

2001 SMACNA Safety Statistics Profile



Performance and Characteristics of the
SMACNA Member

October 2001

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 database 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. Particular attention is given to drug and alcohol abuse programs.

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Summary of Findings

Safety performance data provided by nearly 300 SMACNA contractors indicates that:

- ✓ The lost workday incidence rate was 4.04.
- ✓ More than one-third of all contractors reported a lost workday incidence rate of zero.
- ✓ Contractors with drug testing programs experienced significantly fewer lost workday cases.
- ✓ Lost workday incidence rate generally declined as hours worked increased.
- ✓ The average EMR was .83.

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

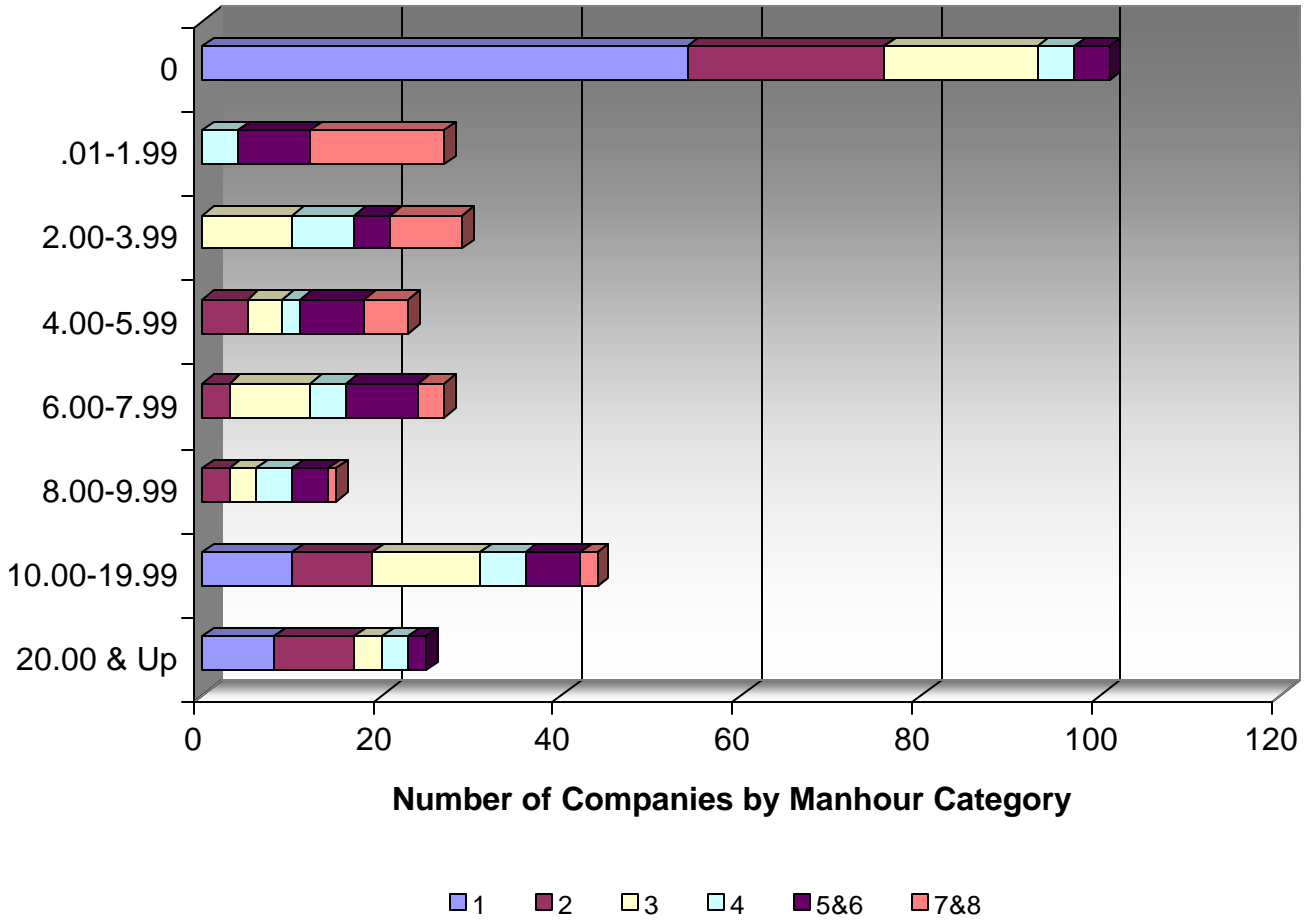
- ✓ A company safety policy
- ✓ A designated competent safety coordinator
- ✓ Regularly scheduled training programs
- ✓ A variety of safety training materials from SMACNA and other sources
- ✓ A formal program for drug and alcohol abuse (a majority).

