

# **SMACNA Safety Profile 2003**

## **Performance and Characteristics**

**August 2003**

## 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 effect on contractor safety performance. Particular attention is given to drug and alcohol abuse programs.

## Summary of Findings

Safety performance data provided by 296 SMACNA contractors indicates that:

- o The lost workday incidence rate was 4.61.
- o Over one-third of all contractors reported no lost workday injuries.
- o Contractors with drug testing programs experienced significantly fewer lost workday cases.
- o Two-thirds of contractors accounting for 82 percent of hours worked reported a formal program for drug and alcohol abuse.
- o Lost workday incidence rate generally declined as hours worked increased.
- o The average EMR was .86.

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

- o A company safety policy.

## SMACNA Safety Summary

Class Size	Reports	Hours	Number of Incidents	Incidence Rate
1	63	815,852	21	5.15
2	58	2,041,295	53	5.19
3	67	4,889,245	144	5.89
4	44	6,562,341	241	7.34
5	24	6,014,592	196	6.52
6	8	2,760,478	74	5.36
7	8	3,592,200	72	4.01
8	24	25,291,262	396	3.13
<b>Grand Total</b>	<b>296</b>	<b>51,967,265</b>	<b>1,197</b>	<b>4.61</b>

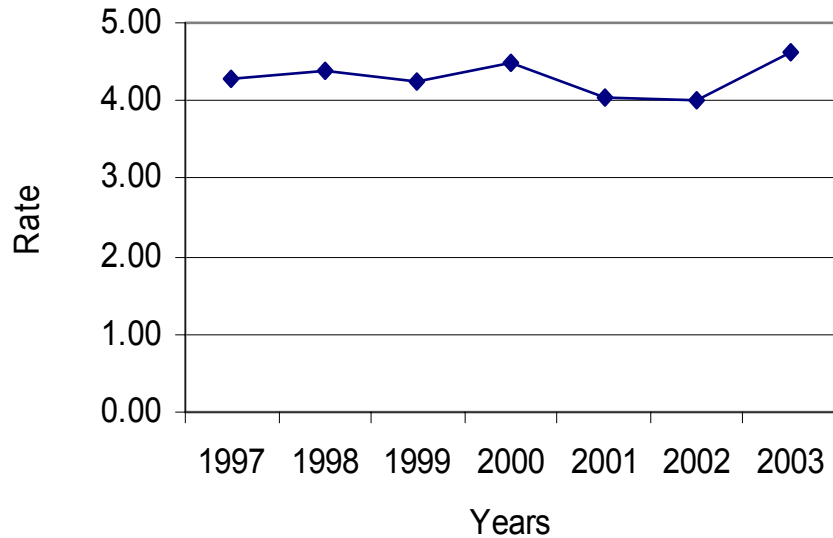
### Class Size

- 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.

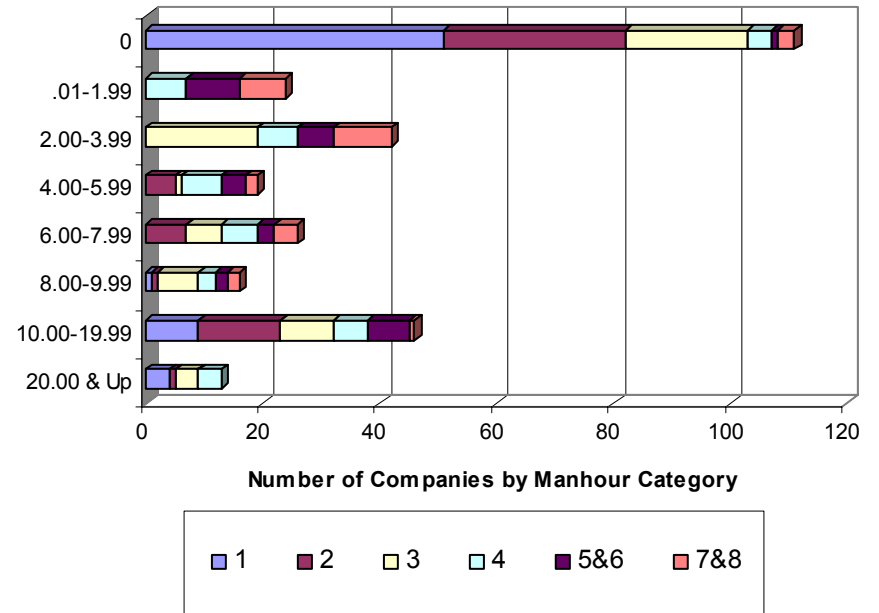
Close to 300 contractors working about 52 million hours participated in the SMACNA 2002 Safety Awards Program. Over one-third of these companies reported no occupational injuries or illness with lost workdays. The average lost workday incidence rate was 4.61.

Responding contractors also reported more than 25,000 lost workdays. There were 109 contractors with no lost workdays. For those contractors who reported lost workdays because of occupational injury or illness, the average number of days was 145; however, only about quarter reported an above average number of days.

## Incidence Rate Trends



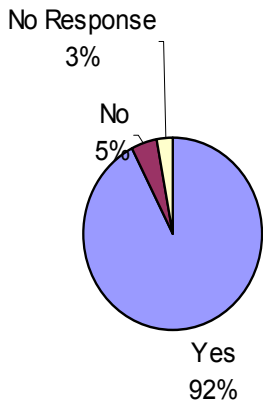
## Incidence Rate By Size



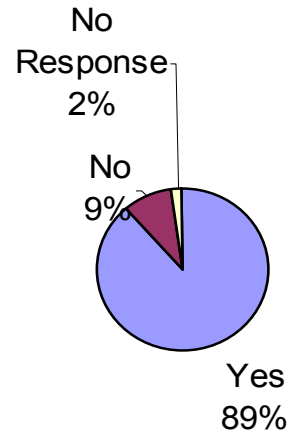
Average incidence rate reported this year rose to its highest level in recent years. The increase is attributed to a large number of lost workday cases reported by larger companies. Highest average incidence rate was experienced by contractors working between 100,000 and 200,000 hours. Overall, variation in incidence rate by hours worked was less than in prior years.

There were companies reporting no lost workday cases in all size categories. Zero was, by far, the most common incidence rate reported.

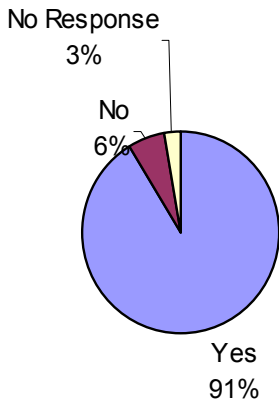
### Safety and Health Program



### Conduct Safety Inspections

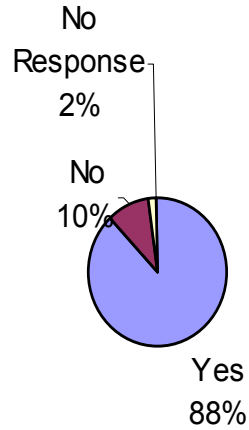


### Designated Safety Coordinator

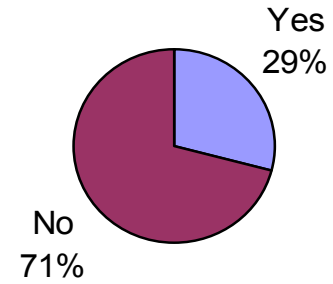


Most respondents reported that their company had a written safety and health program. They have a designated competent safety coordinator and conduct regular safety training. In a majority of companies, the safety coordinator is a full time employee. Very few respondents utilize a third party to be responsible for company safety.

