

2000 SMACNA Safety Statistics Profile

Performance and Characteristics of the
SMACNA Member



October 2000

Introduction

Each year, SMACNA conducts a Safety Statistics Evaluation and Awards Program. This Program evaluates safety data, looks for trends, and 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) within specific manhour categories. Those contractors who completed the year with zero lost workdays also receive recognition and an award.

Information submitted for the contest provides a rich data base for evaluating sheet metal industry safety performance. Findings are summarized in this report.

All member firms are provided with a copy of this report 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. **Also, for the first time this year, information on most common types of injuries has been collected. Responses to these questions are tabulated in this report.**

Summary of Findings

Safety performance data provided by 303 SMACNA contractors indicates that:

- The overall lost workday incidence rate was 4.47
- About one-third of all contractors reported a lost workday incidence rate of zero
- Lost workday incidence rate generally declined as hours worked increased
- The average experience modification rate (EMR) was 0.81

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

- A company safety policy
- A designated competent safety coordinator
- Regularly scheduled training programs
- A variety of safety training materials from SMACNA and other sources

Correlation between drug policy and lost workday rates:

A small majority of SMACNA members responded that they do have a formal program for drug and alcohol abuse. Lost workday injury and illness rates for those contractors was much lower than those who did not have a formal drug and alcohol program.

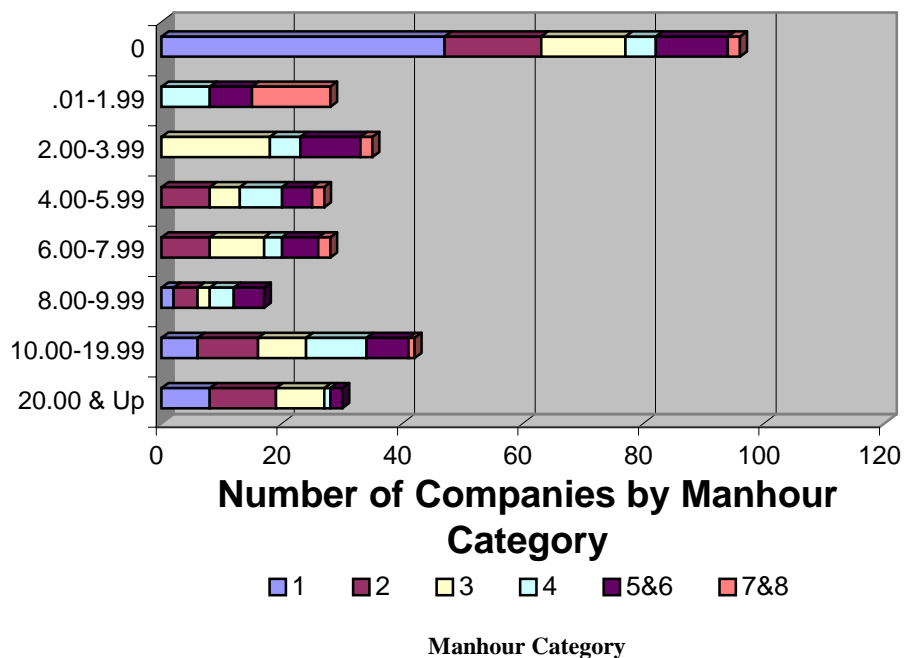
- Contractors with a formal drug policy **3.38**
- Contractors with no formal drug policy **7.49**

Safety Summary

Manhour Category	Class Size	Reports	Hours	Number of Incidents	Incidence Rate
1	1-25,000 hrs.	61	747,091	30	8.03
2	25,001-50,000 hrs.	55	1,967,124	106	10.78
3	50,001-100,000 hrs.	64	4,512,978	160	7.09
4	100,001-200,000 hrs.	42	6,050,408	198	6.55
5	200,001-300,000 hrs.	34	8,034,042	173	4.31
6	300,001-400,000 hrs.	18	6,299,520	219	6.95
7	400,001-500,000 hrs.	8	3,515,683	73	4.15
8	Over 500,000 hrs.	21	25,584,219	308	2.41
Grand Total		303	56,711,065	1,267	4.47

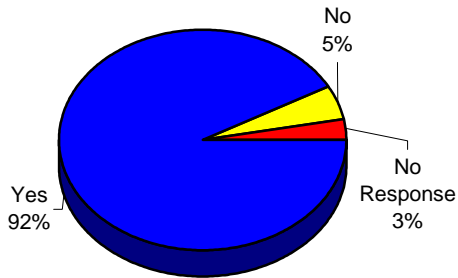
- Over 300 contractors working nearly 57 million hours participated in the SMACNA 2000 Safety Statistics Analysis and Awards Program. About one-third of these companies reported no occupational injuries or illness with lost workdays. For those contractors who reported lost workdays because of occupational injury or illness, the average number of days was 98. The average lost workday incidence rate was 4.47.

Incidence Rate By Size

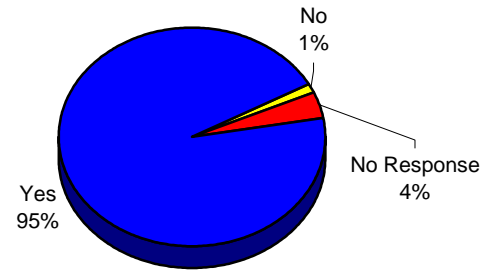


- Lost workday incidence rate was generally lower for contractors working larger numbers of hours. There were, however, exceptions to this pattern. Because OSHA methodology was used for determining incident rates, a small contractor was above average as soon as one incident occurred.