Safety Summary

Manhour Category	Class Size	Reports	Hours	Number of Incidents	Incidence Rate
1	1-25,000 hrs.	71	942,779	36	7.64
2	25,001-50,000 hrs.	52	1,961,910	95	9.68
3	50,001-100,000 hrs.	59	4,234,727	133	6.28
4	100,001-200,000 hrs.	33	4,654,091	207	8.90
5	200,001-300,000 hrs.	28	6,835,049	222	6.50
6	300,001-400,000 hrs.	14	4,756,777	140	5.89
7	400,001-500,000 hrs.	8	3,659,738	104	5.68
8	Over 500,000 hrs.	27	44,748,797	513	2.29
Totals		292	71,793,868	1,450	
				Lost Workday Incidence Rate	4.04

- ✓ Nearly 300 contractors working over 71 million hours participated in the 2001 SMACNA Safety Statistics Analysis and Awards Program.
- ✓ More than one-third (100) of these companies reported no occupational injuries or illnesses resulting in lost workdays during 2000.
- ✓ The average lost workday incident rate was 4.04, a significant decline from the previous year.
- ✓ Contractors reporting lost workdays due to injuries or illnesses averaged 114 lost workdays in 2000.

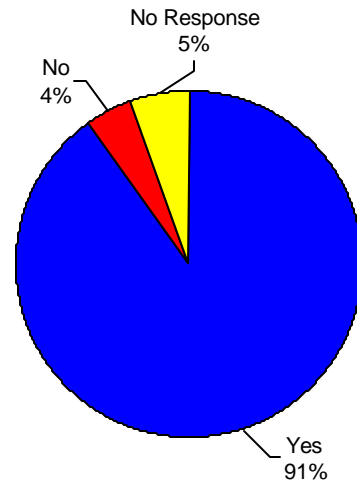
Incidence Rate By Size



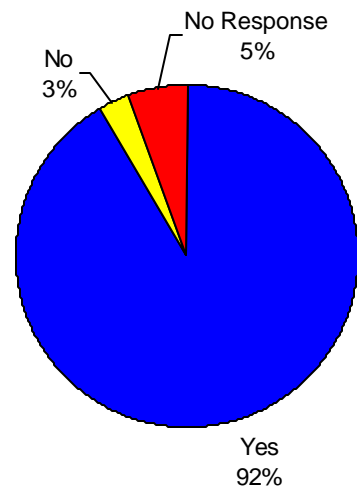
- Lost workday incidence rates were generally lower for contractors working larger numbers of hours. There were, however, exceptions to this pattern.
- Because methodology from the Occupational Safety and Health Administration (OSHA) was used for determining incidence rates, a small contractor was above average as soon as one incident occurred.

Safety and Health Program

- Most respondents reported that their company has a written safety and health program.



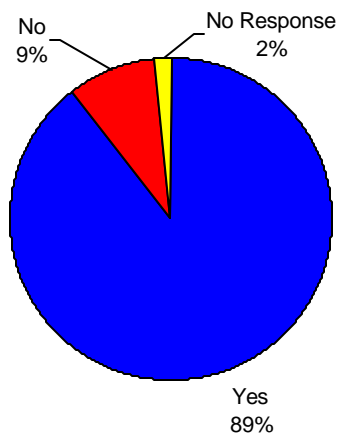
Designated Safety Coordinator



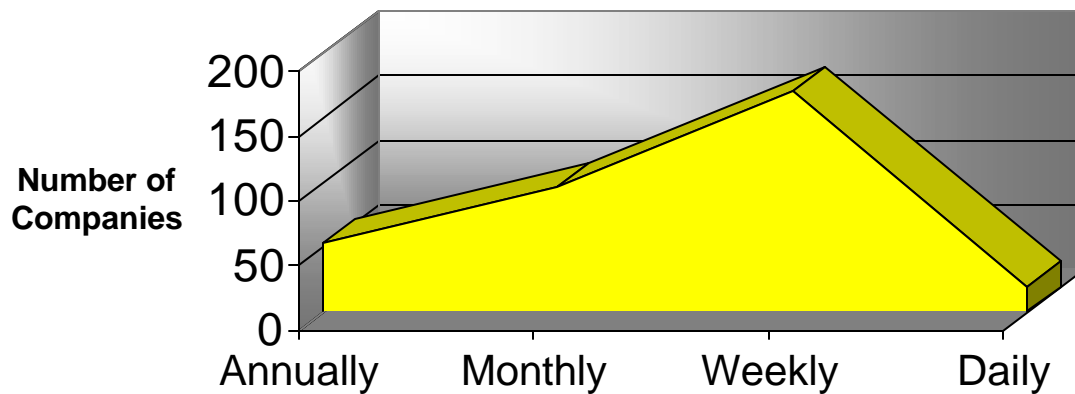
- The majority of the SMACNA members who responded stated that they do have a designated safety coordinator.

Conduct Safety Inspections

- Nearly 90% of respondents regularly conduct safety inspections at their facility or on their jobsites.

