

1991

## **OSHA Compliance by Small and Medium Business**

Bill W. Trammell

*Let us know how access to this document benefits you*

Copyright ©1991 Bill W. Trammell

Follow this and additional works at: <https://scholarworks.uni.edu/gswork>

OSHA  
COMPLIANCE BY SMALL AND MEDIUM BUSINESS

University of Northern Iowa  
College of Natural Sciences  
Department of Industrial Technology

33:299

Research

Professor: Dr. John Fecik

By


Bill W. Trammell

April 29, 1991

OSHA  
COMPLIANCE BY SMALL AND MEDIUM BUSINESS

Charles D. Johnson

Advisor Signature \_\_\_\_\_

  
John T. Fecik

Advisor Signature \_\_\_\_\_



## TABLE OF CONTENTS

	Page
INTRODUCTION-----	1
STATEMENT OF PROBLEM-----	2
STATEMENT OF NEED-----	4
Hypothesis-----	4
Definition of Terms-----	5
Scope, Delimitations and Assumptions-----	6
REVIEW OF LITERATURE-----	7
Methods-----	10
Results-----	10
Discussion-----	17
CONCLUSIONS-----	18
RECOMMENDATIONS-----	18
REFERENCES-----	20
APPENDIX-----	21
Business Safety Survey-----	22
Type of Business-----	23
Number of Employees-----	24
Number of Employees-----	25
Safety Department-----	26
Safety Management-----	27
Safety Division Management-----	28
Safety Department Employee Level-----	29

Safety Managers Time Division-----	30
Safety Managers Primary Title-----	31
Use of Safety Consultants-----	32
Safety Consultant Contract-----	33
Confidence in Safety Program-----	34
Confined Space Compliance-----	35
New Hire Orientation-----	36
Continuous and Update Training-----	37
Safety Program Under Consideration-----	38
Safety Division Costs for 1989-----	39
Safety Division Costs for 1990-----	40
Safety Division Costs for 1991-----	41

## INTRODUCTION

Modern industrial operations, as integrated into the business world, are charged with the moral, ethical, and legal concerns of the individual employee's safety, health, and welfare (Huszczko, 1990; Zaleznik, 1990; Luce, 1990). As compared with its recent past safety has become an immensely complex issue. The safety approach a few years ago was relatively simple and often noted as just, awareness, and that approach was often considered adequate. Today's safety awareness, programs of training, policies and procedures, and testing result in a multifaceted approach which is costly, effective, highly complex, constantly evolving, and difficult to administer (Geber, 1989; Overman, 1990; Luce, 1990).

The evolving and complex safety discipline reinforces the need for increasingly knowledgeable and adept safety managers (Jenkins, 1990). As the moral, legal, and social demands on safety advances and evolves the effective management of it is slowly graduating towards a science rather than an art. Enforcement of congressionally enacted employee protective laws have recently escalated. In addition to safety citations and corresponding fines willful violators may now face criminal charges in serious cases (Luce, 1990).

This gradual shifting of awareness, within business and industry, management, and individual employees (Jenkins, 1990), is causing a deliberate evolution in the focus of commitment.

Legal requirements do not always result in idealized safety. However dedication by management, employees, and business often results in a firm commitment which may optimize a program and its results.

### PROBLEM

The one area receiving the most safety attention is, by necessity, the workplace. Even so there are still significant injuries and deaths, 11,000 deaths and 2 million injuries in 1985, which occur in the work environment (Grimaldi and Simonds, 1989). According to Grimaldi and Simonds (1989) "the cost of work accidents for 1985 is estimated by the National Safety Council to be \$37.3 billion. According to the council, most of that loss is paid for by the employers" (P. 4). These figures are probably very conservative and do not include losses such as impact upon families, or associated costs of care which may be related to the loss of earnings resulting from worker's injuries or death.