Safety and Health Program

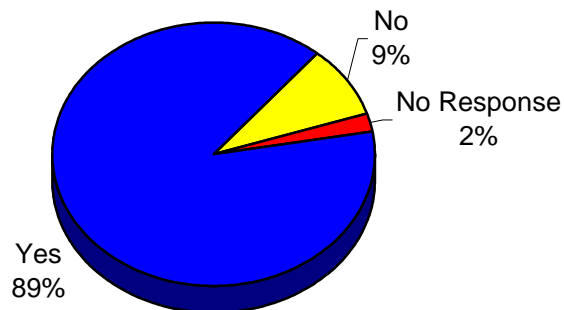


Designated Safety Coordinator



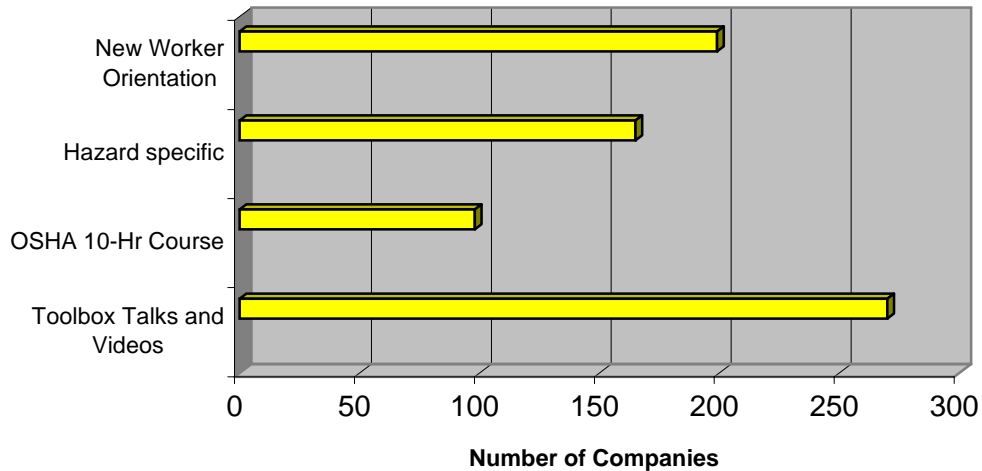
- Most respondents reported that their company had a written safety and health program. They have a designated competent safety coordinator and conduct regular safety training. Their programs include the use of safety products and services available from SMACNA.

Use Safety Products & Services from SMACNA



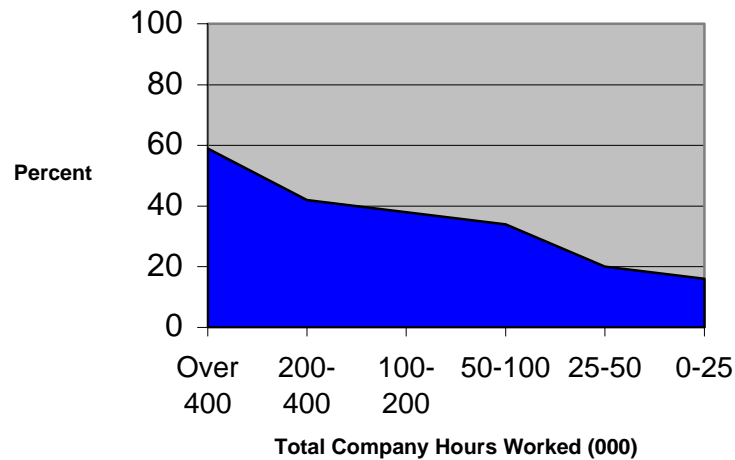
- The vast majority of respondents used the safety products and services available from SMACNA.

Type of Safety Training



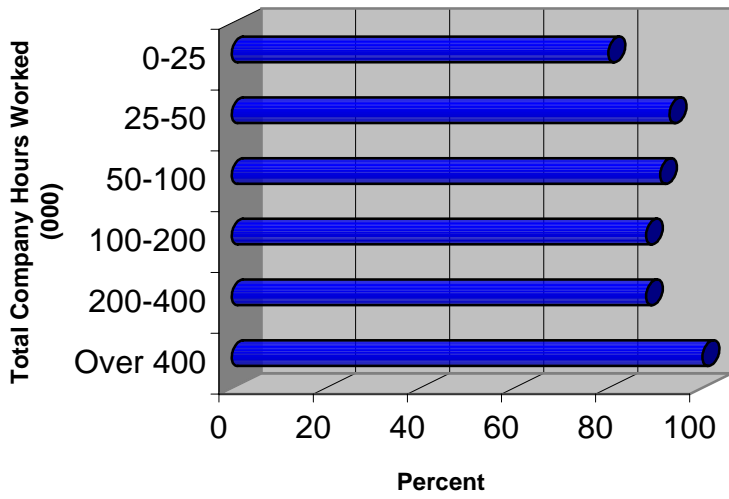
- A number of types of training are utilized by contractors. All were conducted by a majority of contractors, except the OSHA 10-hour course. Toolbox talks and videos were used by almost all companies. Generally, the usage of each type of training increased with the number of hours worked by the contractor. Prevalence of hazard-specific training fell from the prior year among all size contractors.