### Use Safety Products & Services from SMACNA

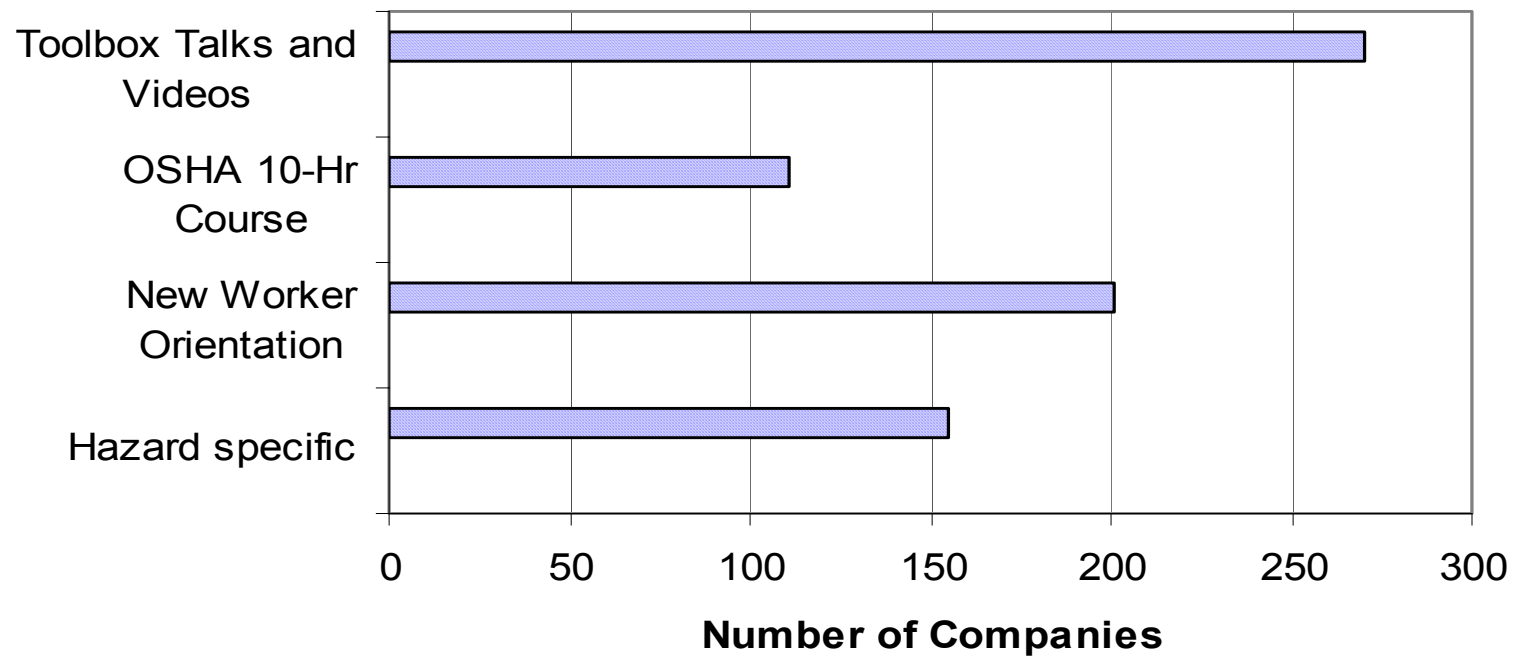


### Use SMOHIT Safety Products



Most contractors use SMACNA safety products and services. A much lower portion utilize SMOHIT safety products. While larger companies were more likely to use SMACNA as a source of safety materials, there was no pattern, by contractor size, in SMOHIT usage.

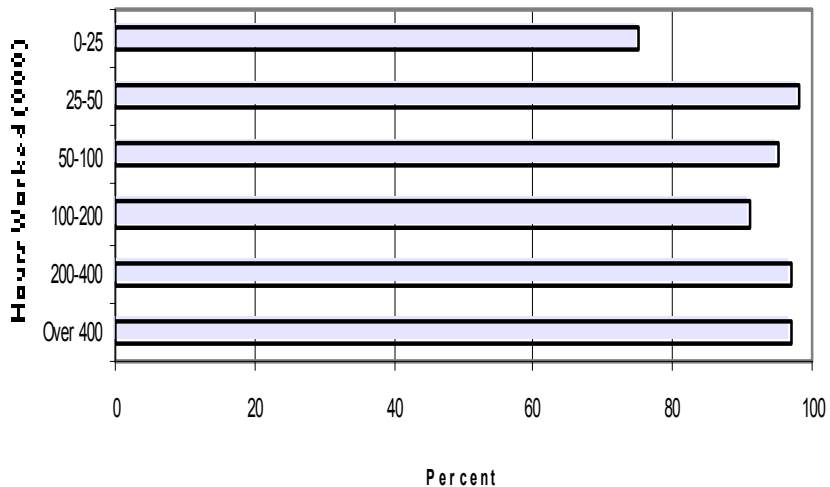
## Type of Safety Training



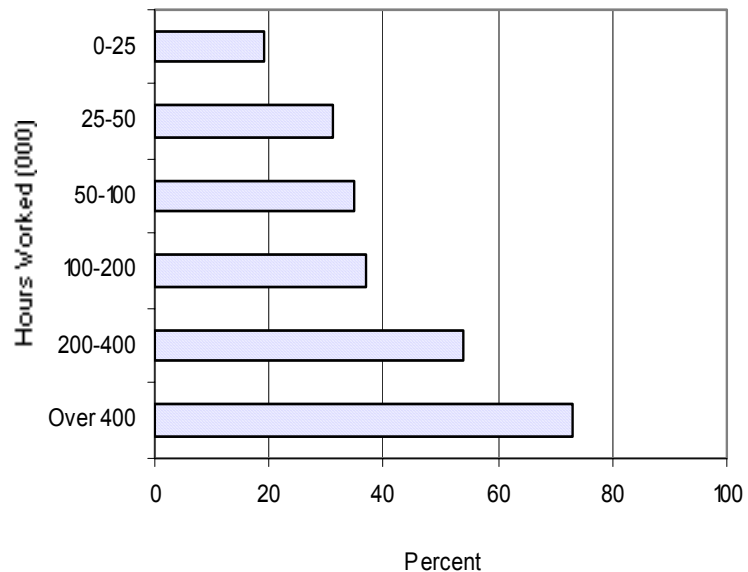
A number of types of training are utilized by contractors. All were conducted by a majority of contractors, except the OSHA 10 hour course. Toolbox talks and videos are used by almost all companies. Generally, the usage of each category of training increased with the number of hours worked by the contractor.