While there is extensive, and convincing, evidence that a well defined and administered safety program will have a positive impact upon reducing occupational injuries and illnesses there also exists an attitude, within small to medium sized manufacturers and businesses, which defies this statistical evidence. According to Grimaldi and Simonds (1989) "a well defined and administered safety program can reduce injuries, illnesses, and result in reducing operating costs substantially" (P.4).

Although safety is an acknowledged management responsibility there are vast numbers of small and middle sized businesses, and manufacturers, whose management executives routinely shirk this duty. While there may be a wide variety of reasons given by management for failing to implement a safety program the two predominate reasons may well be management's lack of knowledge and ability and secondly perceived economics. It is readily apparent that a large number of smaller businesses have assumed the position that consequences that result from a lack of a safety program is an acceptable risk. These managers are gambling everything that in the pursuit of their daily operations they will not encounter an accident or safety violation which will result in loss of life, serious employee injury, and the resultant investigation and heavy fines that may cost their business everything. It appears that these risks are being taken routinely without much thought of the probabilities and consequences.

In addition to the risks another element enters into consideration. Negligence by one definition is "creation of an unreasonable risk causing unintended harm" (Grimaldi and Simonds, 1989,-P. 168). While negligence is a leading cause for tort action the law defines it as "whether a reasonable man would have recognized the risks and striven to avoid it". Thus, according to Grimaldi and Simonds (1989) "the risk scenario, in summary, may be seen to exhibit many pitfalls for unwary manufacturers, sellers, and product designers unless appropriate risk analysis



and safety controls are applied" (P. 169).

The goal of this study was to sample a small cross section of business and industrial firms within the geographic area of Iowa. To obtain information concerning their safety programs, or lack of, and the administration of these programs.

#### STATEMENT OF NEED

Worker safety and health laws exist primarily because of a consensus that individual employer's efforts either were non-existent, ignored, or administered in a fragmented form (Grimaldi and Simonds, 1989). Since 1970 when public law 91-596, the Williams-Steiger act, better known as the Occupational Safety and Health Act, was passed the gradual move towards safety was recognized as inevitable. The concern for employee safety and health has gained momentum throughout business and industry. However the initial costs are high. Because of various reasons and factors a large number of smaller to middle sized businesses simply may not be living up to their moral, social, ethical, and legal obligations of providing their employees a safe and healthful working environment. The need to examine this hypothesis and attempt to determine some of the underlying reasons is the primary purpose of this study.

#### Hypothesis

It is hypothesized that even though governmental rules, regulations, and policies along with ethical, social, and moral

dictates within our communities now require, even demand, that businesses and industry provide their employees a healthful and safe working environment the opposite is often the case. There is a substantial number of employers, within the small to medium sized industrial manufacturers, whose chief executive officers: (1) fail to implement a safety program within their organization; (2) fail to provide more than token attention to employee safety and the intent of the OSHA regulations; (3) have no sincerity or intention to complying with OSHA laws now or in the foreseeable future; (4) and appear willing to accept the risk of punishment for failure to comply with all or part of the Occupational Safety and Health Act.

#### Definition of Terms

As a prelude to, and in support of, the survey certain explanations and definitions need to be defined and expounded upon. These definitions are;

**Type of Business.** Refers to statements of the primary function or current operations of the business from which a firm derive profits thus justifying their continued survival.

**Safety Department.** For this survey is identified as a specific and separate functioning division, or unit, within a business which is responsible for employee safety and health as set out by OSHA and other regulatory agencies.

**OSHA Regulation Compliance.** For purposes of this study is meant to be the substantive and dedicated effort, by an

organization, to comply with OSHA rules and regulations as set forth by CFR 29 1910.

Consulting Service. Refers to an independent or outside agency which specializes specifically in an area within which the contracting agency has little or no expertise.

Safety Policy. For purposes of this study is the written, and demonstrated dedication to, a specific method of corporate compliance with OSHA rules and regulations governing employee health and safety.

