

# **SMACNA Safety Profile 2004**

## **Performance and Characteristics**

**August 2004**

## 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 contractor's 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 by 252 SMACNA contractors indicates that:

- o The lost workday incidence rate was 5.52.
- o Close to one-third of all contractors reported no lost workday injuries.
- o Contractors with drug testing programs experienced significantly fewer lost workday cases.
- o Three-quarters of contractors accounting for 84 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 .85.

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

- o A company safety policy.
- o Regular safety inspections.
- o A designated safety coordinator.
- o Regular safety training.
- o A formal program for drug and alcohol abuse.

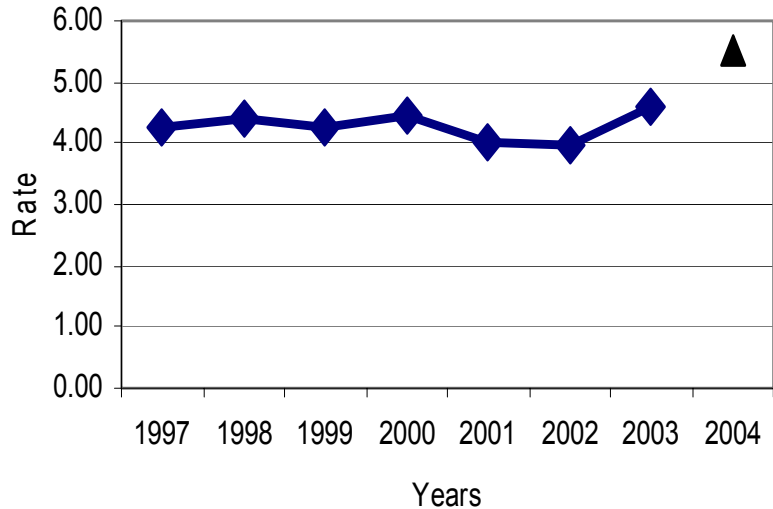
## SMACNA Safety Summary

Class Size	Reports	Hours	Number of Incidents	Incidence Rate
1	57	775,739	23	5.93
2	35	1,277,607	69	10.80
3	42	2,940,627	110	7.48
4	40	5,762,753	240	8.33
5	31	7,389,646	226	6.12
6	18	6,390,766	157	4.91
7	6	2,797,328	65	4.65
8	23	24,458,032	539	4.41
<b>Grand Total</b>	<b>252</b>	<b>51,792,498</b>	<b>1,429</b>	<b>5.52</b>

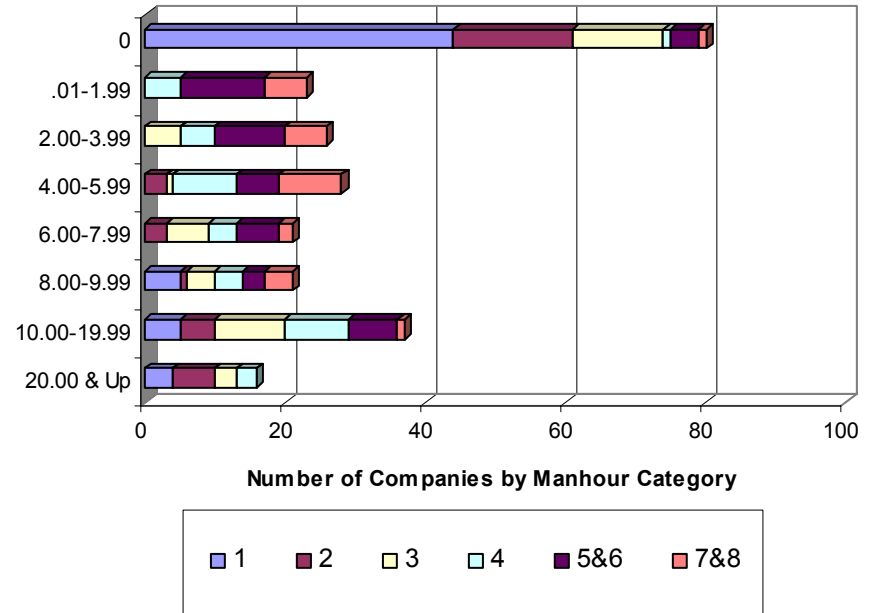
### Class Size

1	1-25,000 hours	This year there were 252 participating contractors in the SMACNA Safety Awards Program. These companies worked almost 52 million hours. Close to one-third of them reported no occupational injuries or illness with lost workdays. The average lost workday incidence rate was 5.52.
2	25,001-50,000 hrs.	
3	50,001-100,000 hrs.	
4	100,001-200,000 hrs.	
5	200,001 - 300,000 hrs.	Responding contractors reported about 26,000 lost workdays. There were 97 contractors or almost 40 percent with no lost workdays. (Four companies accounted for a quarter of all lost workdays.) For those contractors who reported lost workdays because of occupational injury or illness, the average number of days was 168.
6	300,001-400,000 hrs.	
7	400,001-500,000 hrs.	
8	Over 500,000 hrs.	

### Incidence Rate Trends



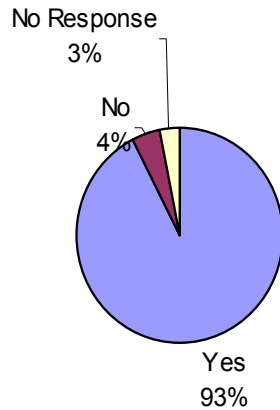
### Incidence Rate By Size



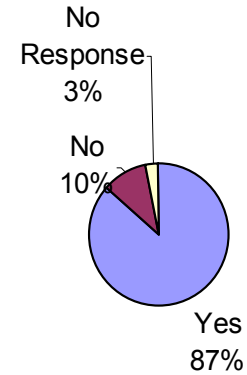
The average incidence rate reported this year increased from past years; however, **data for 2003 (and future years) are not totally comparable to previous years due to significant changes in the OSHA record keeping requirements.** As the OSHA form used to record injury and illness cases is now more comprehensive, a greater number of incidents are being reported. In addition, the mix of respondents, by number of man-hours, was different from past years. The impact on the data of these factors cannot be measured. It should be noted that 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. If a company did not report a zero incidence rate, it was most likely to report a rate between 10 and 20. This is partially a function of the method used to calculate incidence rate, as smaller companies with fewer man-hours and a minimal number of cases calculated to an elevated rate.