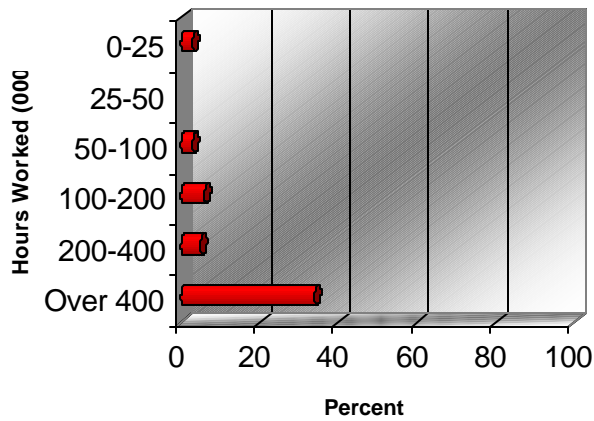


Regularly Conduct Training

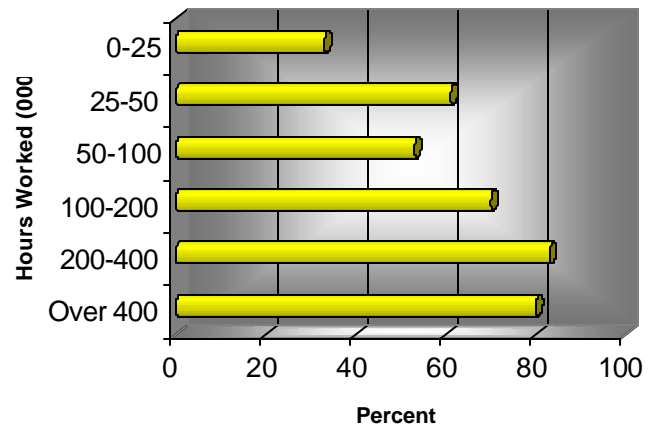


- SMACNA members most often performed training on a weekly basis
- A considerable number of companies also had monthly training schedules
- Companies that worked more hours were more likely to perform weekly training

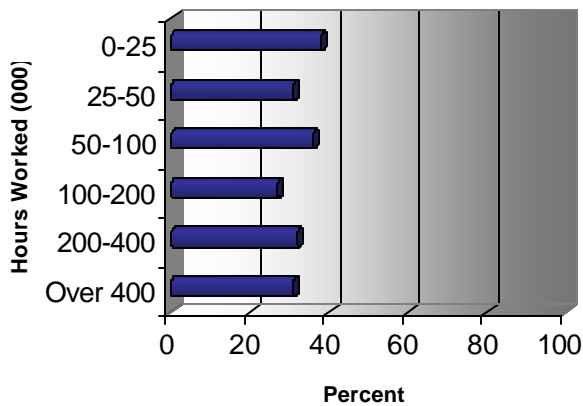
Conduct Training-Daily



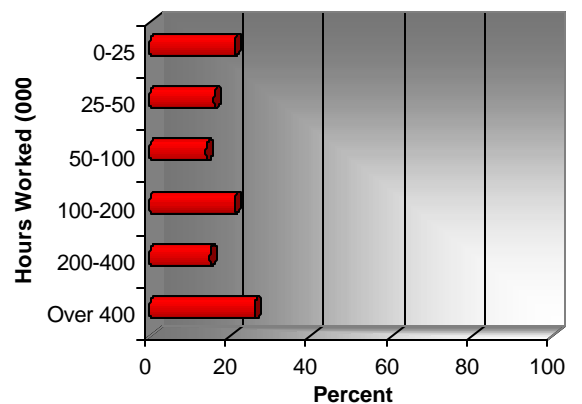
Conduct Training-Weekly



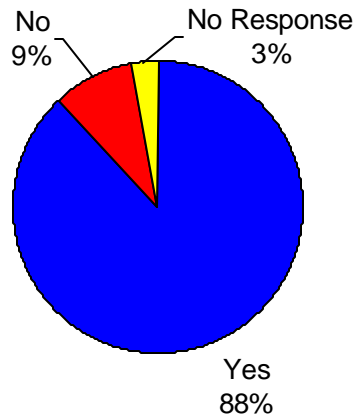
Conduct Training-Monthly



Conduct Training-Annually

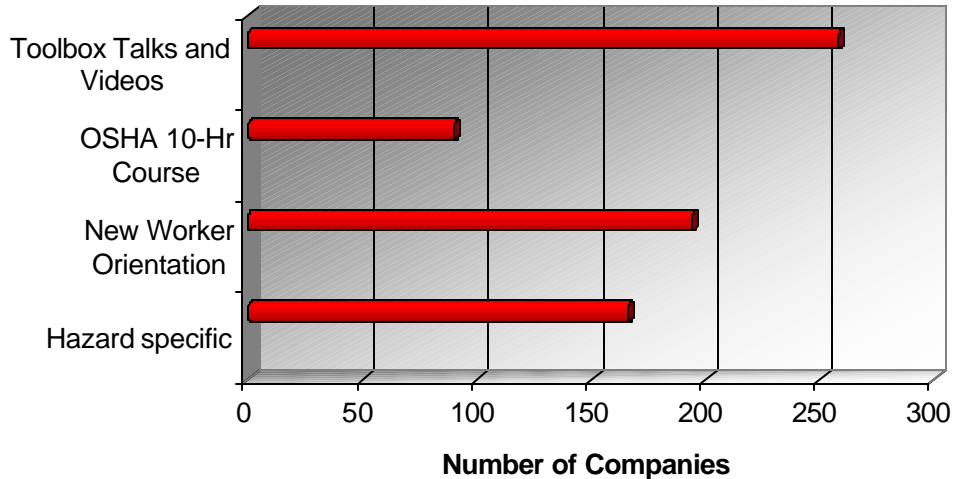


Use Safety Products & Services from SMACNA



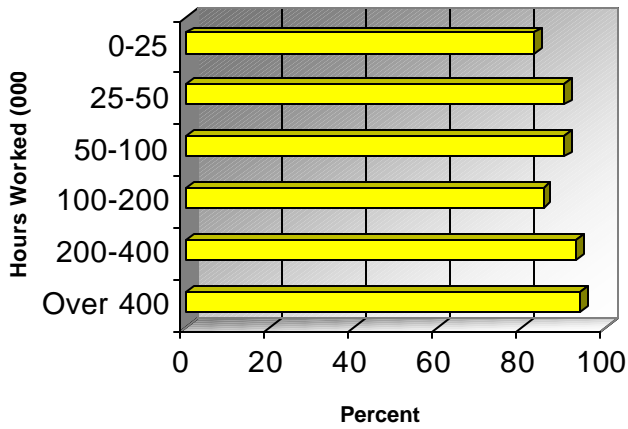
- The vast majority of respondents used the safety products and services available from SMACNA.