Contract. Referred to as the formal written agreement between an organization and another company, or individual, in which an agreed upon safety service is performed.

Confined Space Entry Standard. Is specified as the proposed standard as set out in federal register.

Continuous and Updated Training. For this survey means the organizations efforts and procedures through which they comply with OSHA standards.

Small Sized Business. As addressed in this study will consist of employee strengths from 11 through 100.

Medium Sized Business. As addressed in this study will consist of employee strengths from 101 through 500.

#### Scope, delimitations and Assumptions

There was no pilot study conducted in this research. The data was collected using questions from an instrument developed by this researcher. One delimitation of this study is the fact

that it was conducted in only one state. Due to the limited scope of the study, the results are not generalizable to other states.

Another limiting factor is that the number of corporations was quite small. Only 130 firms were surveyed. This factor could also cause generalization problem.

It is assumed that the respondents answered each question or request on the questionnaire as honestly and accurately as possible.

#### REVIEW OF LITERATURE

Although business and industry have made enormous progress toward employee safety and health recently there has been an increasing emphasis on strengthening their commitment by employers, employees, governmental regulatory and enforcement agencies (Luce, 1990). Promoting and maintaining supervisors and employees interest in safety is primarily managements responsibility. Management must demonstrate its sincerity and interest by actively supporting a solid safety program (The National Safety Council, 1988). The National Safety Council, (1988), noted "any lack of interest by top management should not be construed as indifference or even opposition to safety. Many times it can be traced to a lack of awareness of the basic benefits of an organized safety program" P239.

This gradual evolution of safety consciousness is closely related to the perception of employee vested rights within the employment structure (Luce, 1990). The recognition of employee

rights to employment permeates the entire social structure (Jenkins, 1990). Everyone, including the government, benefits from each and every healthy and safe gainfully employed worker (Grimaldi, 1989).

Even though the awareness, and practice, of safety is on the increase within commercial and industrial organizations the concentrations of these efforts are primarily centered around the larger organizations (Grimaldi and Simonds, 1989). From the simple economics standpoint the larger employer is in a better position to establish, fund, and manage an active employee safety program. Just one phase of safety advertisement for the salt river project in Arizona costs approximately \$70,000 (The National Safety Council, 1988). This leaves the small and medium sized employers caught in an unenviable position of implementing and managing an employee safety program even though he, or she, have very limited resources, abilities, and expertise to do so. They are faced with the legal, moral, ethical, and social demands that directly contradict their limited resources (Luce, 1990).

A common consensus is that most, if not all, hazards and resultant unwanted consequences could be reduced by better safety engineering. This notion is faulted by practicalities that influence how levels of effort occur and accompanying work priorities. Often what appears to be a problem, or a major obstacle, to some is simply unimportant or non-existent to others (Grimaldi and Simonds, 1989).

In recognition of societies soft approach toward safety and

the accompanying managerial apathy Grimaldi and Simonds, 1989, wrote "on the other hand, the record shows that even presumably strong persuasives, such as laws and the powers of enforcement that accompany them, often do not induce the desired levels of conformity in individuals" P5.

Given the opportunity, one's priorities usually are determined by quite personal and occasionally ephemeral inclinations. Since safety is not always uppermost in individual's minds, a method of external governance is required to provide some regularity in the department necessary for safety's achievement. Organized societies enact laws, establish rules and policies, and use other broad-scale means to regularize the conduct of groups of individuals. Nevertheless the limitations of these methods can be noted (Grimaldi and Simonds, 1989).

The hierarchical arrangement of authority enables managers to selectively apply their skills and abilities and determines their accountability for the groups performance. It is assumed that he or she is apt to be more skilled and dependable by virtue of being selected for a position of trust. Managing thus becomes the focal point for fulfilling organizational and group objectives.