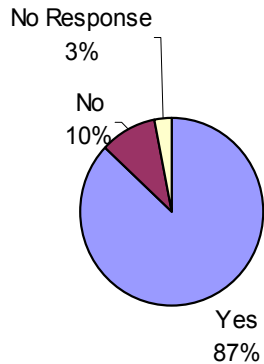
### Safety and Health Program



### Conduct Safety Inspections

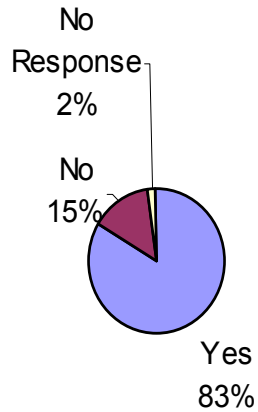


### Designated Safety Coordinator

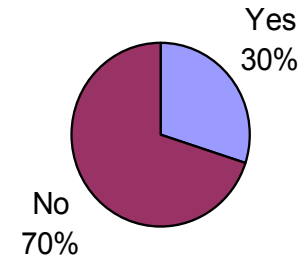


Most respondents reported that their company has a written safety and health program. They have a designated competent safety coordinator and conduct regular safety training; however, this figure declined from the prior year's 91 percent. In a majority of companies, the safety coordinator is a full time employee. Very few respondents utilize a third party to be responsible for company safety.

### Use Safety Products & Services from SMACNA

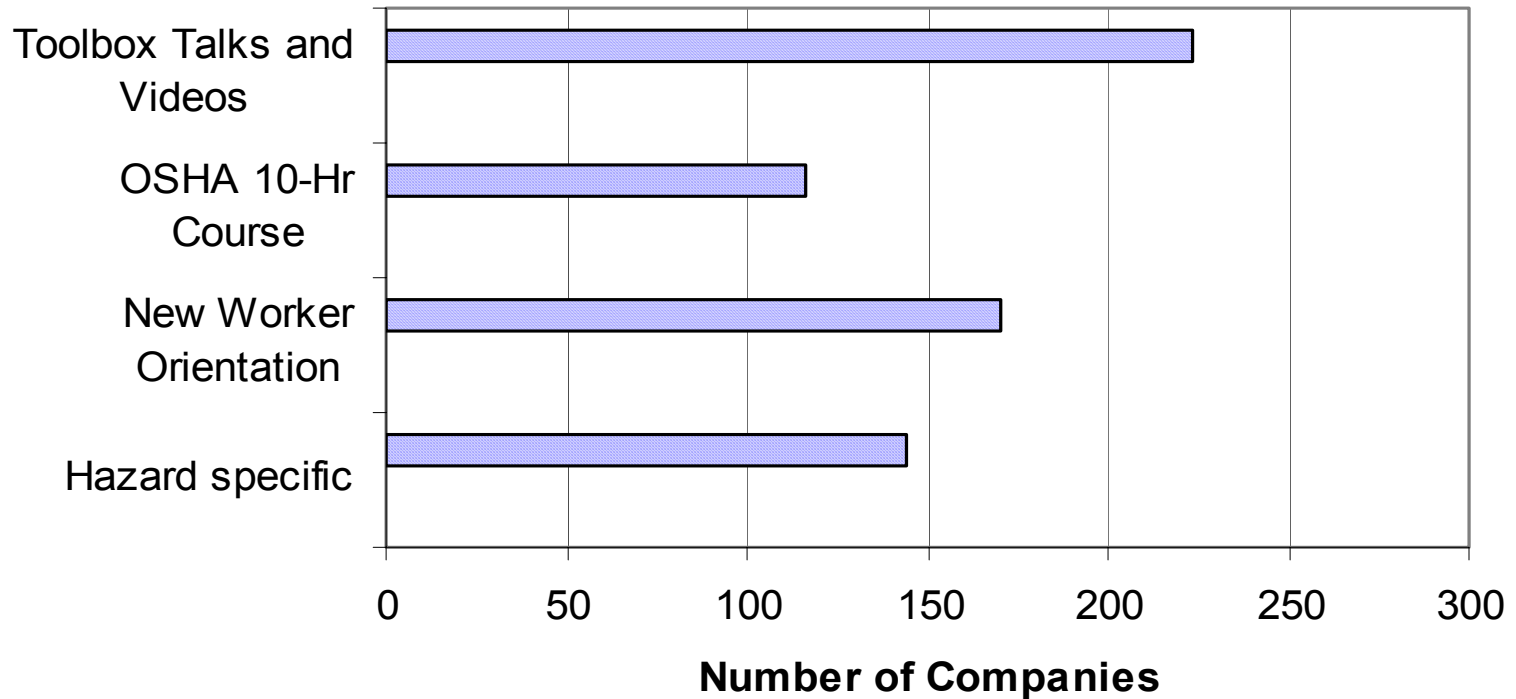


### Use SMOHIT Safety Products



Most contractors use SMACNA safety products and services, although the percentage has declined somewhat from recent years. 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.

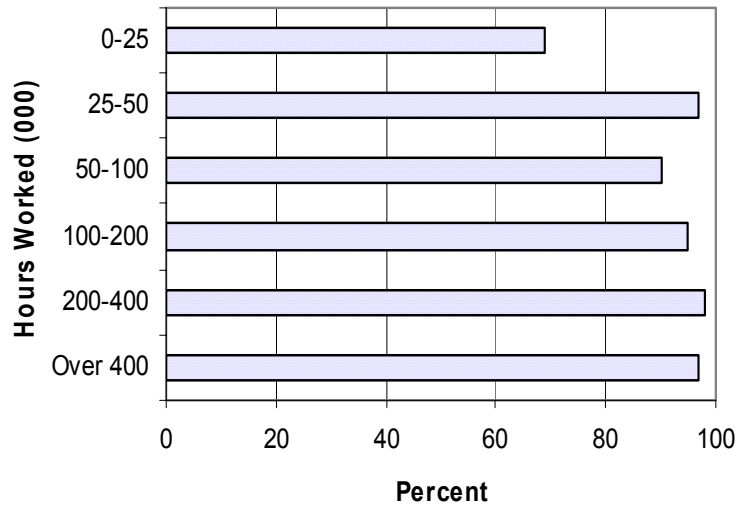
## Type of Safety Training



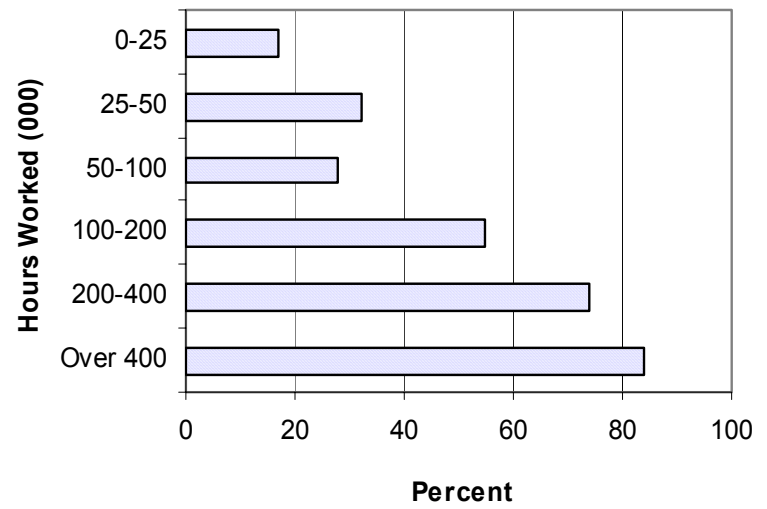
A number of types of training are utilized by contractors. All were conducted by a majority of respondents, except the OSHA 10 hour course. Use of the OSHA 10 hour course was more widespread this year. Generally, the usage of each category of training increased with the number of hours worked by the contractor.