OSHA 10-Hour Course

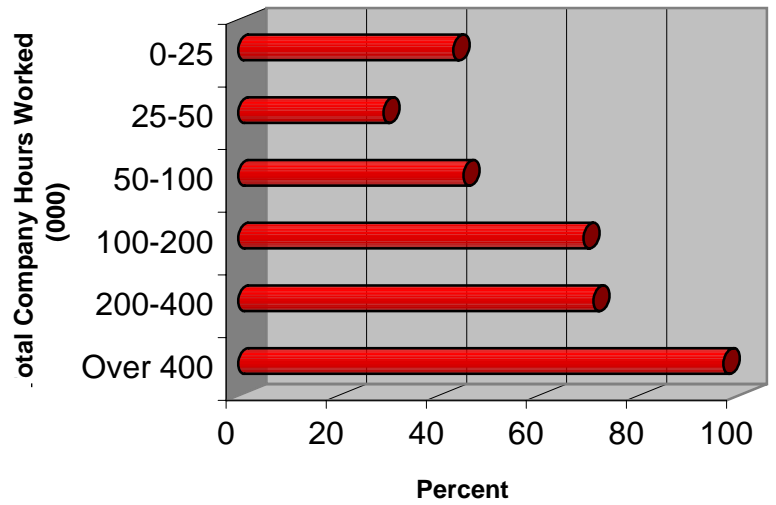


- Like other training options, the OSHA 10-hour course was more likely to be associated with contractors reporting larger numbers of hours worked. Use of the OSHA 10-hour course was geographically clustered. Respondents in three chapters accounted for one-third of the contractors conducting this type of training.

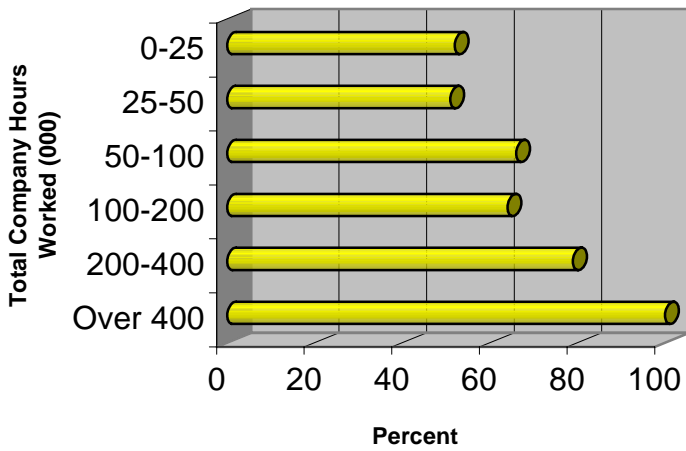
Toolbox Talks and Videos



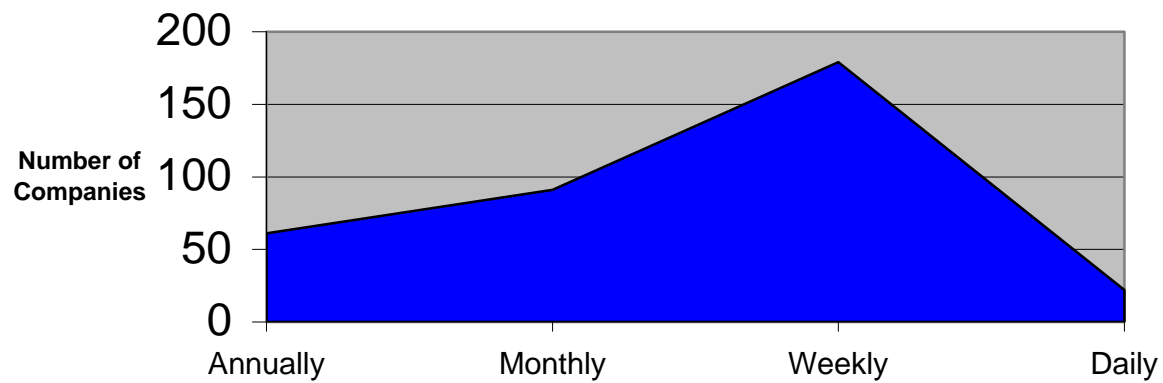
Hazard-Specific



New Worker Orientation

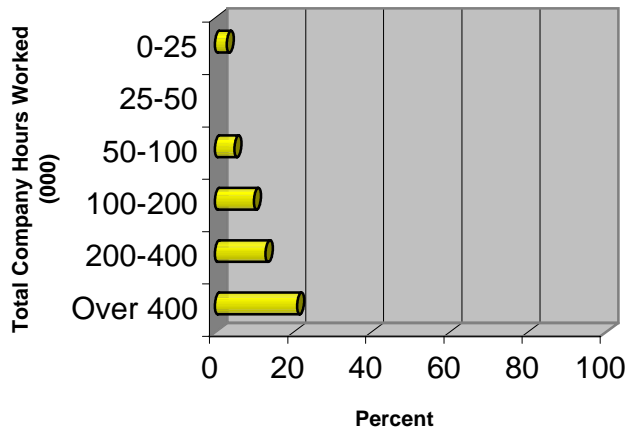


Regularly Conduct Training

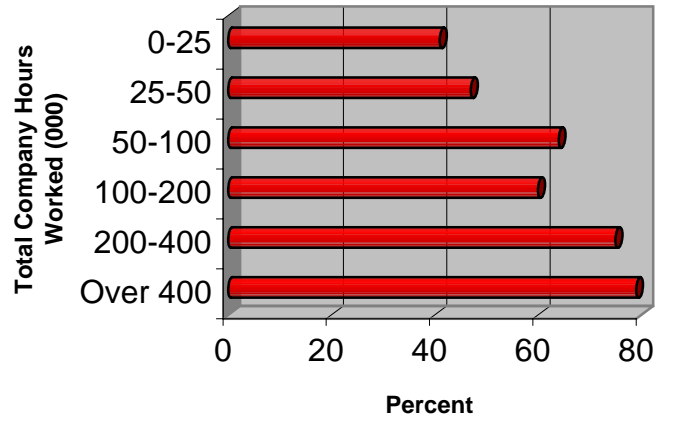


- SMACNA members most often performed training on a weekly basis
- There were also a considerable number of companies that had a monthly training schedule
- Companies that worked more hours were more likely to perform weekly training
- Other training schedules were utilized independent of hours worked