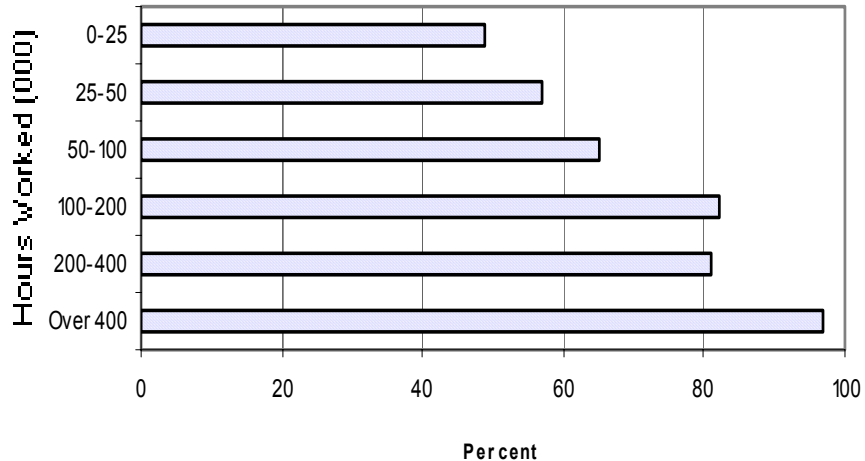
### Toolbox Talks and Videos



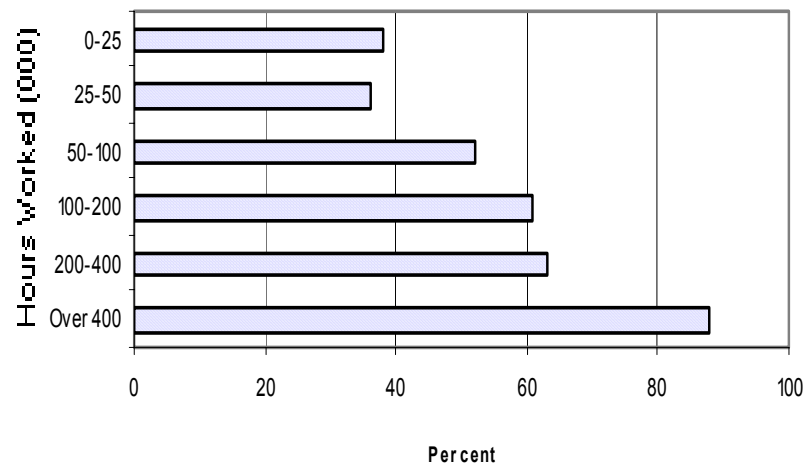
### OSHA 10-Hour Course



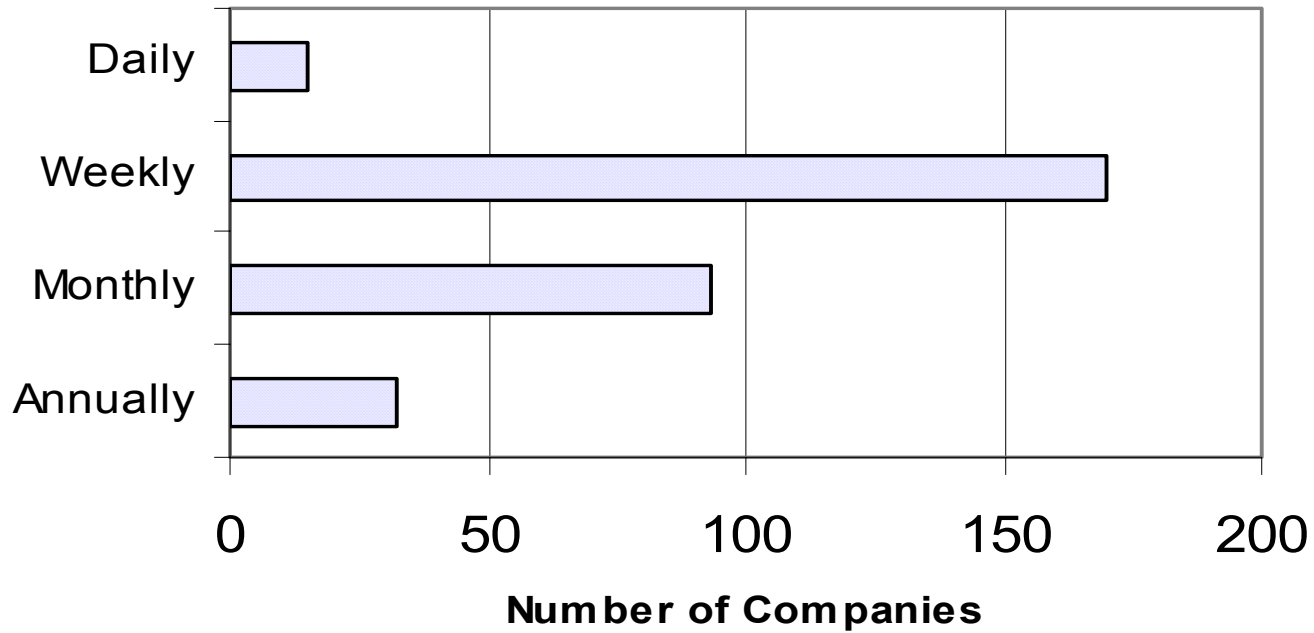
### New Worker Orientation



### Hazard-specific

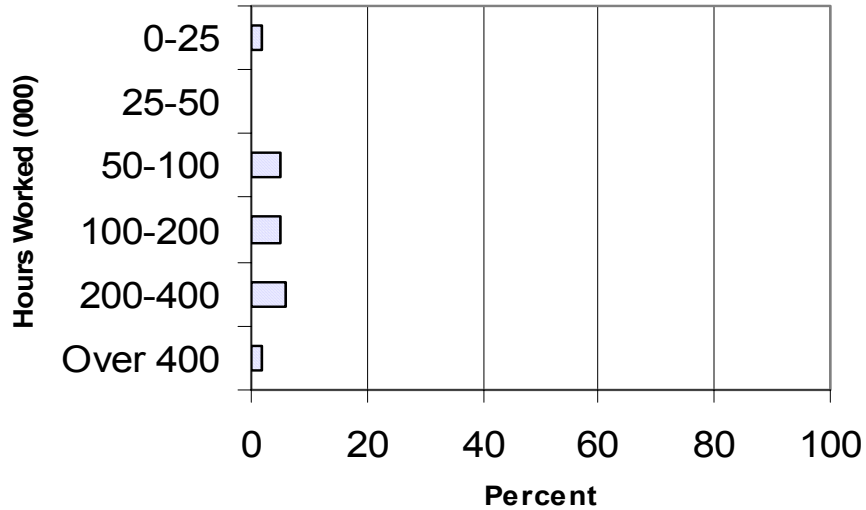


## Regularly Conduct Training

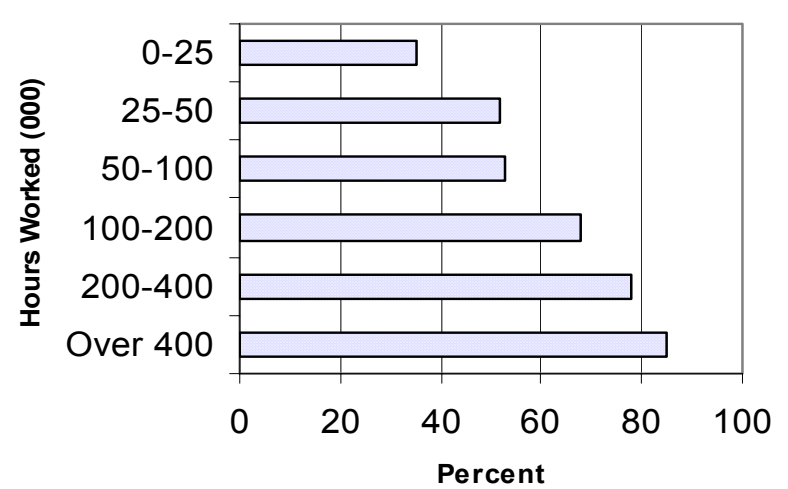


Most often contractors include training as a part of their weekly schedule. Likelihood of weekly training increased with number of hours worked by contractors. Frequency of training for other time periods was independent of number of hours worked.