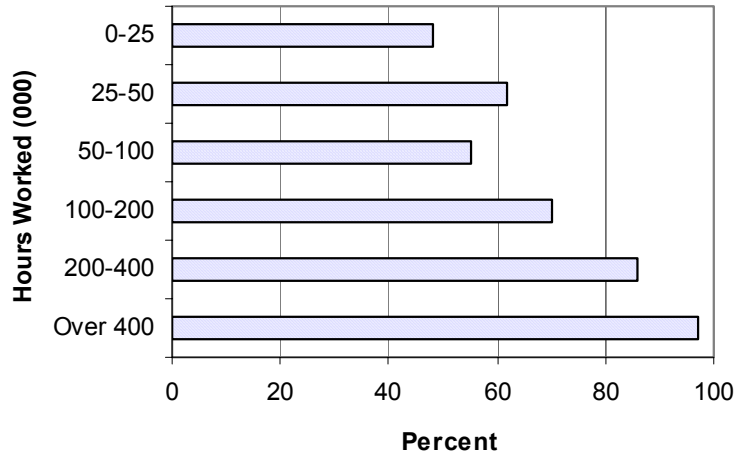
### Toolbox Talks and Videos



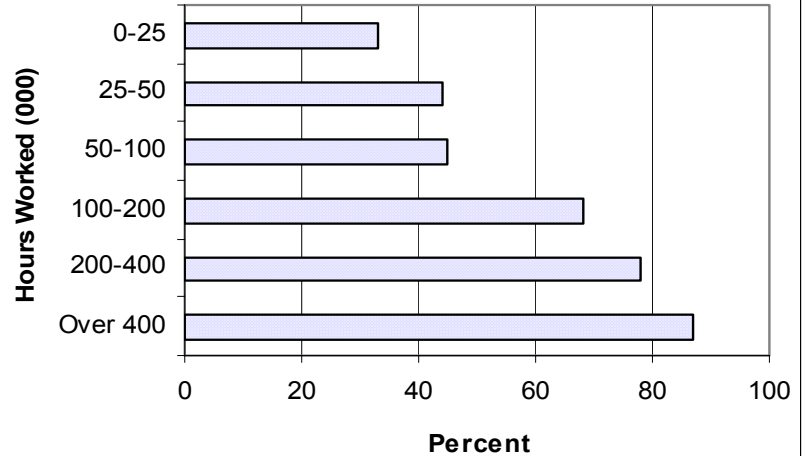
### OSHA 10-Hour Course



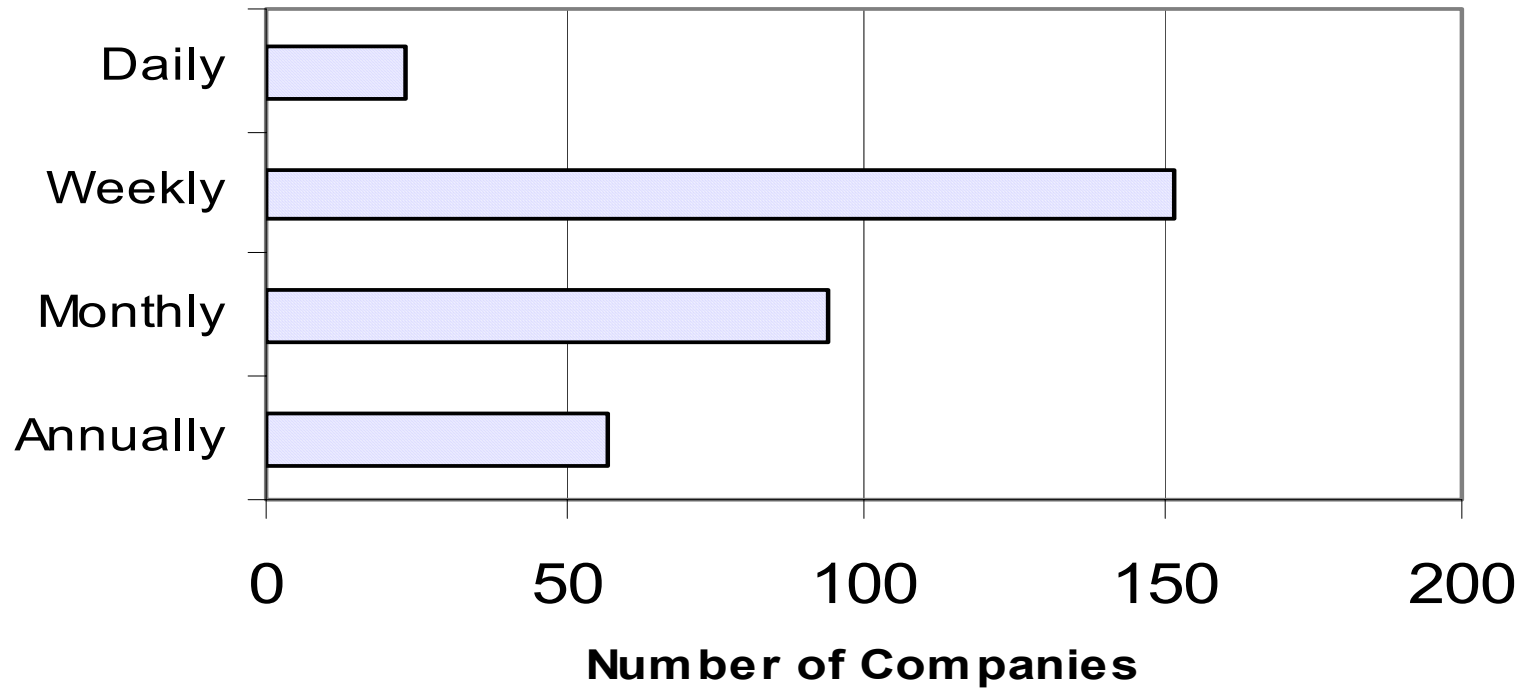