Type of Safety Training

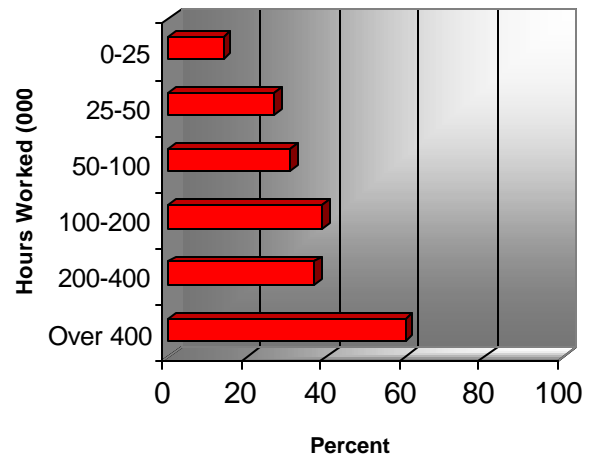


- A number of types of training are utilized by SMACNA contractors. All were conducted by a majority of the respondents, except the OSHA 10-hour course.
- Generally, the usage of each category of training increased with the number of hours worked by the contractor.
- Toolbox talks and videos were used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

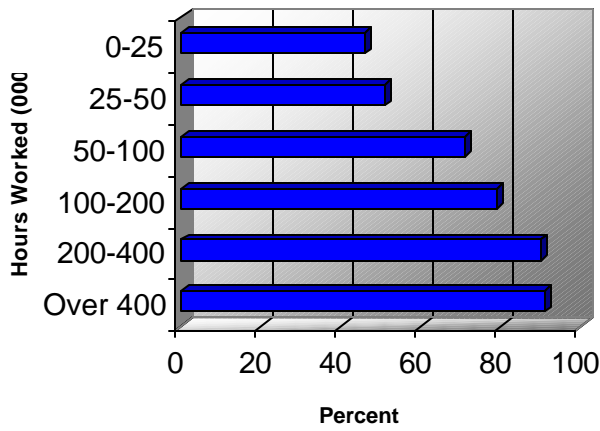
Toolbox Talks and Videos



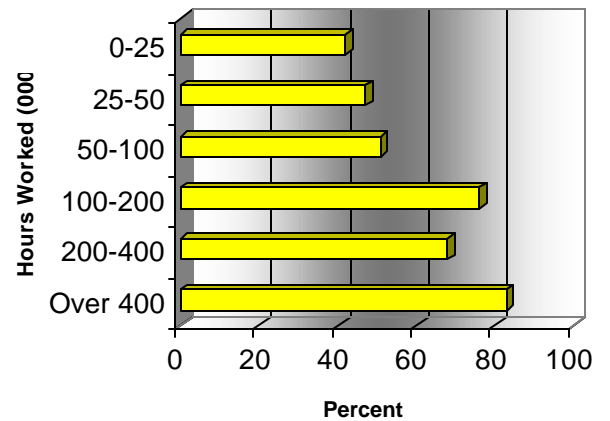
OSHA 10-Hour Course



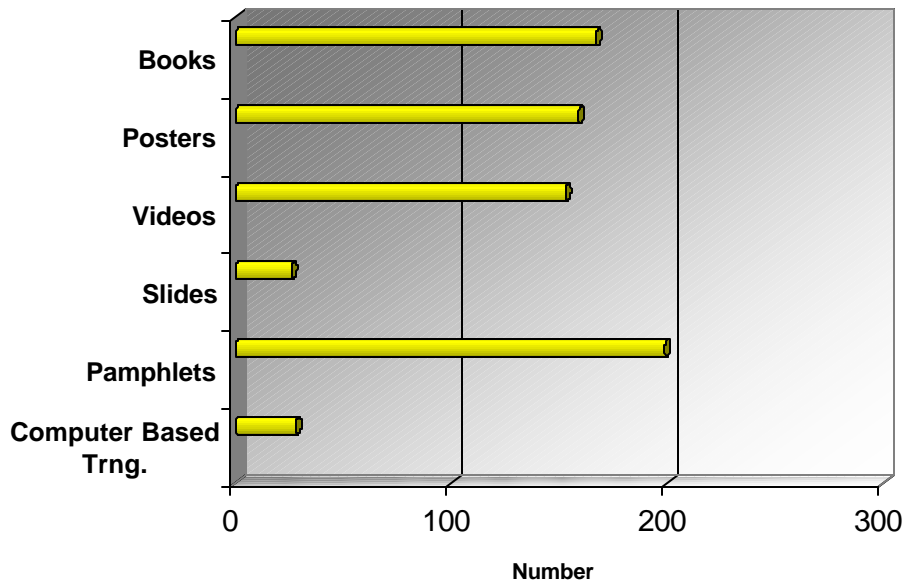
New Worker Orientation



Hazard-specific

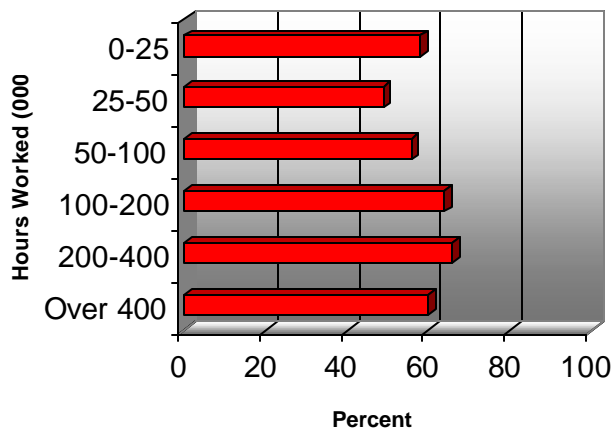


Types of Training Materials Used

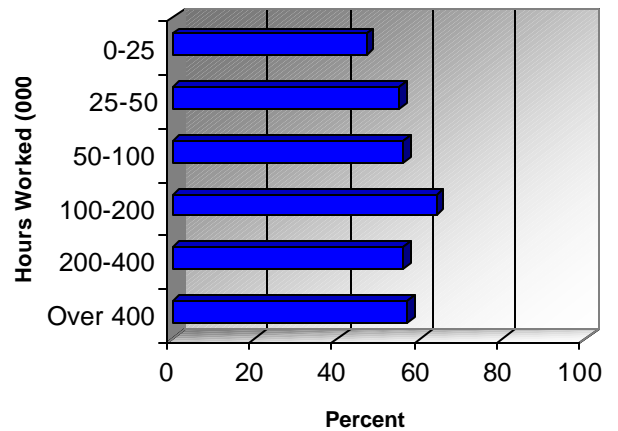


- A wide variety of printed training materials are used by contractors.
- While the use of printed materials was widespread among all sizes of companies, videos were used more often by contractors working larger numbers of hours.