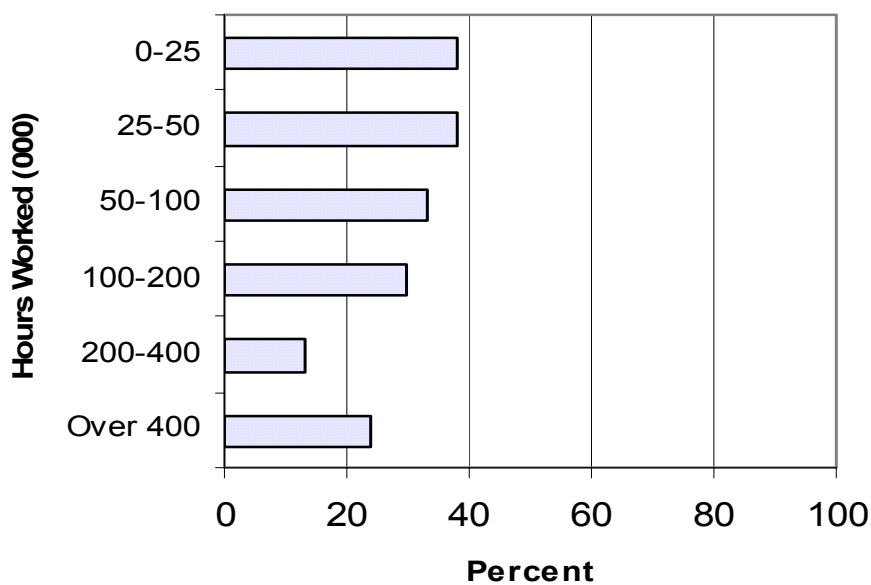
### Conduct Training-Daily



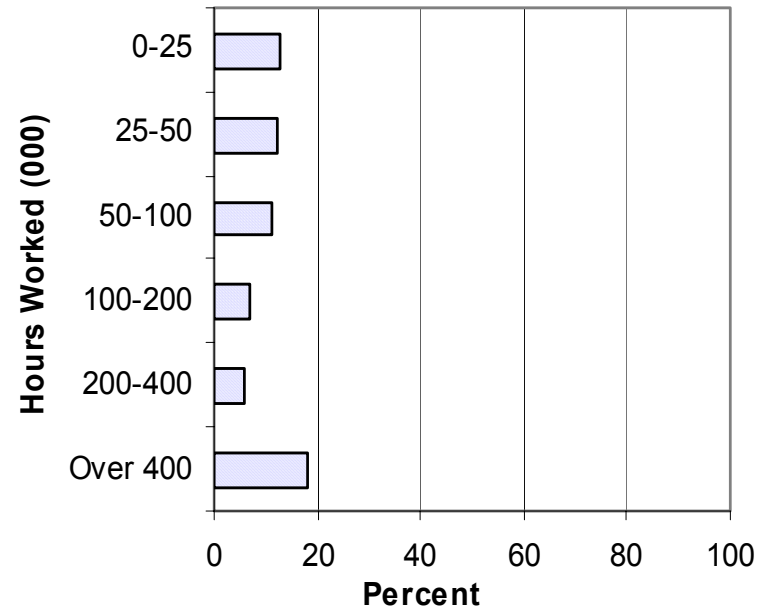
### Conduct Training-Weekly



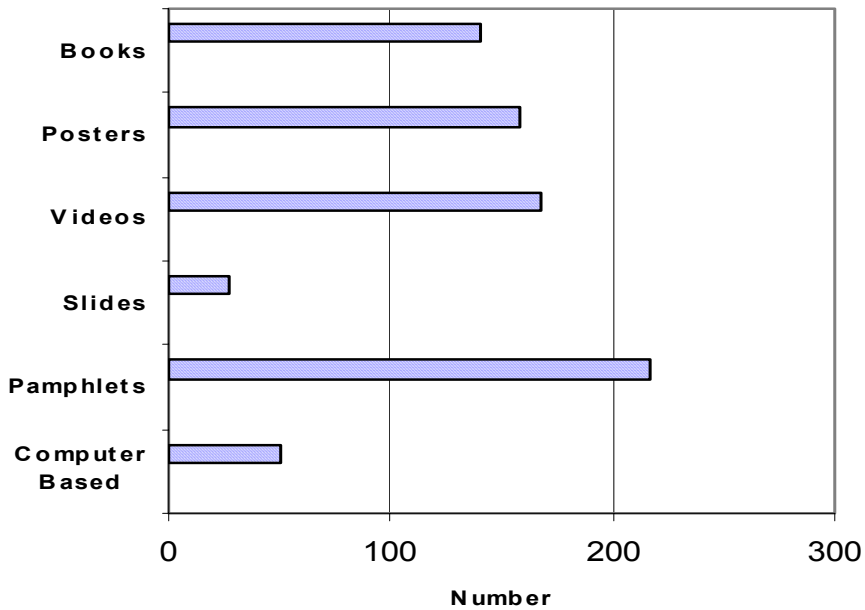
### Conduct Training-Monthly



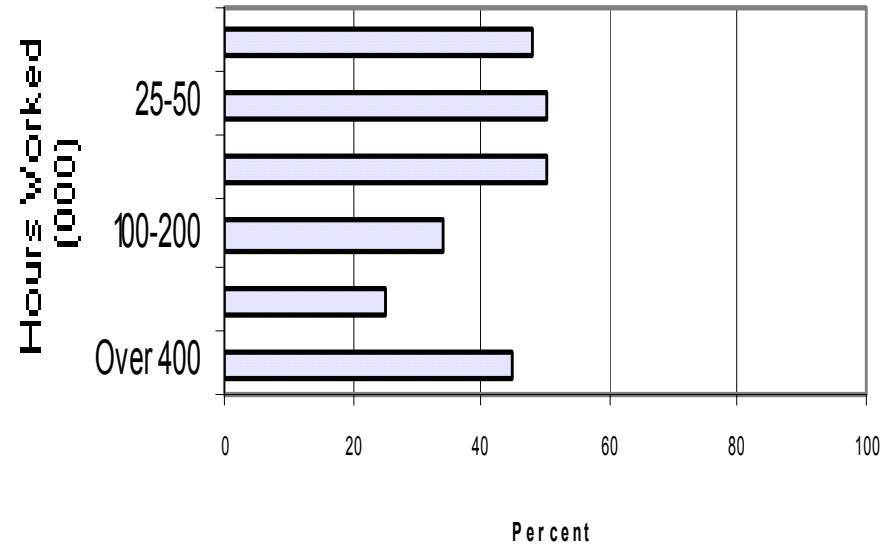
### Conduct Training-Annually



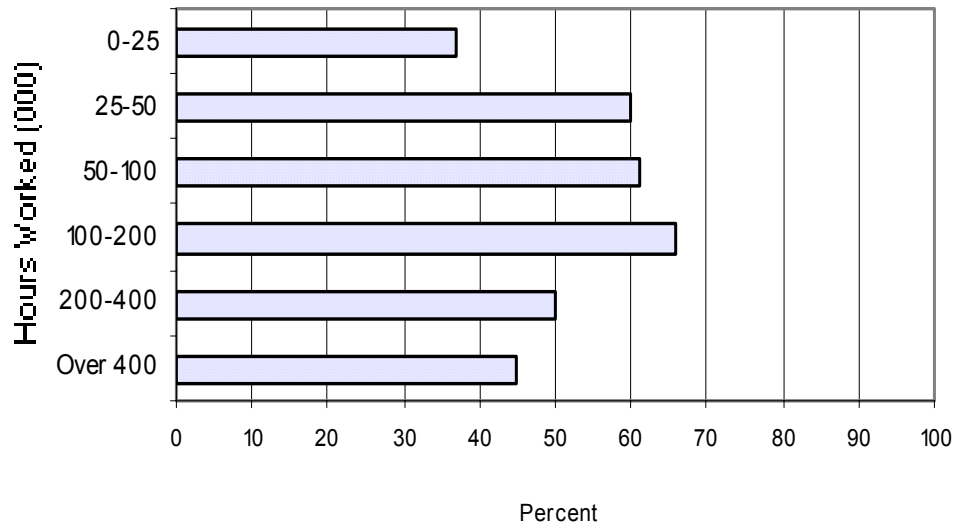
### Types of Training Materials Used



### Safety Training Materials-Books

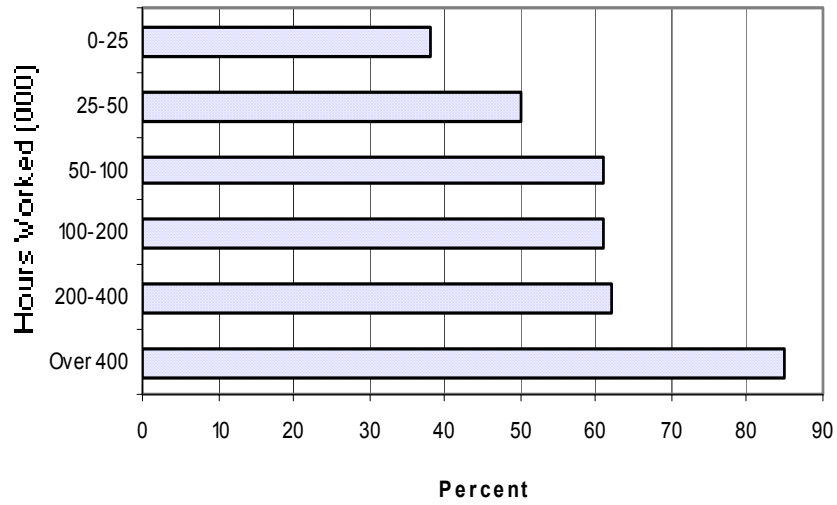