### New Worker Orientation



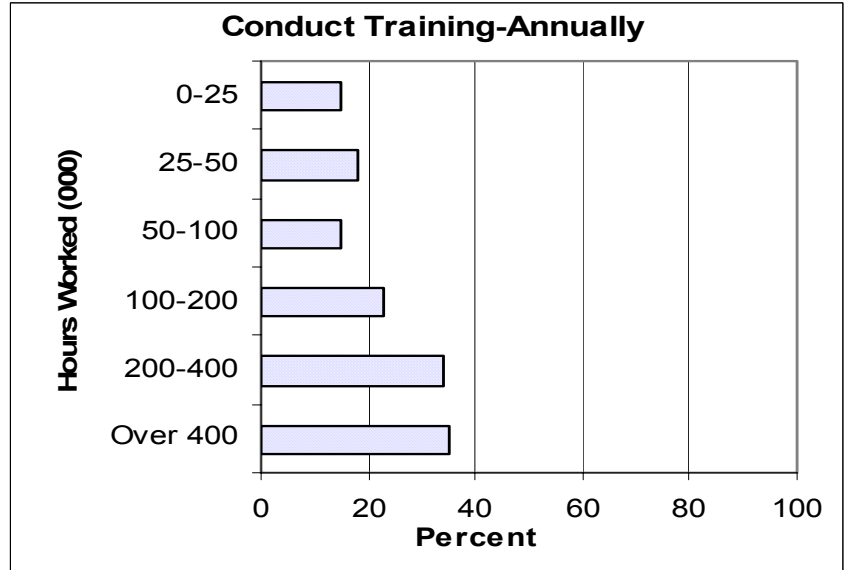
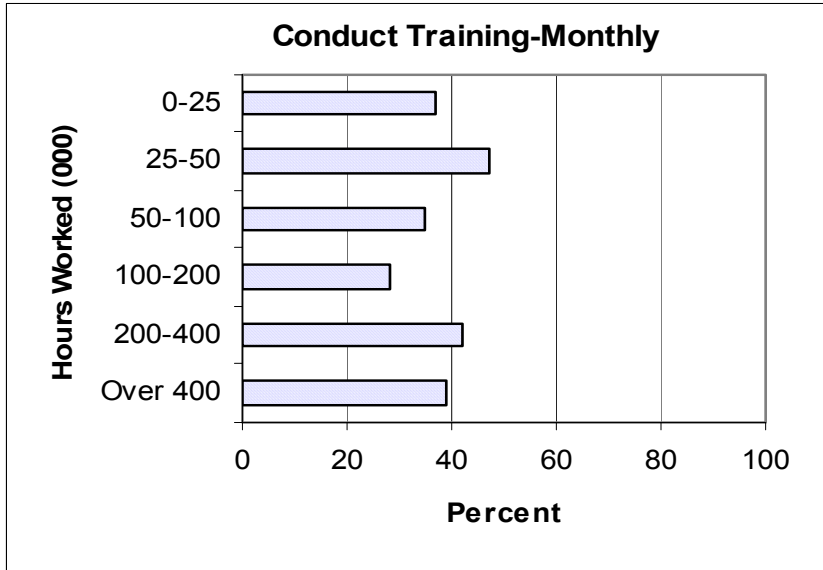
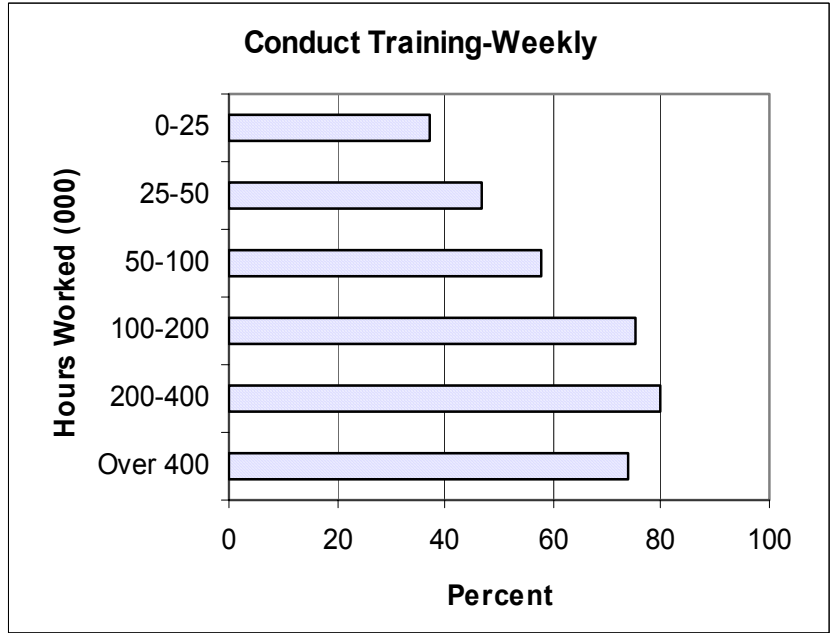
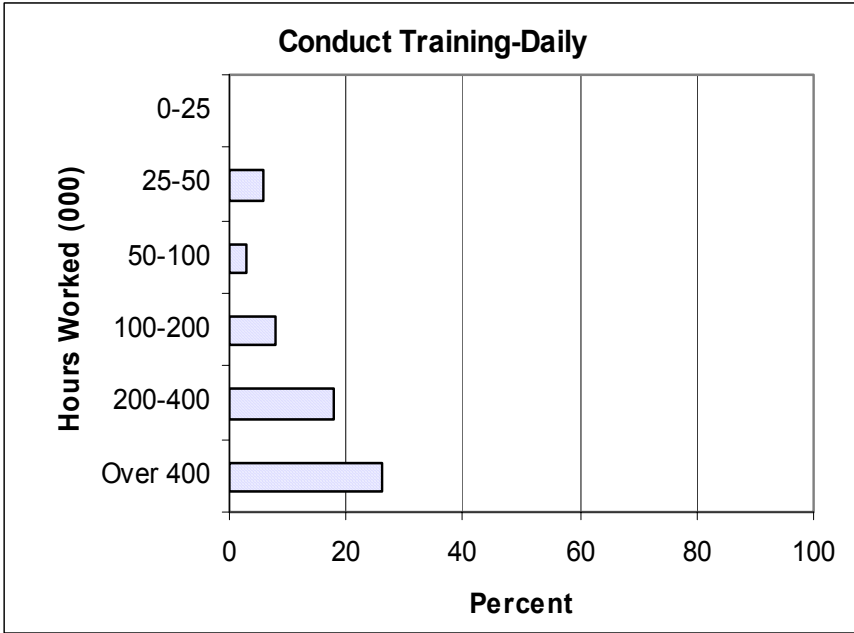
### Hazard-specific