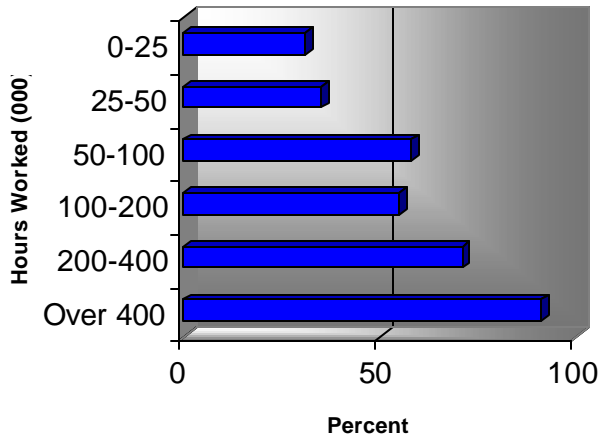
Safety Training Materials-Books



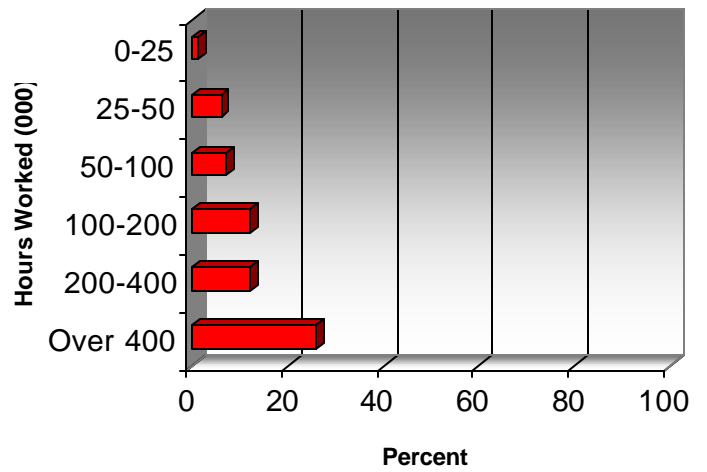
Safety Training Materials-Posters



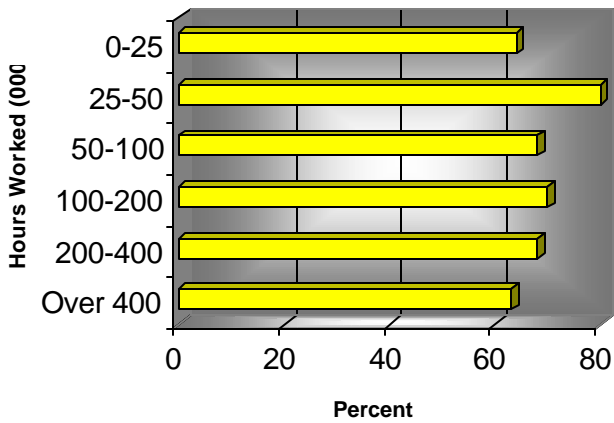
Safety Training Materials-Videos



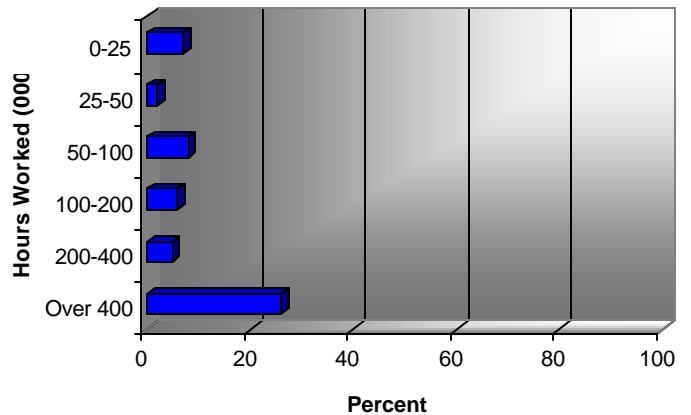
Safety Training Materials-Slides



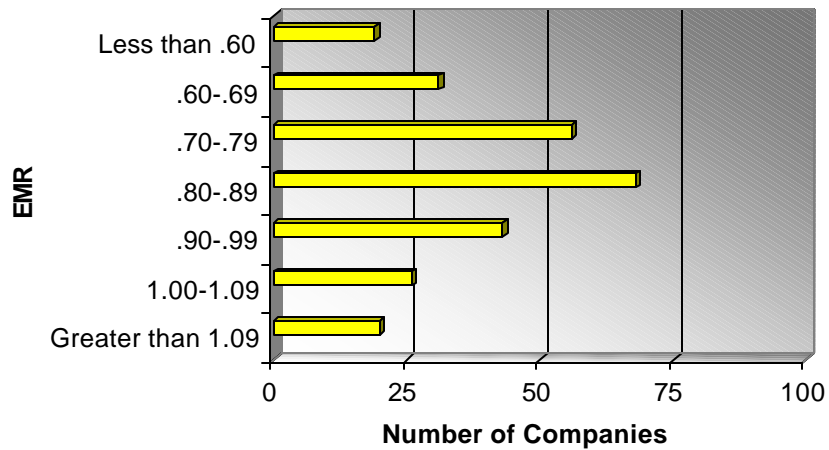
Safety Training Materials-Pamphlets



Safety Training Materials-Computer Based Training

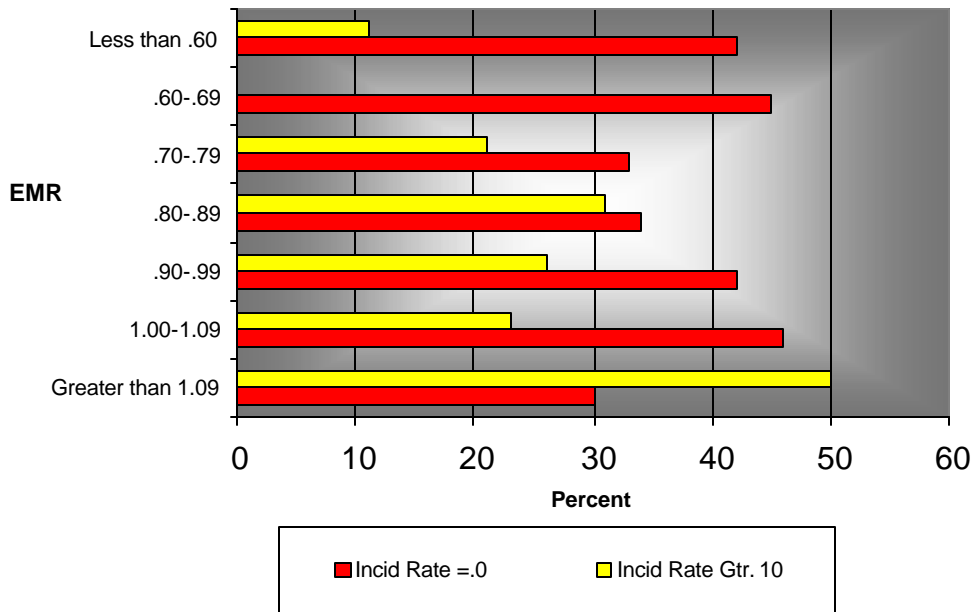


Number of Responses by EMR



- About 45% of all companies reported an experience modification rate (EMR) of between .70 and .89.
- The average of all contractors reporting was .83.

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 1.00 to 1.09.