### Safety Training Materials-Posters

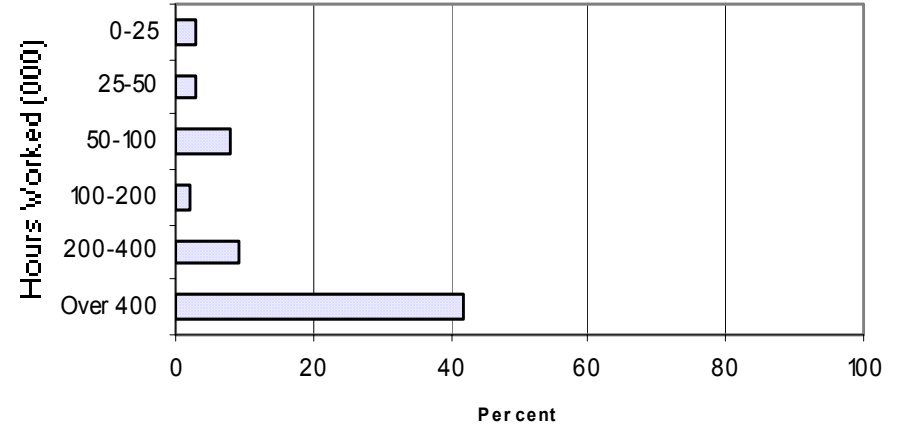


Pamphlets, as well as other written materials, were widely used by contractors for transmitting safety information. While the use of printed materials was widespread among all size companies, videos were used more often by contractors working larger numbers of hours. Computer based training materials remain uncommon, but have increased in their usage by contractors working larger numbers of hours.