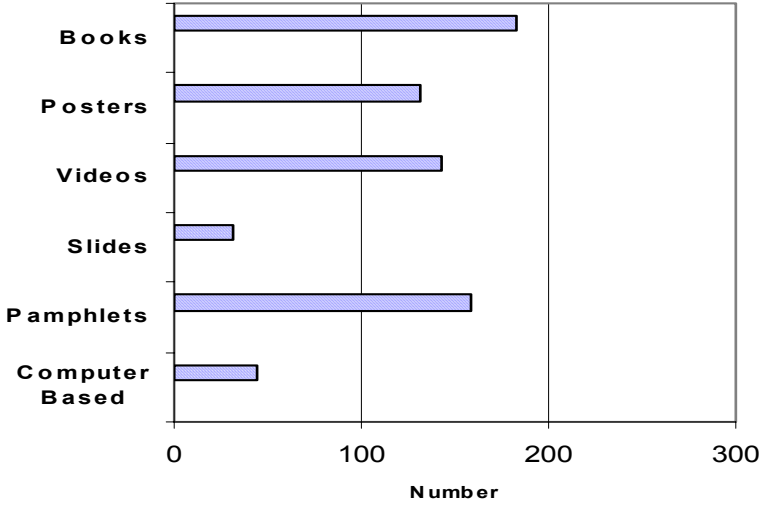
# Regularly Conduct Training



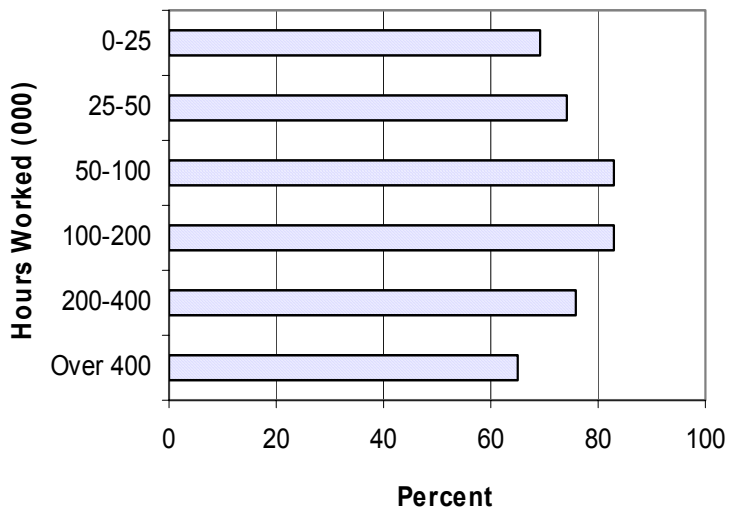
Most often contractors include training as a part of their weekly schedule. Except for monthly training, likelihood of all intervals of training tended to increase with number of hours worked by contractors.



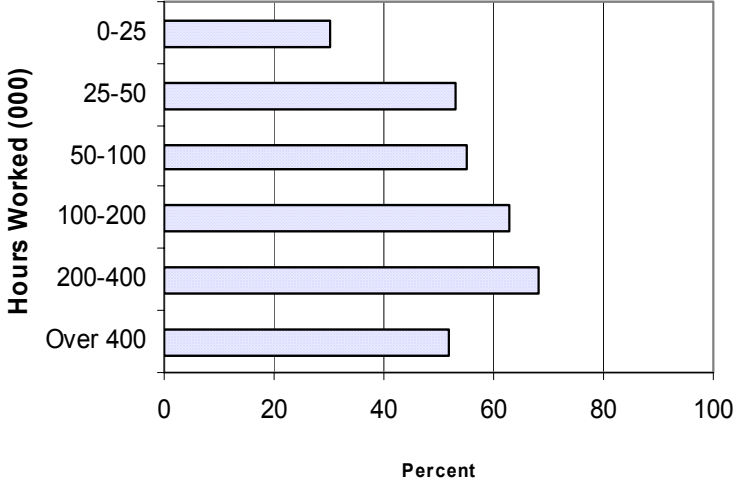
**Types of Training Materials Used**



**Safety Training Materials-Books**

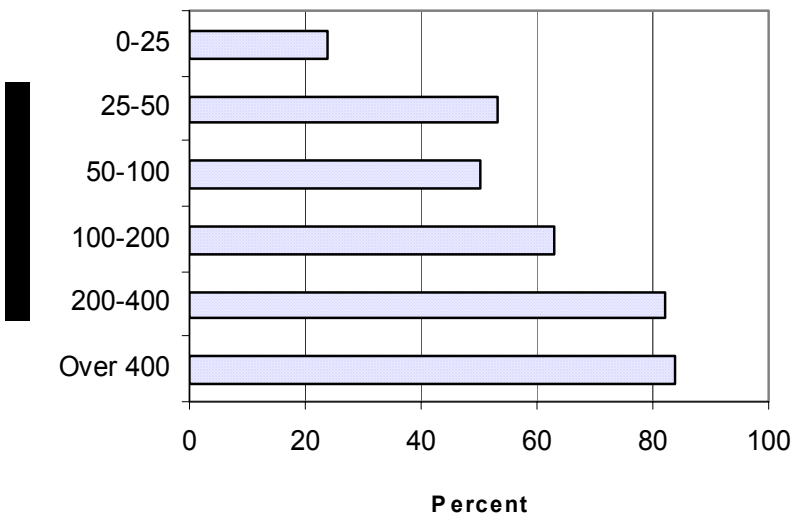


**Safety Training Materials-Posters**

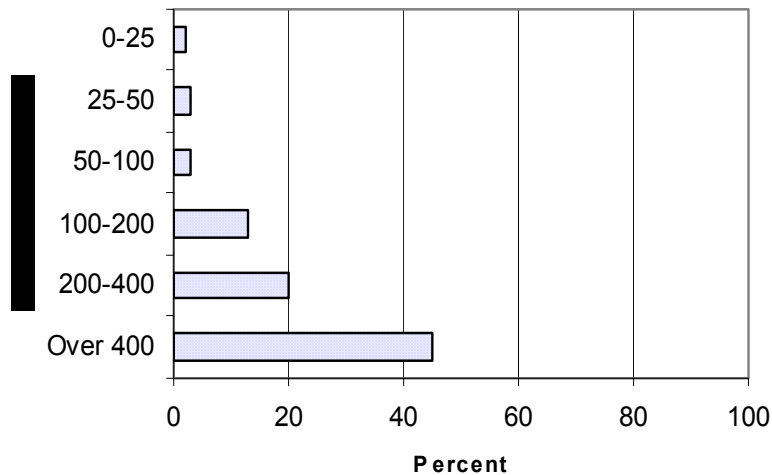


A variety of materials are widely used by contractors to transmit safety information. Usage of all materials generally increased with hours worked by the contractor, except for the largest size category. Various written materials as well as videos remain the most commonly used materials.