- High incidence rates were most often reported by companies with an EMR greater than 1.09.

Industry Segment Safety

Industry Segment	Number	Hours	Incidents	Incident Rate
HVAC	215	36,729,110	783	4.27
HAC	61	1,477,528	33	4.47
ASM	96	2,376,779	55	4.64
ISM	165	11,212,742	183	3.27
KIT	43	402,858	8	3.99
MFG	80	2,817,747	107	7.59
TB	70	1,417,644	28	3.94
SD	33	550,863	15	5.32

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

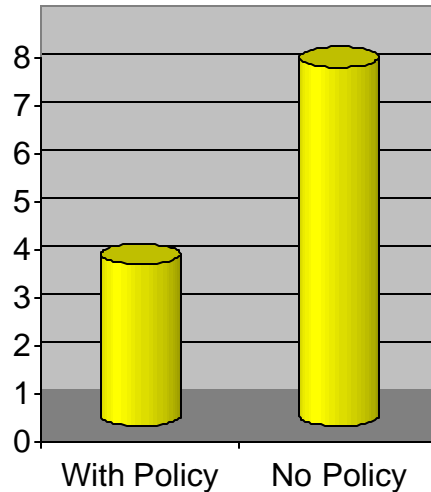
TB – Testing and Balancing

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. Because some contractors did not report types of work performed, those numbers were omitted from this table. Therefore, the number of hours listed is not 100% of the total hours worked.