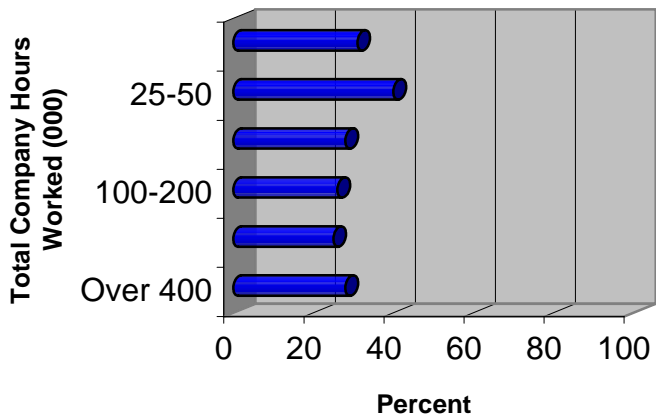
Conduct Training-Daily



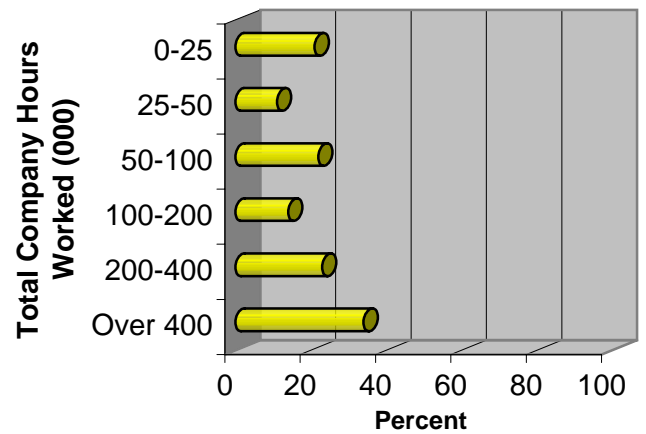
Conduct Training-Weekly



Conduct Training-Monthly

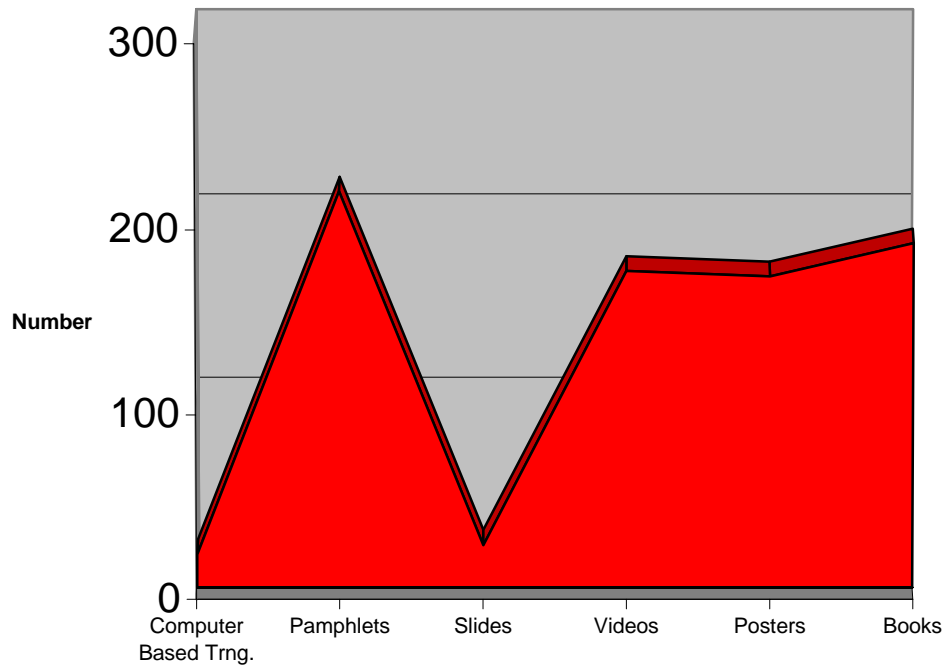


Conduct Training-Annually

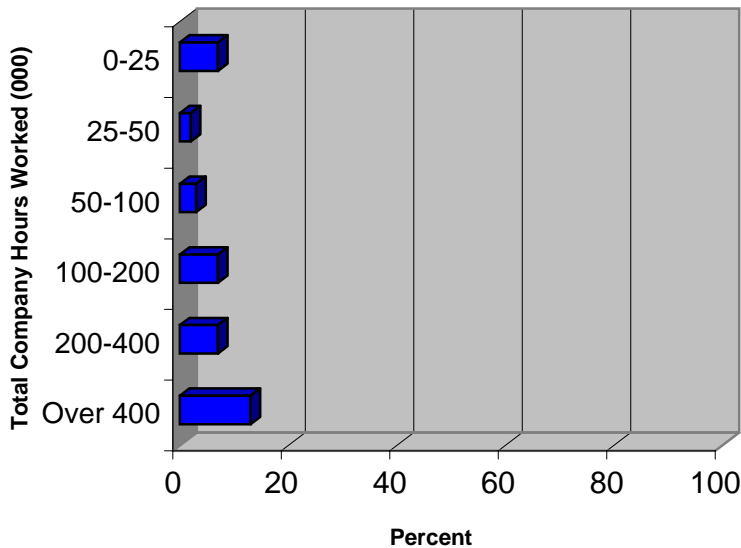


- SMACNA members used a wide variety of printed materials for training. These, as well as videos, were used by more than half of all companies.
- While the use of printed materials was widespread among all sizes of companies, videos were most often used by contractors working larger numbers of hours.