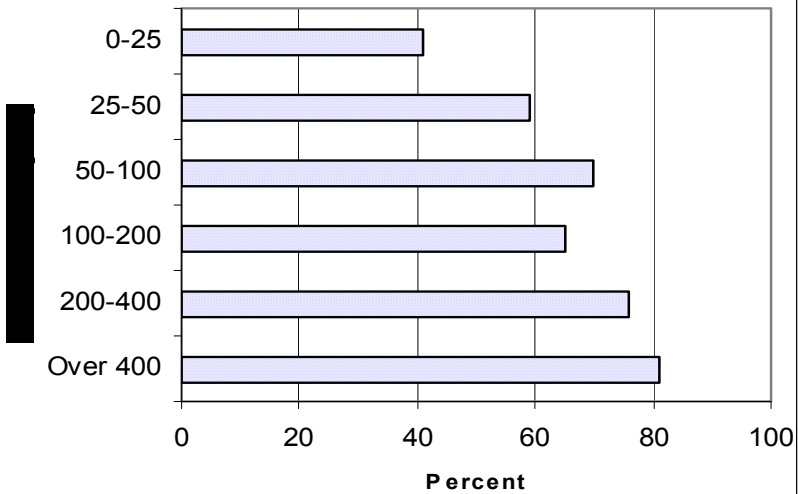
### Safety Training Materials-Videos



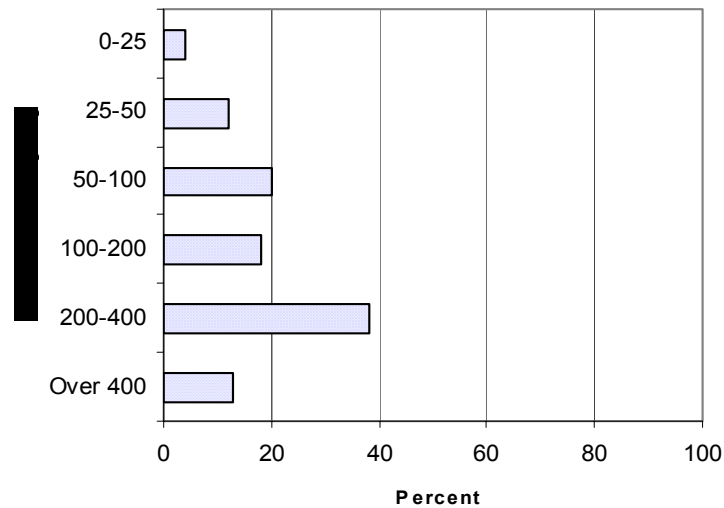
### Safety Training Materials-Slides

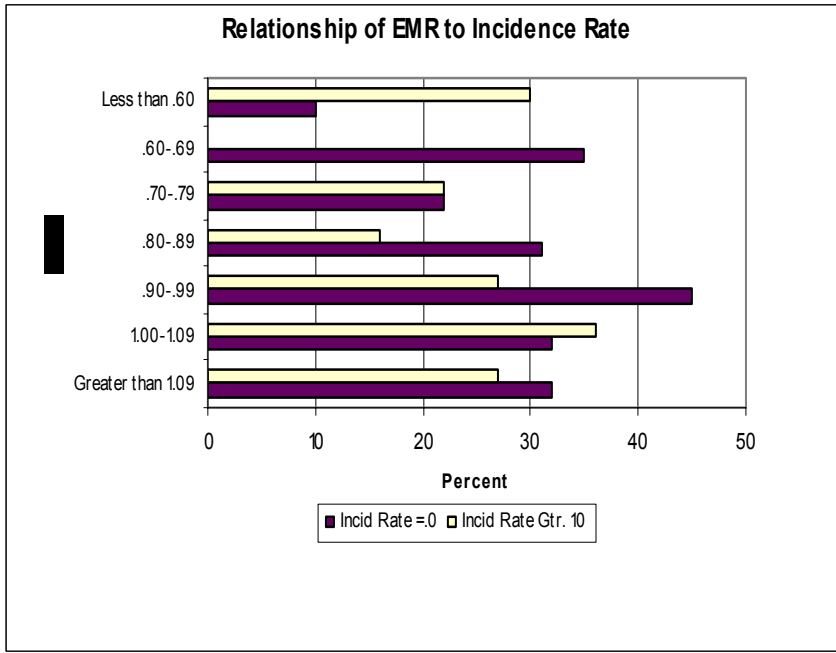
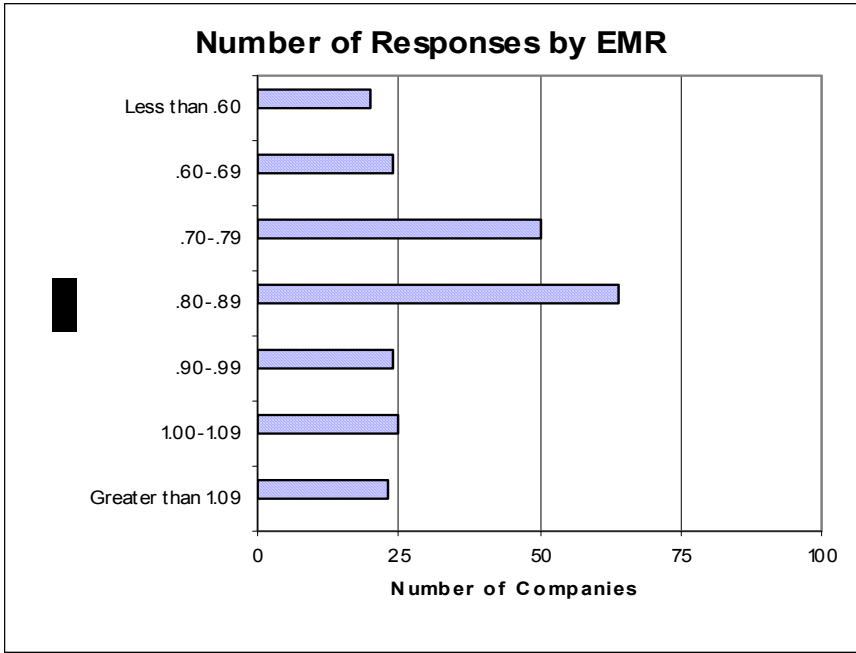


### Safety Training Materials-Pamphlets



### Safety Training Materials-Computer Based Training





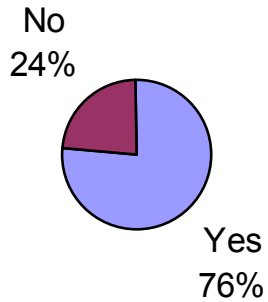
About 80 percent of companies reported an experience modification rate (EMR) of less than 1.0. Half were between .70 and .89 with an average for all respondents of .85. There was only moderate correlation between a company's EMR and its lost workday incidence rate. A zero incidence rate was most often associated with companies with an EMR of .90 to .99.