This study was based upon a perception of need to recognize, examine, and address the presence and depth of safety programs, and their management, by the identified businesses. By the use of a vehicle, a survey questionnaire, some information and data may

provide an insight to a cross-sample of industry. The results may assist in determining some of the associated problems which the beleaguered small to medium sized business executives face while trying to survive economically and at the same time conform to society's requirements of establishing and maintaining a safe and healthy working environment for their workers.

### Method

The survey questionnaire was developed to assist in developing an insight into safety issues and programs administered by small to medium sized commercial and industrial businesses. The survey questionnaire consisted of twenty four elements. The first consisted of identifying the respondents primary business function. The second element provided information concerning the respondents employee strength with divisions of five different categories. All the remaining questions were primarily directed toward determining the respondent organizations level of commitment and involvement in their safety program

The cover letter accompanying the questionnaire indicated the intent and need for current data within the safety field and also protected their individual identity by exempting the return name and address on each.

### Results

With 130 questionnaires mailed to selected area industrial

and commercial businesses, the return rate was 64 which amounted to a 49% return. Of the returns one was left blank and several were left partly unanswered. These were indicated simply by a blank statement. The appendix, page 22, may be referred to for graphical expression of these results. Considering an estimated universe of 1500 this return rate falls well within the guideline (Balsey and Clover, 1988) of .05 to .01 rates. Thus the return rate in this study was deemed adequate.

Confirming the intent of the survey to reach the smaller medium sized industrial and commercial business was the results of the first question. Eighty six percent of the returns indicated their business was manufacturing, three percent was other types of commercial business. Refer to page 23 of the appendix for the graphical illustration. Striving to reach a target universe primarily of manufacturing the returns confirmed a high percentage were within these guidelines.

Supporting the quest for small to medium sized industrial or commercial businesses the employment figures indicated that 9% were from organizations with up to 10 employees, 41% employed from 11 through 50 employees, 31% employed from 51 through 250 persons, 5% had 251 through 500 employees, 5% had in excess of 500 employees. The appendix, page 24 & 25, indicates in graphical expression the predominance of surveyed organizations employee levels were primarily in the 11 through 250 numbers. Because the intended target of this study was employers with between 11 and 500 employees it was necessary to identify them by employee



strengths. The results were satisfactory with over three fourths of the returns successful in reaching their target sizes.

The question dealing with the existence of an organizations safety department was met with a high rate of completions. Forty five percent stated that their organization had a safety division while 53% advised they had none. For graphical expression of this result refer to the appendix, page 26. The return data indicates nearly one half of all surveyed organizations without a safety department. These figures within themselves are not conclusive due to several factors: (1) the organization may not have a safety department as such; (2) management of safety may fall to subordinate employees; (3) safety may be a part-time effort.

For the returns indicating they had no safety program, or department, the overwhelming response indicated that safety within their organization was administered, or managed, by a part time executive administrator or a part time middle manager. Graphical expression, as indicated in page 27 of the appendix, clearly expresses the results. With a high percentage, 33%, of the safety functions managed by a part time executive and other employees delegated to manage safety programs in 36% of the organizations it becomes apparent there is room for improvement.

Among the organizations surveyed the returns indicated that their safety departments were usually managed by part time personnel. The appendix, page 28, refers and expresses this in graphical form however statistical results indicated 36% of the safety departments were administered by full time safety

(specifically) managers while 47% were noted as it was a part time function or responsibility of a manager.

Employees whose functions and responsibilities were exclusively noted as safety was indicated as a widely varying factor. The appendix, page 29, indicates this in graphical form but percentages indicated 28% had 1 employee, 26% had two to five employees, 8% had over 5 employees.