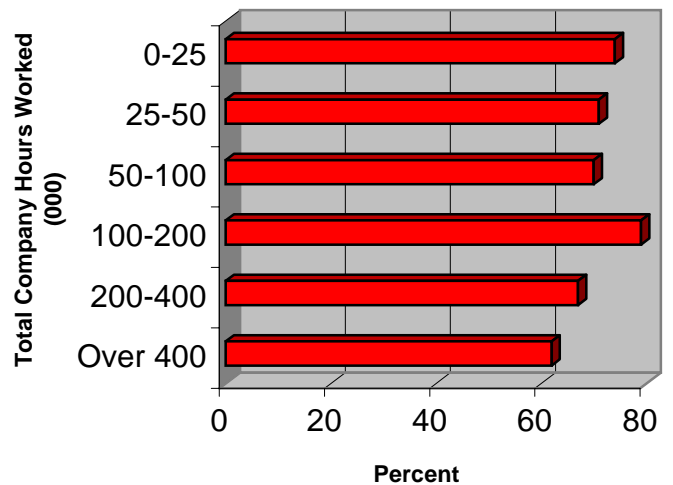
Types of Training Materials Used



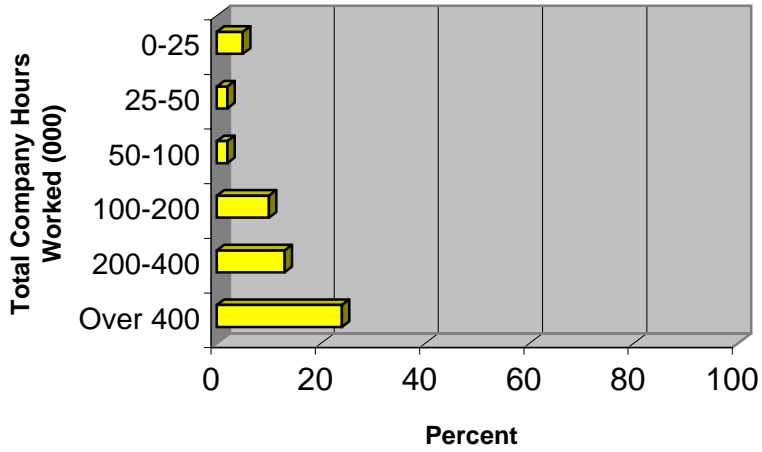
Safety Training Materials-Computer Based Training