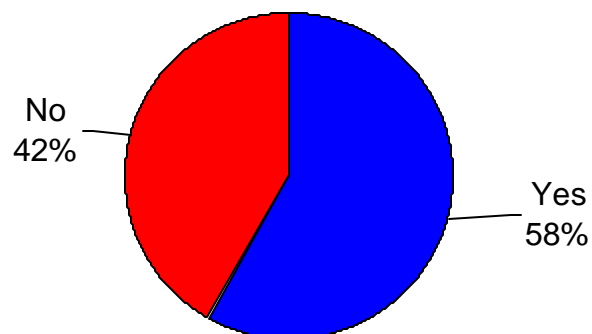
- For most respondents, it was possible to relate work hours and injury and illness experience to type of work performed.
- The lost workday incident rate for all industry segments was within one of the overall average, except for manufacturing and siding and decking which were higher.

Incidence Rate by Drug Policy



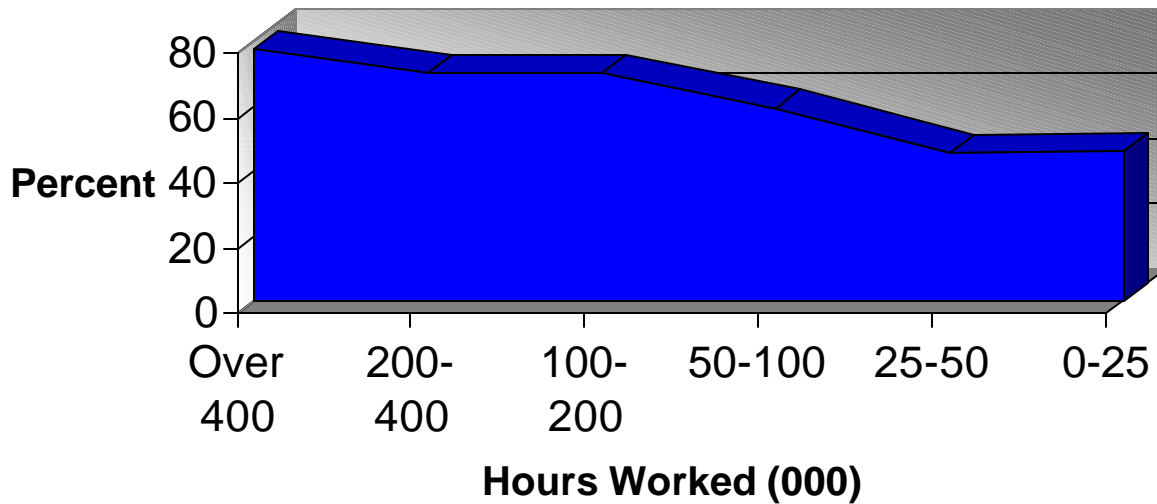
- During the 2001 SMACNA Safety Statistics Evaluation and Awards program, we looked at the correlation between drug and alcohol programs and lost workday injury and illness rate.
- The results show that there is a strong negative correlation between these two variables. That is, contractors who reported having a drug and alcohol program typically had significantly lower injury and illness rates (**3.38**) when compared to those contractors without a program (**7.49**).

Formal Program for Drug and Alcohol Abuse



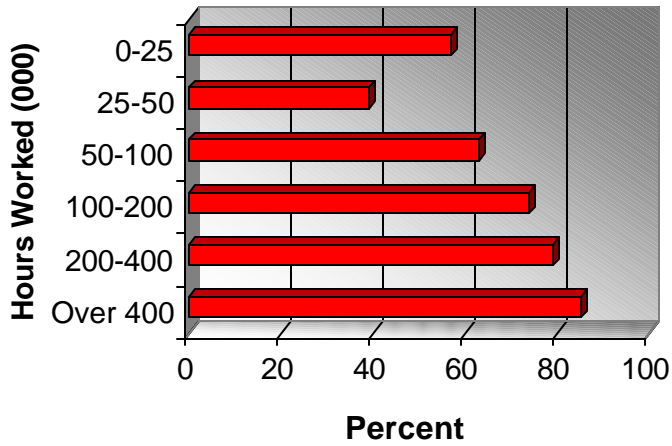
- A majority of those companies (58%) responding to the questions reported that they had a formal program for drug and alcohol abuse.

Formal Program for Drug and Alcohol Abuse

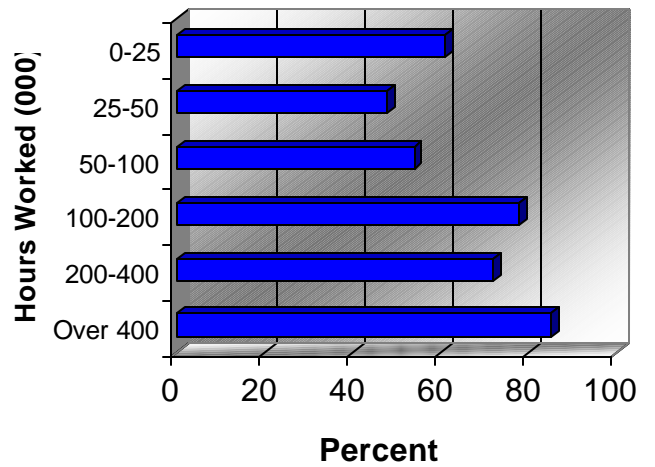


- Among contractors working more than 400,000 hours, almost 80 percent responded that they do have a formal drug and alcohol abuse program.
- In the two chapters with the largest number of responses (about 15 percent of the total), most contractors did not report a program.
- There were a number of methods of informing employees of drug and alcohol abuse policies, with an orientation program for new workers being the most common.
- More than 20 percent of companies with a drug and alcohol abuse program relied upon the union or a manual/handbook to communicate the policy to workers.