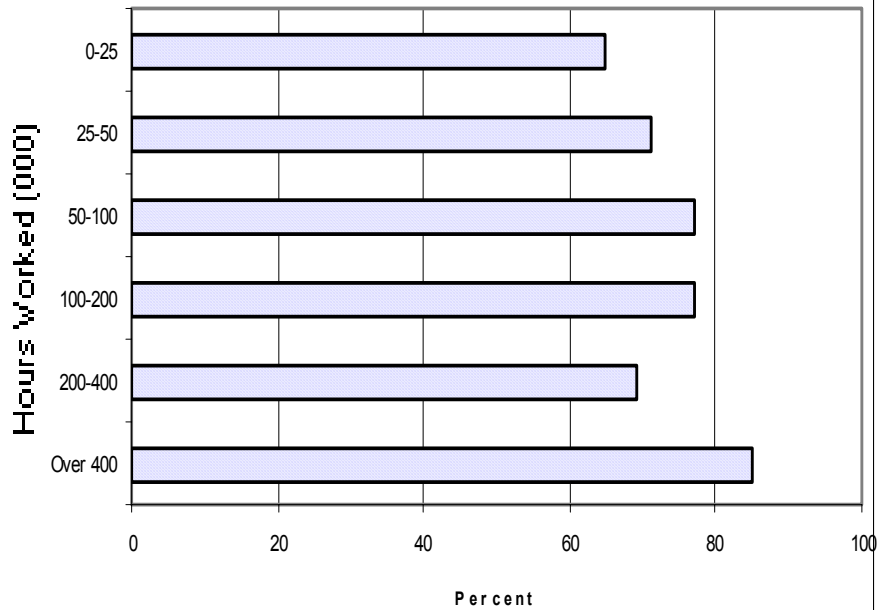
### Safety Training Materials-Videos



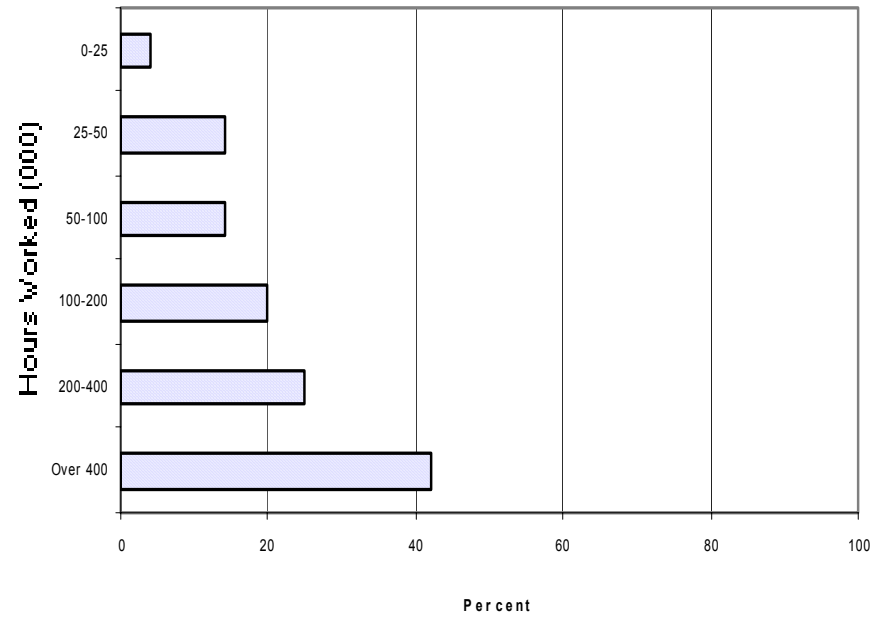
### Safety Training Materials-Slides



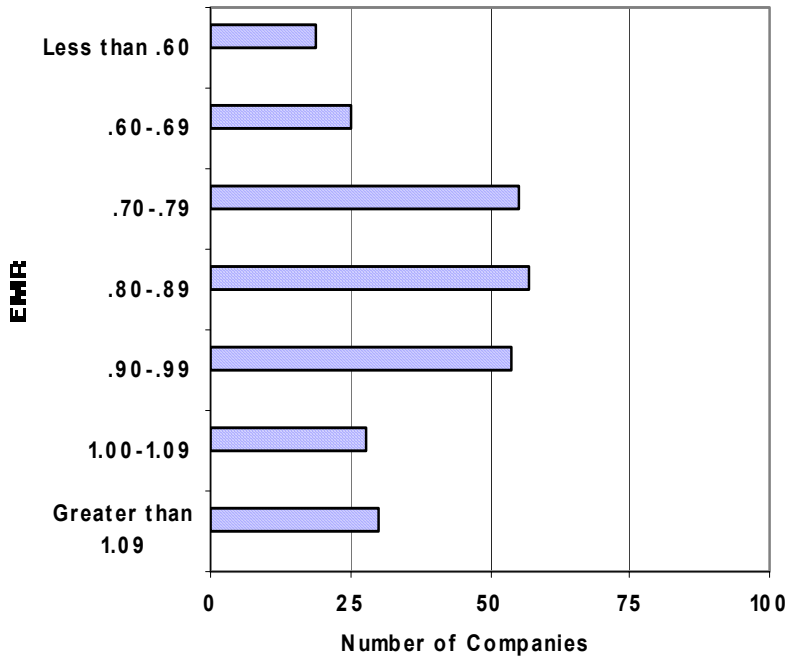
### Safety Training Materials-Pamphlets



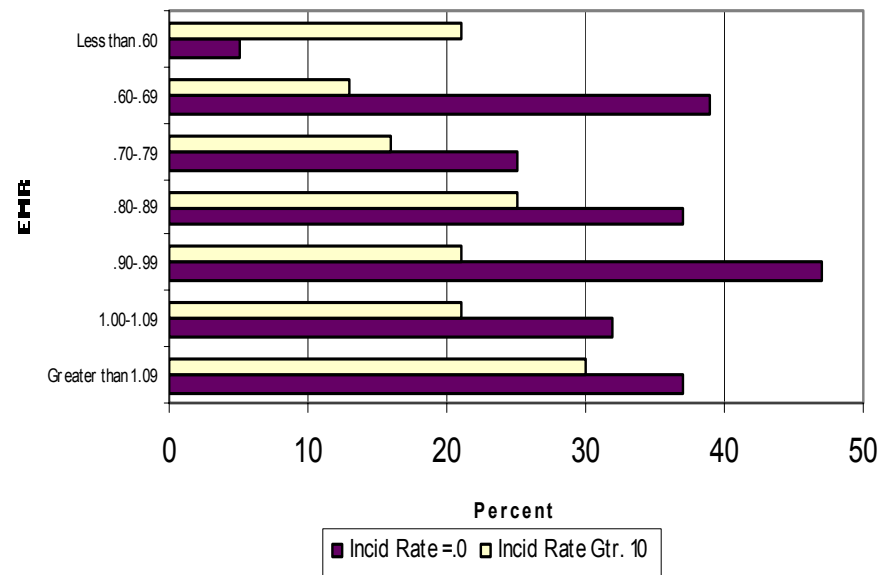
### Safety Training Materials-Computer Based Training



### Number of Responses by EMR



### Relationship of EMR to Incidence Rate



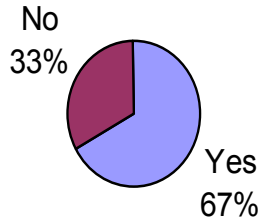
Almost 80 percent of companies reported an experience modification rate (EMR) of less than 1.0. Most were between .70 and .99 with an average for all respondents of .86. There was only moderate correlation between a company's EMR and its lost workday incidence rate. Lower EMR's did not always mean a lower incidence rate; however, a high EMR was often associated with a high incidence rate.