Part time organizational safety directors, whose primary title was something other than safety, indicated that most spent 25% or less of their time involved in safety. The appendix, page 30, indicates this in graphical form but in percentages 53% indicated their safety directors, or managers, dedicated 25% or less of their time to managing their organizations safety programs. 11% stated they devoted up to 50% of their time, no one indicated up to 75% and 2% responded they dedicated up to 100%. These results point out obvious deficiencies in the surveyed organizations safety efforts. With over fifty percent of their safety departments managers spending less than one fourth of their time on safety work it is apparent that these managers dedicate most of their time to other duties. One may only deduce these-organizations consider the safety issue as irrelevant or unimportant.

Primary executive title of the safety directors were noted as simply, a wide variety of professional titles, as can be seen on the appendix, page 31, of the graph. The results were; President 6%, Executive 2%, Manager 31%, Foreman 2%, Personnel

Director 8%, Director of Quality Control 6%, Engineer 5%, Director of Safety 3%, Secretary 2%. As may be noted small to medium sized businesses delegate the safety responsibilities and duties to a wide variety of personnel and position titles. The accompanying wide variety of abilities and knowledge associated with each primary job title may be reflective of that organizations dedication and value which it places upon the overall safety issue.

Consulting service usage, specifically for safety purposes, by surveyed organizations indicated that most do not use consultants. The appendix, page 32, illustrates this in graphical form however 24% noted that they use safety consultants, 63% noted that they do not use consultants. The overwhelming no response to usage of safety consultants may have several implications: (1) the organizations executives feel their safety program is adequate; (2) they are not fully aware of the complexity of the safety issue; (3) they are reluctant to open their business to what they feel is an invasion by an outside influence; (4) they may fear reprisals from governmental sources.

Contract retained safety consultants were the exception rather than the norm but it should be worth mentioning that a large number simply left this section blank, as can be seen in the appendix, page 33. The breakdown indicated 14% employed safety consultants through the use of contracts and 16% said they had no such contractual services.

Confidence in their safety program was indicated by response

to the question "are you satisfied your safety program complies with OSHA". The graph in the appendix, page 34, expresses these results well. However it was noted that 66% of the surveyed were satisfied their program fully complied with all of OSHA's requirements. 20% indicated that they were not satisfied. The positive response to this question may infer that most of the businesses surveyed were engaged in an active safety program which met or exceeded all OSHA standards.

Confined entry was another question of concern. It should be noted that this question concerns, a proposed standard, and it was addressed with question by the respondents. The graph in the appendix, page 35, bears out the response and 33% of the respondents noted that they currently administer a confined entry space program while 44% responded negatively. This proposed standard contains several elements which would have far reaching effect on any organizations safety program. Implementation of just this phase requires intimate knowledge and ability regarding OSHA regulations of which may prove frustrating and intimidating to even the best business executive.

Orientation for new hires resulted in a positive response by respondents. As noted in the appendix, page 36, in graphical form 78% of the surveyed organizations indicated that they provided all new hires an in-depth training in OSHA, hazardous materials etc, with 9% responding that they provided none. This response was an exciting one lending itself toward future growth and indicates the surveyed organizations do have a deep underlying

care and concern for the safety and welfare of their employees.

Continuous and updated training programs organizationally administered to employees was another area of positive response. As noted in the graphical illustration in the appendix, page 37, the surveyed firms appeared to place a high value upon employee continuous training with 70% indicating their organizations had such a system in place and operational. 14% responded that they had no such program.

For the organizations that had no safety program or policy and the ones which indicated marginal programs the question, if your organization has no safety program are you considering implementing one?, resulted in primarily a negative response. Graphical illustration in the appendix, page 38, indicates this lack of interest, or response, with 9% indicating an affirmative answer to this question, 8% indicating a negative answer, and 83% ignored the question entirely.

Safety program costs, as indicated by respondents, has been increasing.<sup>7</sup> The question dealt with costs for the years 1989, 1990, and 1991. The appendix, page 39, illustrates the trend in graphical form. Rather than break down these responses into various percentages reference should be made to the graphical display.