Pre-Hire Testing Conducted

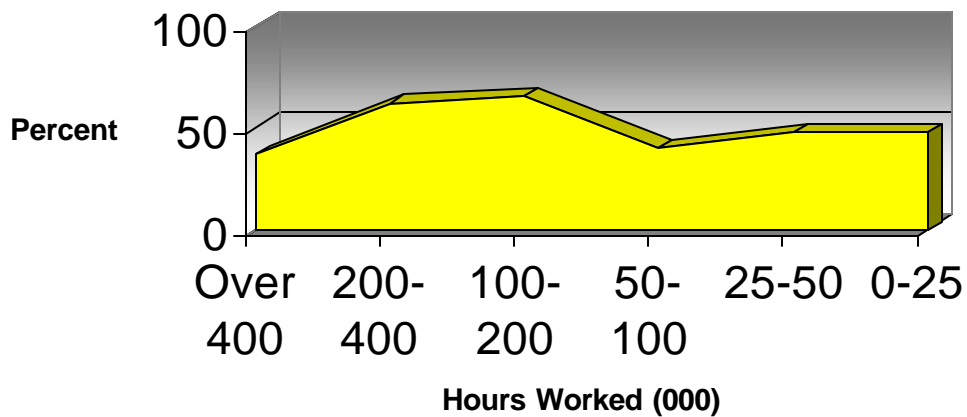


Post Accident Testing Conducted



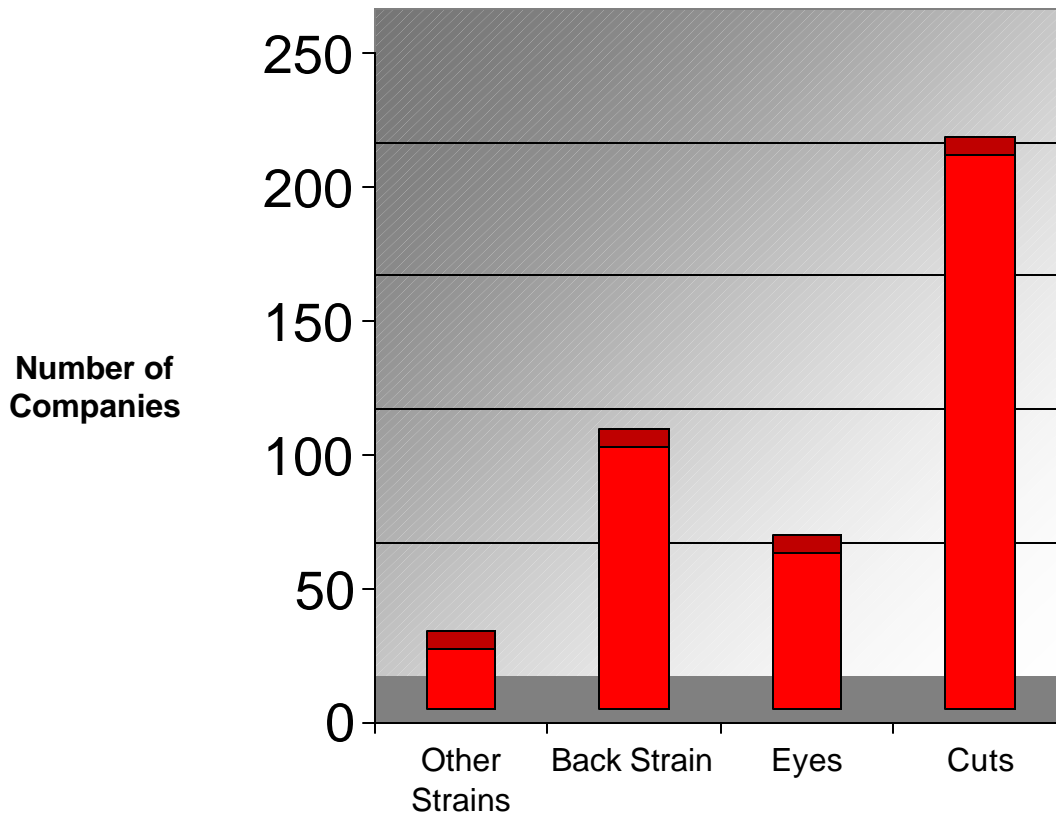
- Most companies with a formal program for drug and alcohol abuse conduct pre-hire and post-accident testing.

Random Testing Conducted



- Generally, less than half of the responding contractors conduct random drug testing.

Most Common Injuries



- The most common injury reported by SMACNA contractors was cuts.
- Back strains were the next most common injury.
- Severity of injuries was not determined by the survey. Although these injuries are most common or frequent, they may not necessarily be most severe or costly to an employer.