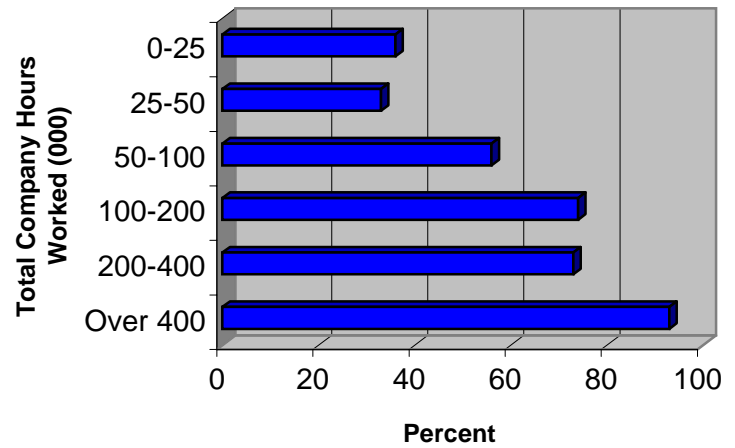
Safety Training Materials-Pamphlets



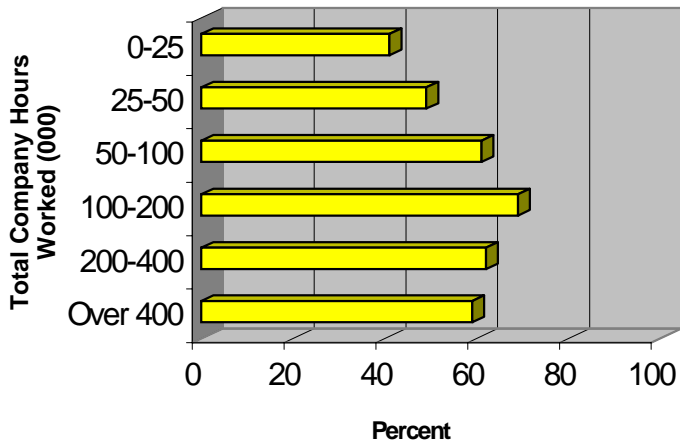
Safety Training Materials-Slides



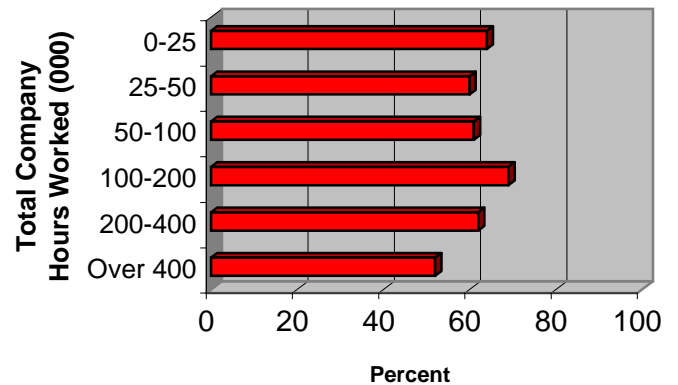
Safety Training Materials-Videos



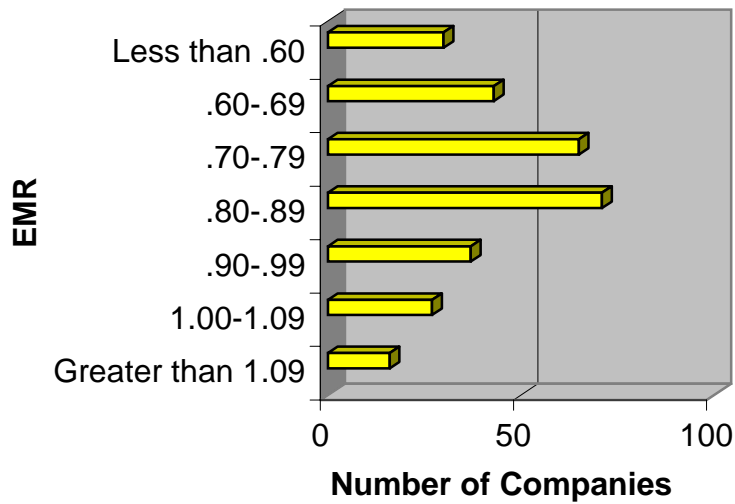
Safety Training Materials-Posters



Safety Training Materials-Books

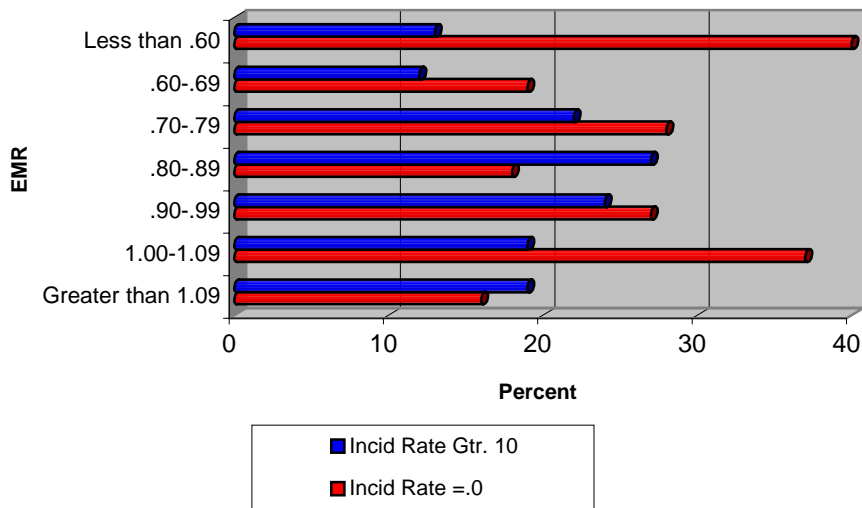


Number of Responses by EMR



- About 45 percent of all companies reported an experience modification rate (EMR) of between .70 and .89.
- The average of all contractors reporting was .81.

Relationship of EMR to Incidence Rate



- An EMR of less than .60 was about equally likely to be associated with a company with an incidence rate of zero as a company with an EMR of 1.0 to 1.09. High incidence rates were found for companies in most EMR categories.

Industry Segment Safety

	Number	Hours	Incidents	Incident Rate
HVAC	237	33,225,141	733	4.41
HAC	81	1,603,854	31	3.87
ASM	110	2,046,065	63	6.19
ISM	194	9,875,757	183	3.70
KIT	54	402,854	7	3.39
MFG	95	1,957,582	56	5.72
TB	80	953,443	20	4.17
SD	48	611,085	13	4.27

HVAC – Commercial Heating, Ventilation, and Air Conditioning

HAC – Residential Heating, Ventilation, and Air Conditioning

ASM – Architectural Sheet Metal

ISM – Industrial Sheet Metal

KIT – Kitchen Equipment/Food Service

MFG – Manufacturing

TB – Testing and Balancing

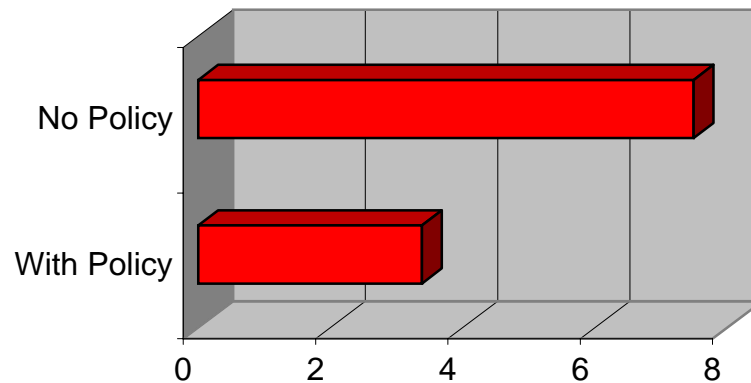
SD – Siding and Decking

When more than one type of work was reported, the number of total injuries reported were allocated to the type of work performed based on the percentage of manhours.

- For most respondents, it was possible to relate work hours and injury and illness experience to type of work performed.
- Over half of all hours were related to HVAC, with the largest portion of the remainder related to industrial sheet metal work.

During the 2000 SMACNA Safety Statistics Evaluation and Awards Program, we looked at the correlation between drug and alcohol programs and lost workday injury and illness rate. The results show that there is a strong negative correlation between these two variables. That is, contractors who reported having a drug and alcohol program typically had lower injury and illness rates when compared to those contractors without a program.