## Industry Segment Safety

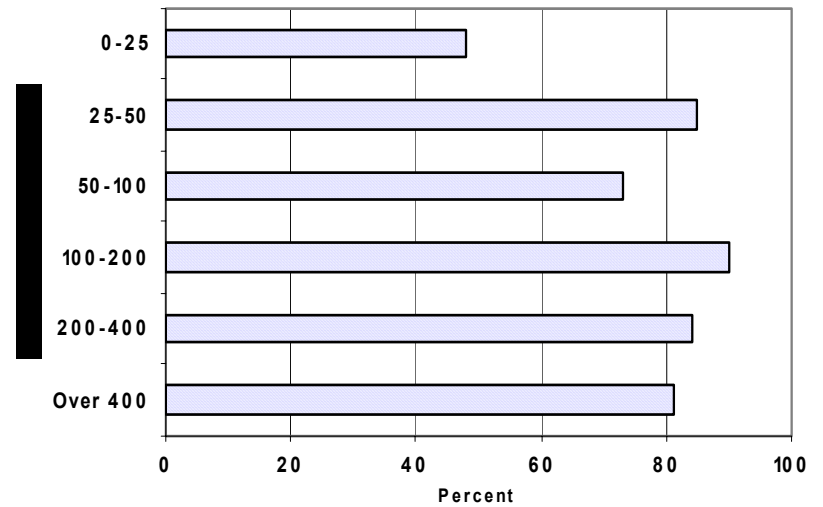
	Number	Hours	Incidents	Incident Rate
<b>HVAC</b>	148	22,600,773	612	5.41
<b>HAC</b>	34	480,106	21	8.75
<b>ASM</b>	74	1,507,817	38	5.02
<b>ISM</b>	121	6,838,838	168	4.90
<b>KIT</b>	42	328,492	9	5.21
<b>MFG</b>	54	1,147,675	30	5.29
<b>TB</b>	65	742,019	19	5.22
<b>SD</b>	22	365,038	7	4.03

For a majority of respondents, it was possible to relate safety experience to type of work performed. Most reported work was HVAC. For all categories of work, but one, incidence rate was between four and five and a half. Heating and air conditioning was considerably higher.

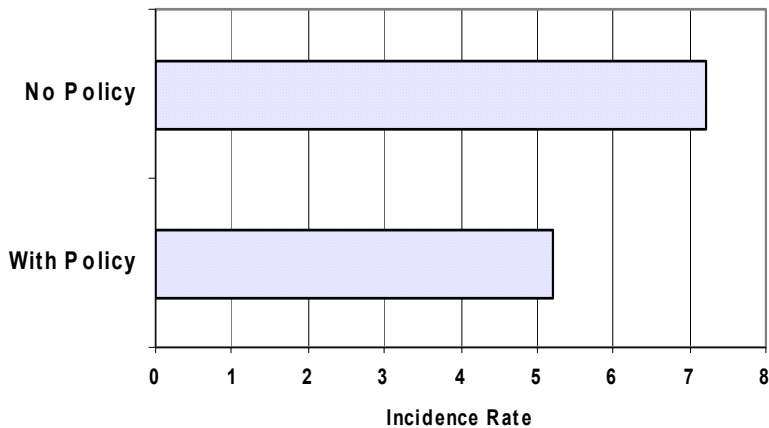
## Formal Program for Drug and Alcohol Abuse



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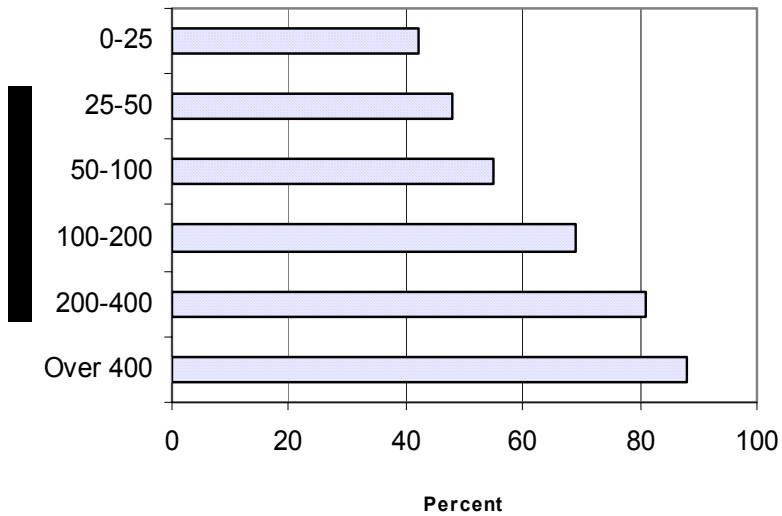
## Incidence Rate by Drug Policy



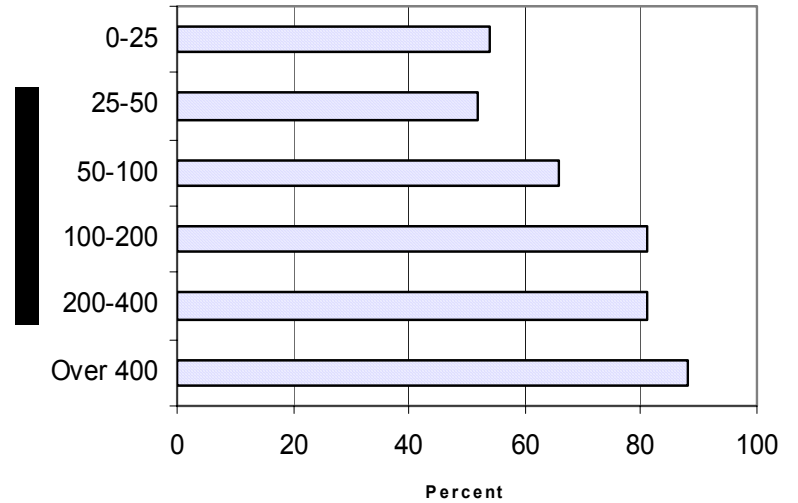
The number of companies reporting that they had a formal program for drug and alcohol abuse continues to increase and is now 76 percent. These companies worked 84 percent of all reported hours. While likelihood of a program was generally greater among contractors working a larger number of hours, geographic location of the contractor also appears to be a factor. 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.