From responses it appears that expenditures for safety is declining in the lower end, which is the \$5,000 per year or less, while expenditures for the \$5,000 to \$25,000 range is increasing. It should be noted that expenditures for \$25,000 and up are

increasing also. Refer to pages 39,40 and 41 of the appendix.

### Discussion

The process of random sample or simple random sampling has been applied to this study. Balsley and Clover (1988) noted "most sampling selection techniques provide that the sample be a probability sample, which has already been defined as one in which each item in the universe has had an equal chance of being chosen" P105.

Adequacy refers to sample size and must be taken such that any inferences about the universe must be reliable at the level chosen (Balsley and Clover, 1988).

The rate of return was adequate with 49% completing and returning the questionnaire. One may only speculate on the reasons for the remaining 51% which was not returned. Managerial fear and apathy may be one conclusion which would enjoy some entertainment.

Results compiled from returned data certainly bear out the basic hypothesis of failure by small and medium sized business to comply with OSHA worker safety and health requirements. This is supported by the 45% of respondents noting their organization had an active safety program however contradicted this by noting most of their safety departments are managed on a part-time basis and by designated employees of questionable qualifications and ability. While the majority of respondents exhibited some effort at operational safety the structure, organization, and

procedures appeared widely fragmented. The majority of the respondents indicated their safety program was administered by a wide variety of staff employees who were required to attend the safety duties as an extra workload.

Contrasting these results is the indication, by respondents, of confidence in their safety program. The large majority noted they felt their program fully complied with the rules and regulations required by the Occupational Safety and Health Act.

### CONCLUSION

Even though employers are being held increasingly responsible and accountable for the health and safety of their employees there still exists a large percentage of small and medium sized businesses who do not support, manage, or promote an active organizational safety program. Whether through fear, ignorance, or just simple defiance the risk still appears to be judged by some managers as worth taking.

### RECOMMENDATIONS

In order to operate an effective safety program the organization's top executives have to be committed and fully supportive. Their ability to organize the program, provide leadership, transfer innovative and resourceful methodology, and commit towards overall corporate goals will be indicative of responsible and progressive leadership.

Some steps that management may take to provide support and

leadership for the safety management program could be:

- 1) Creation of a program director position responsible to the CEO. This position should be a position of authority occupied by an executive of leadership skills who is socially adept, knowledgeable, responsible and caring. This executive should focus on societal objectives by placing emphasis on individual and community needs and rights. He needs to emphasize organizational and functional objectives which will further the organizations effectiveness. He must recognize, and actively support, programs to help employees recognize their personal objectives through education, training, and establishing realistic goals.
- 2) Implementation of a proactive employee and staff educational program with social influences, and an extensive record system. This program should maintain social contacts within the community, the employee and their family, and the organizations customers.
- 3) Implementation of an active employee/staff feedback system in which each person may provide active input without fears of reprisals.
- 4) Initiate contact with an appropriate consultant for assistance in developing a comprehensive safety program tailored specifically for your organizations desires and needs.