Incidence Rate by Drug Policy

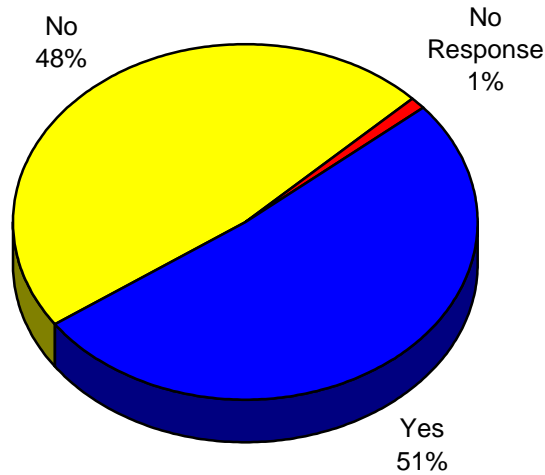


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A small majority of SMACNA members responded that they do have a formal program for drug and alcohol abuse. Lost workday injury and illness rates for those contractors was much lower than those who did not have a formal drug and alcohol program.

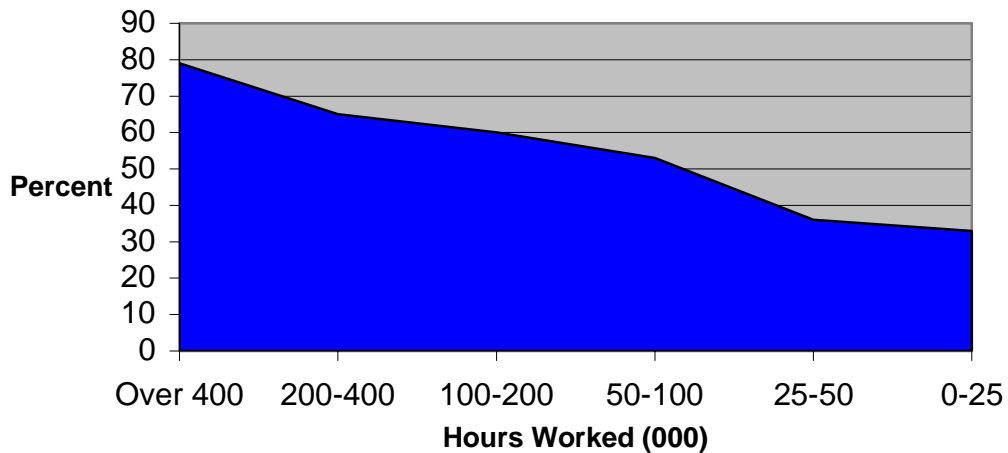
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Formal Program for Drug and Alcohol Abuse



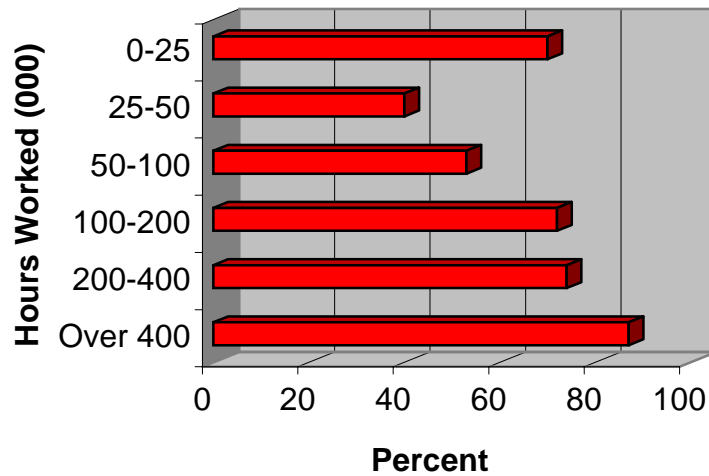
- A small majority of those companies responding to the questions reported that they had a formal program for drug and alcohol abuse.

Formal Program for Drug and Alcohol Abuse



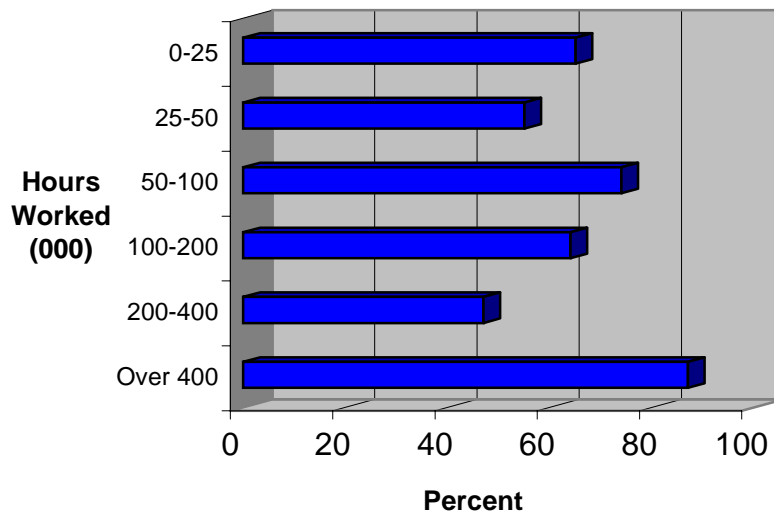
- Among contractors working over 400,000 hours, 80 percent responded positively. In the three chapters with the largest number of responses (about 20 percent of the total), most contractors did not report a program.
- There are a number of methods of informing employees of drug and alcohol abuse policies with two especially common - an orientation program for new hires or distribution of written materials describing the policy.