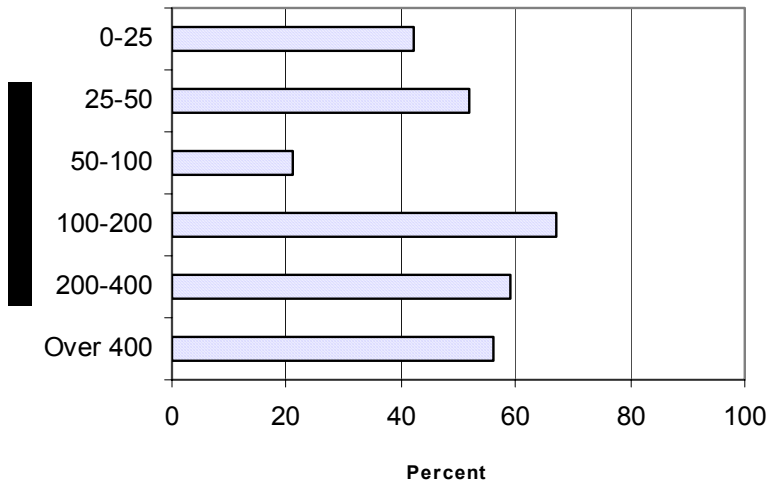
### Pre-Hire Testing Conducted



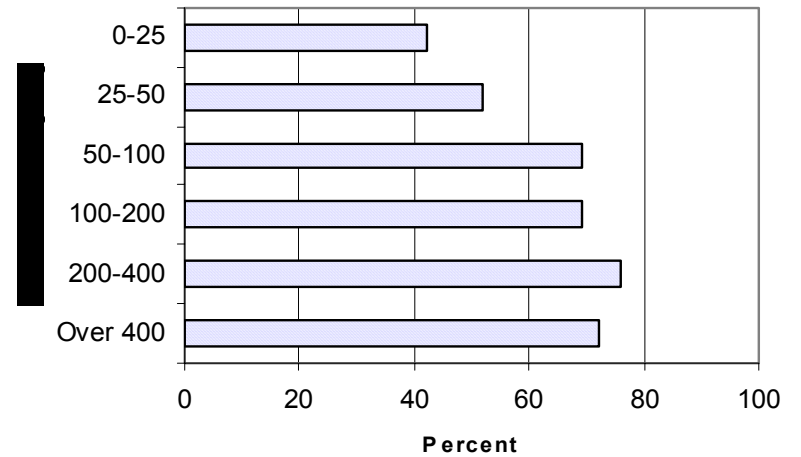
### Post Accident Testing Conducted

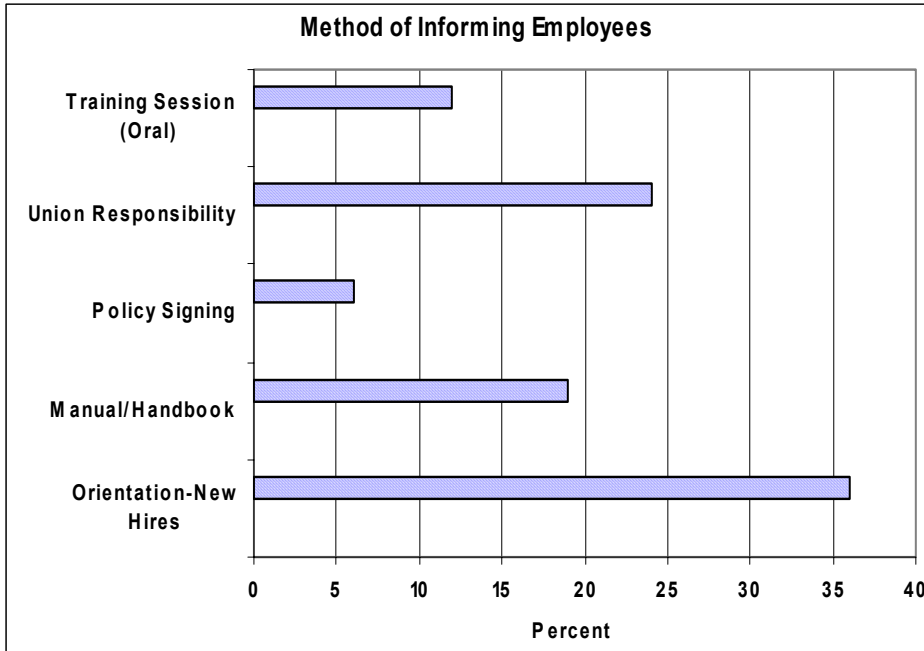


### Random Testing Conducted

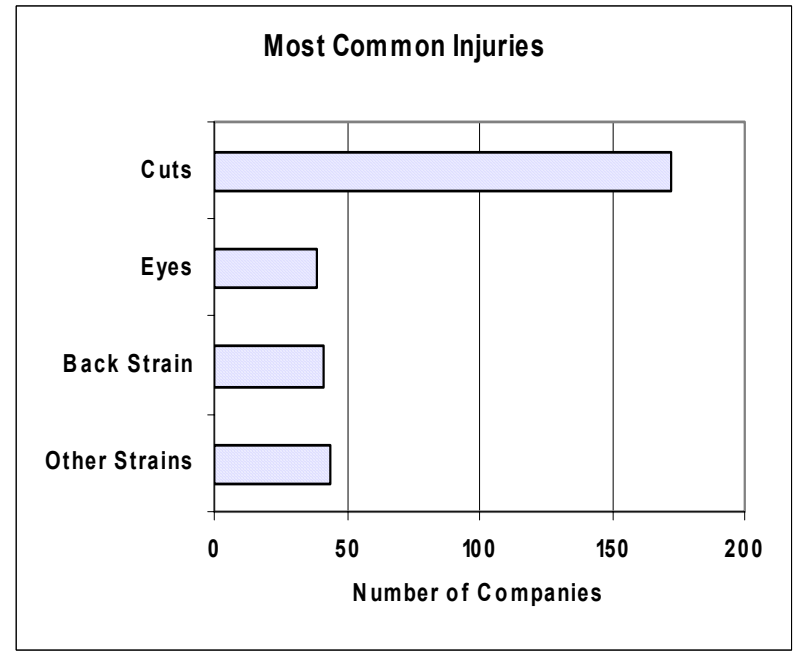


### Penalties





Contractors utilize a number of means to inform their employees as to their drug and alcohol abuse policies. Most commonly, 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.



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>	<u>2004</u>
Incidents	1,026	1,174	1,282	1,267	1,450	1,326	1,197	1,429
Incidence Rate	4.28	4.39	4.25	4.47	4.04	3.99	4.61	5.52
Lost Workdays	15,903	16,478	21,650	18,665	20,106	15,617	25,591	26,086
Average Lost Workdays	92	86	97	97	114	87	145	168
Safety & Health Program	95%	91%	94%	92%	91%	94%	92%	93%
Designated Safety Coord.	94%	88%	95%	95%	92%	94%	91%	87%
SMACNA Products	84%	82%	84%	89%	88%	88%	88%	83%
EMR	0.84	0.84	0.85	0.81	0.83	0.84	0.86	0.85
Drug Program	45%	42%	46%	51%	58%	64%	67%	76%
Number of Companies	294	312	334	303	292	322	296	252