## Industry Segment Safety

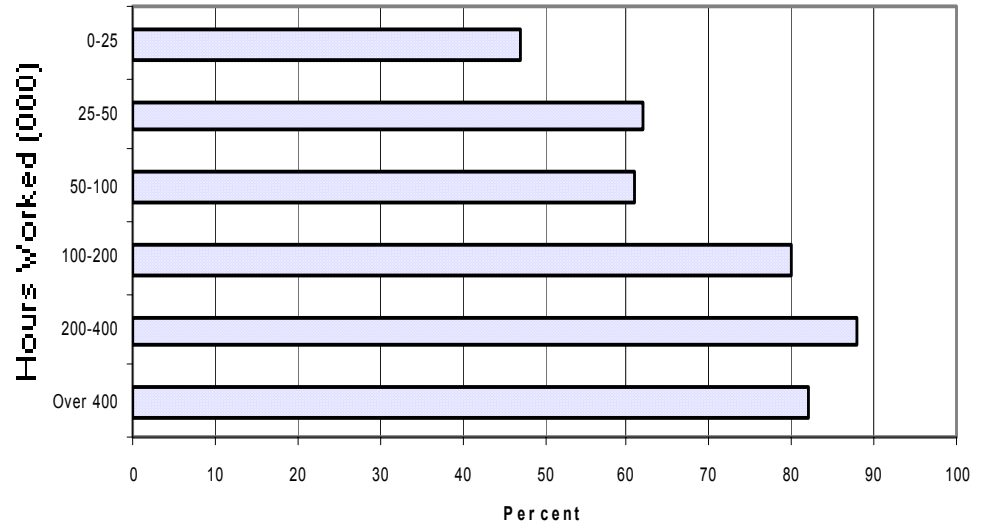
	Number	Hours	Incidents	Incident Rate
<b>HVAC</b>	176	21,493,082	473	4.40
<b>HAC</b>	50	1,184,378	23	3.88
<b>ASM</b>	83	1,448,846	45	6.14
<b>ISM</b>	136	5,600,147	109	3.90
<b>KIT</b>	48	368,342	8	4.18
<b>MFG</b>	70	1,593,634	57	7.20
<b>TB</b>	56	599,956	11	3.83
<b>SD</b>	24	337,163	10	6.14

For a majority of respondents, it was possible to relate safety experience to type of work performed. Most reported work was HVAC. No segment had an incidence rate as much as one below the overall average, but some had rates considerably above the 4.61 industry rate.

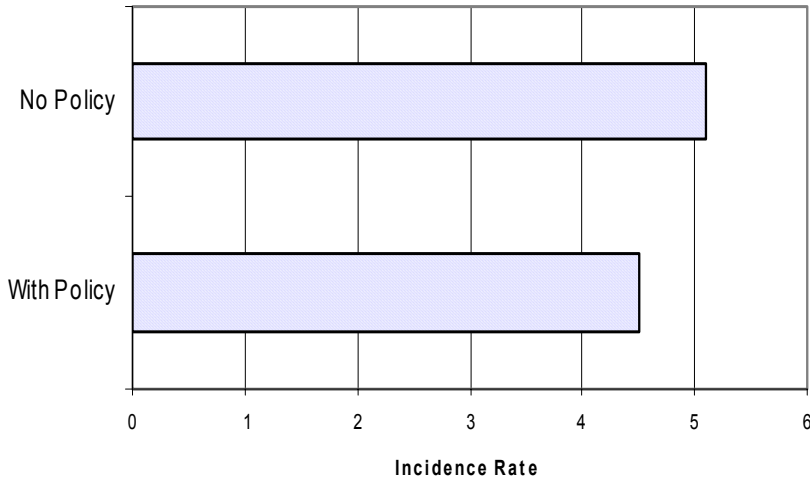
## Formal Program for Drug and Alcohol Abuse



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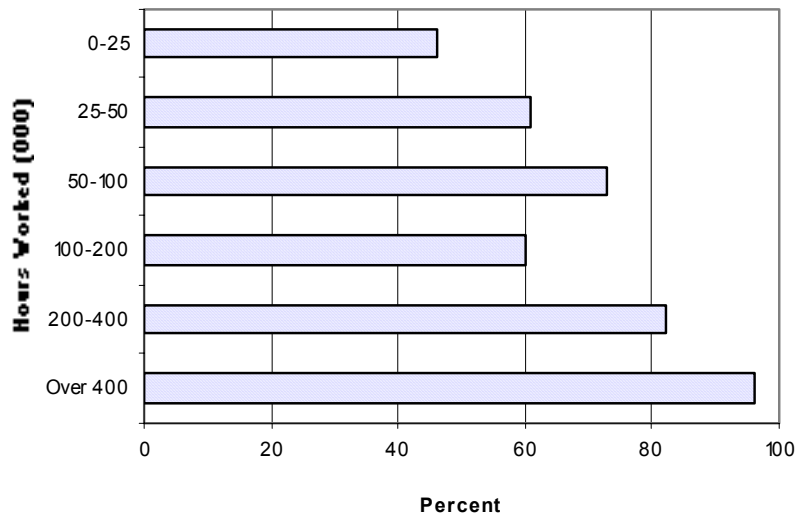
## Incidence Rate by Drug Policy



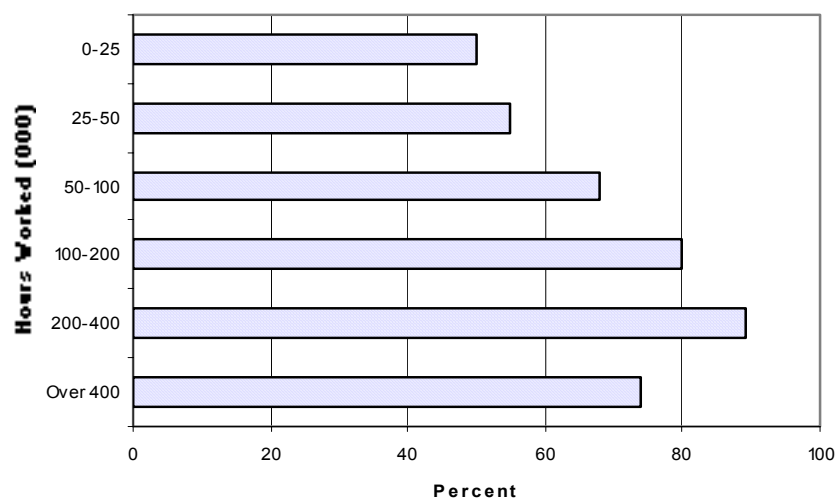
The number of companies reporting that they had a formal program for drug and alcohol abuse continues to increase and is now 67 percent. These companies worked 82 percent of all reported hours. While likelihood of a program generally increased as hours worked increased, patterns were not as pronounced this year. In the two chapters with the largest number of responses (about 20 percent of the total), a majority of contractors did not report a program. Companies with a formal program for drug and alcohol abuse had a lower lost work day incidence rate than those with no programs.