Pre-Hire Testing Conducted



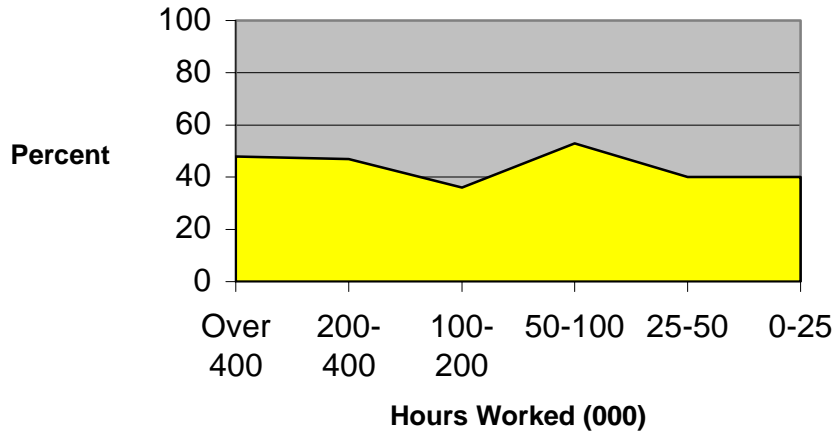
- Most companies with a formal program for drug and alcohol abuse conduct pre-hire and post-employment testing.

Post Employment Testing Conducted



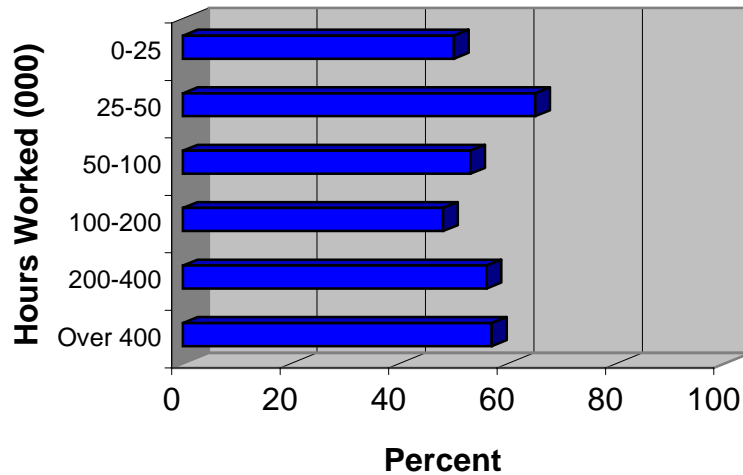
- The data show that the prevalence of post-employment testing has increased when compared to previous years.

Random Testing Conducted



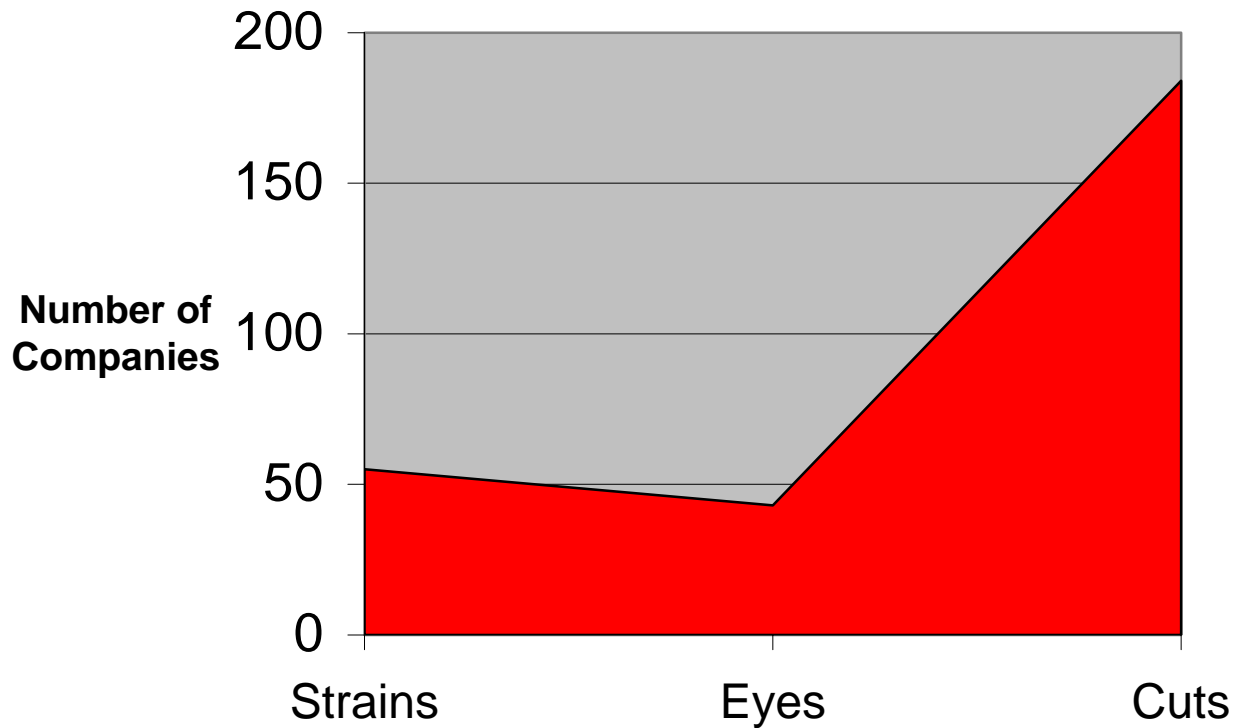
- Fewer than half of the responding companies conduct random drug testing

Penalties



- The size of a contractor was less clear when examining drug testing. Testing and penalties still tended to increase with number of hours worked, but not to the extent of other safety programs. This may be related to the geographic characteristics of reported drug and alcohol programs due to the fact that some areas with high levels of participation in this year's program do not have drug testing included in their collective bargaining agreements.

Most Common Injuries



- The most common injuries reported by SMACNA contractors were cuts. Strains were the next most common injury.
- Severity of the injuries was not included in the survey. This is due to the way the question was asked in the survey. Although these injuries are most common or frequent, they may not be most severe or costly to the employer.