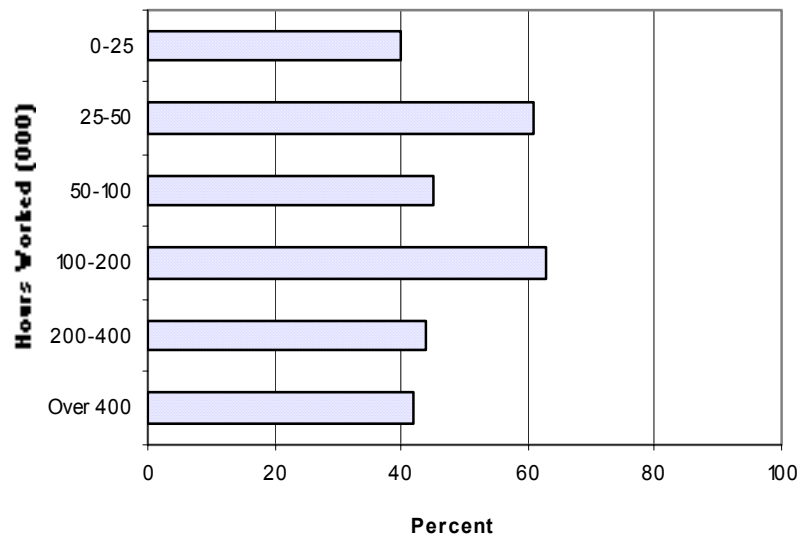
### Pre-Hire Testing Conducted



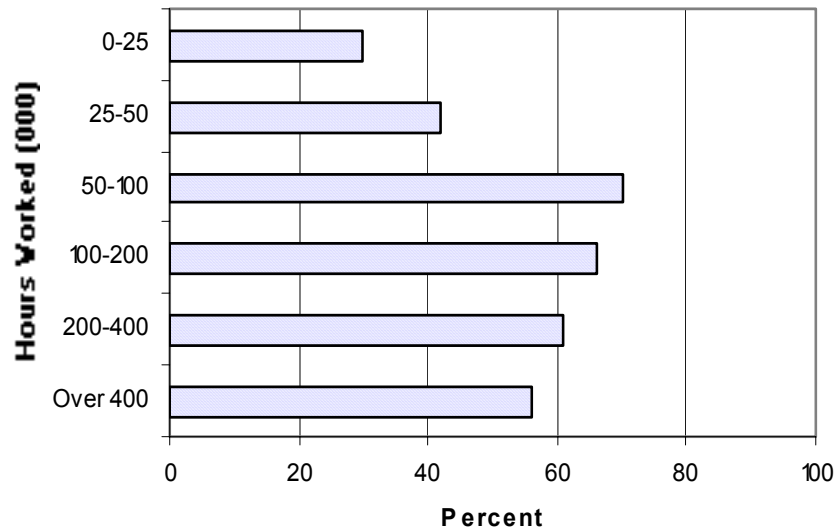
### Post Accident Testing Conducted



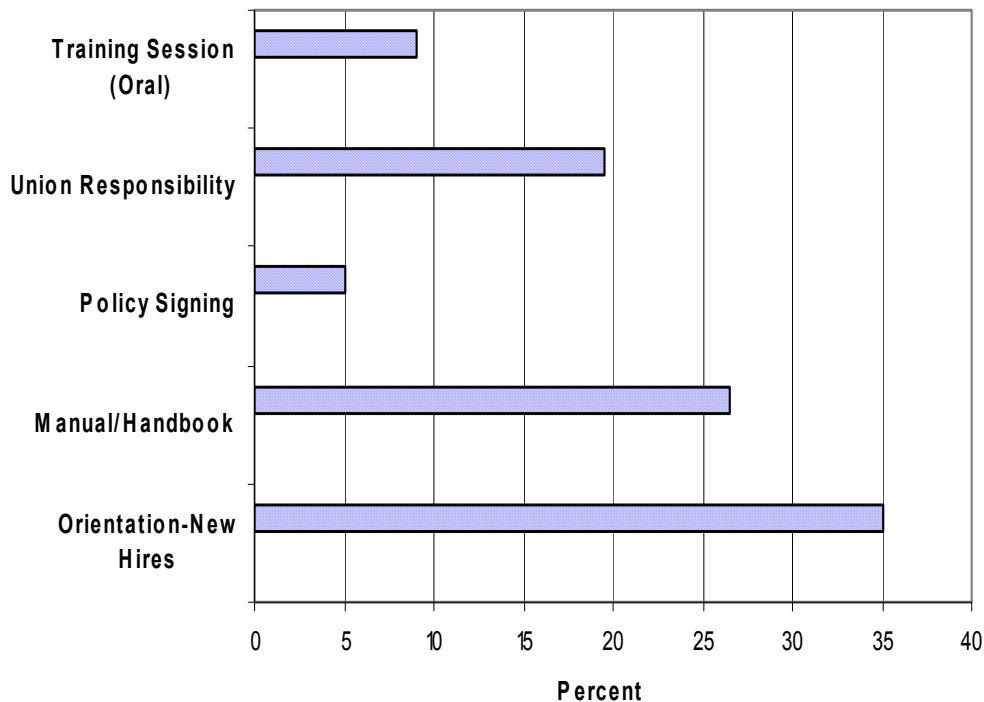
### Random Testing Conducted



### Penalties

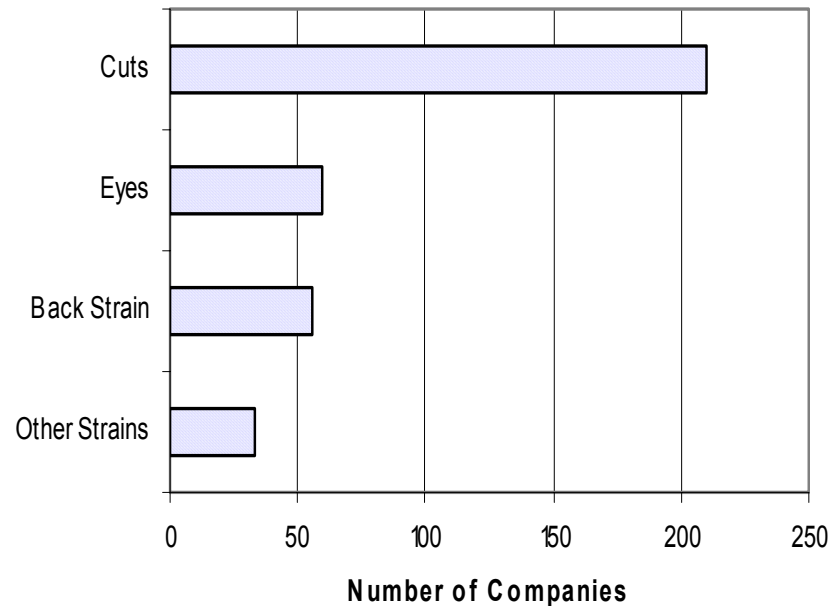


### Method of Informing Employees



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. Over a quarter of employers include this information as part of written information for workers.

### Most Common Injuries



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

Supplement  
SMACNA Safety Trends

	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>
Incidents	1,026	1,174	1,282	1,267	1,450	1,326	1,197
Incidence Rate	4.28	4.39	4.25	4.47	4.04	3.99	4.61
Lost Workdays	15,903	16,478	21,650	18,665	20,106	15,617	25,591
Average Lost Workdays	92	86	97	97	114	87	145
Safety & Health Program	95%	91%	94%	92%	91%	94%	92%
Designated Safety Coord.	94%	88%	95%	95%	92%	94%	91%
SMACNA Products	84%	82%	84%	89%	88%	88%	88%
EMR	0.84	0.84	0.85	0.81	0.83	0.84	0.86
Drug Program	45%	42%	46%	51%	58%	64%	67%
Number of Companies	294	312	334	303	292	322	296