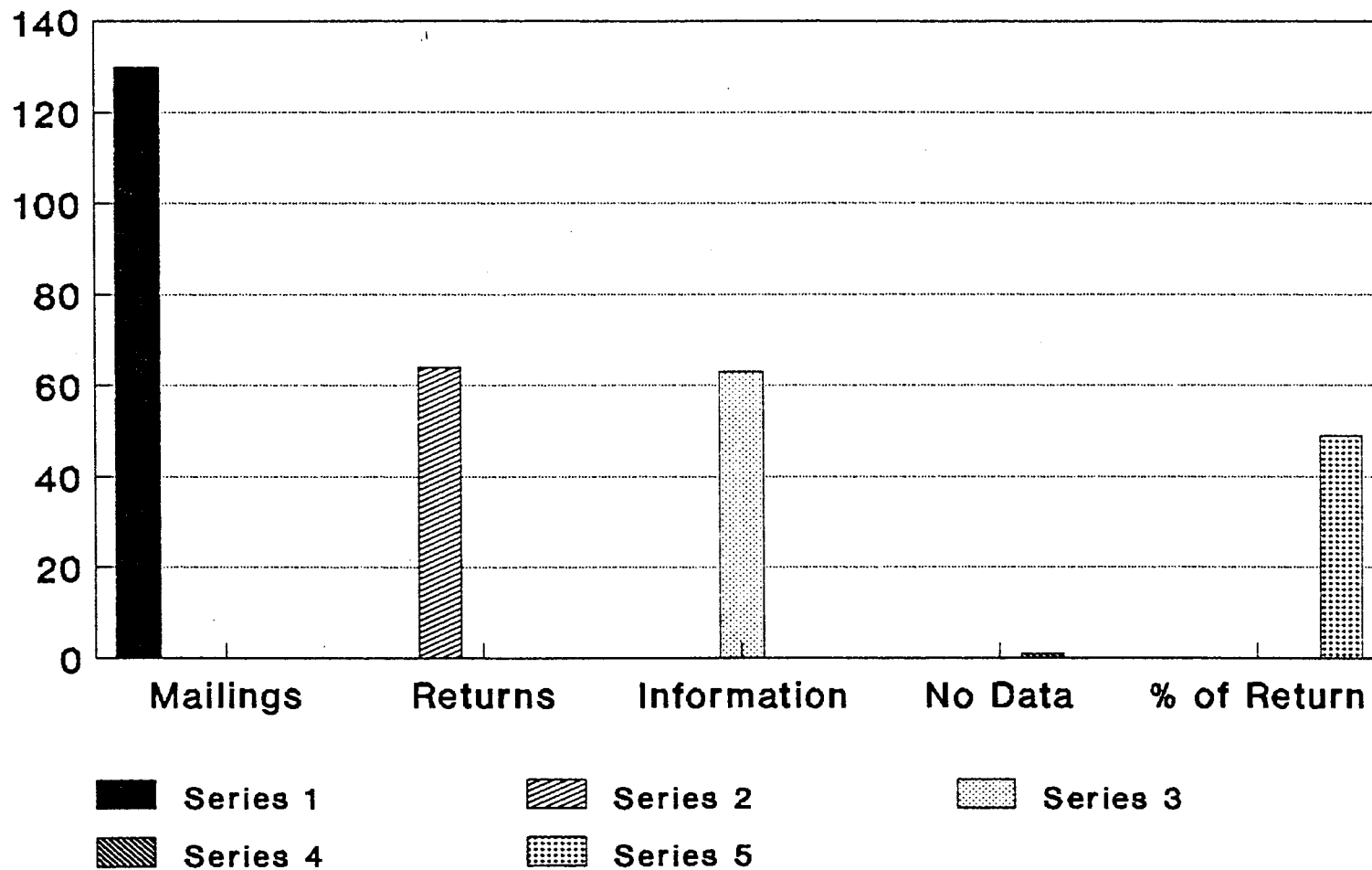


## LIST OF REFERENCES

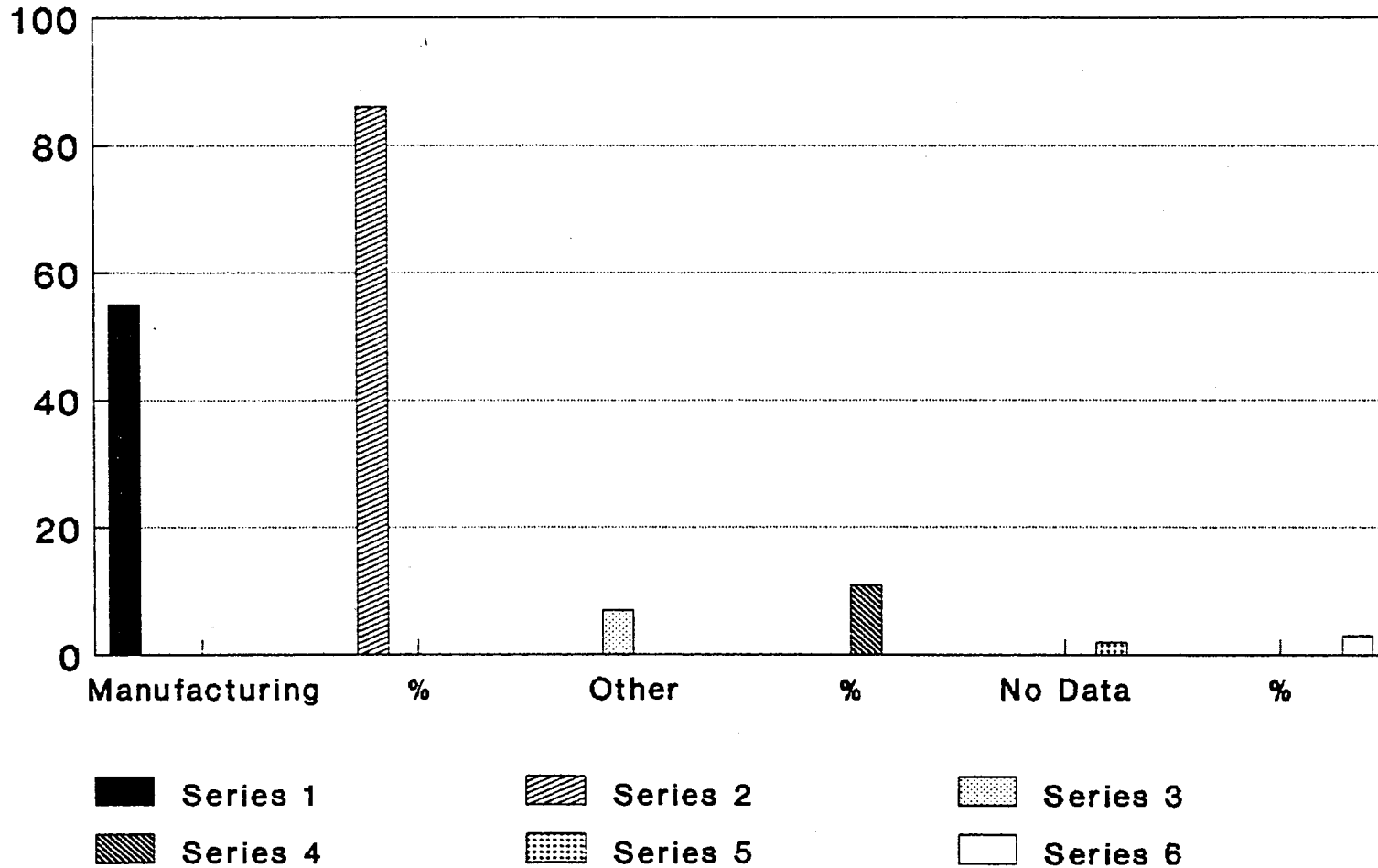
- Gerber, B. (1989, October). Who, How & What.  
Training, 51-63.
- Grimaldi, J. V., & Simonds, R. H. (1989). Safety Management.  
Homewood: Il
- Jenkins, J. A. (1990, February). Self-Directed Work Force  
Promotes Safety. Human Resource Magazine, 54-56.
- Luce, Z. R. (1990, January). The Integrated Management Approach  
to Environmental Protection, Health, and Safety. Professional  
Safety, 30-33.
- Overman, S. (1990, May). Workers, Managers Unite.  
Human Resource Magazine, 38-41.
- The National Safety Council. (1988). Accident Prevention Manual  
for Industrial Operation. Chicago: Il
- Zaleznik, A. (1990). The Leadership Gap.  
Academy of Management Executive, 7-22.

APPENDIX

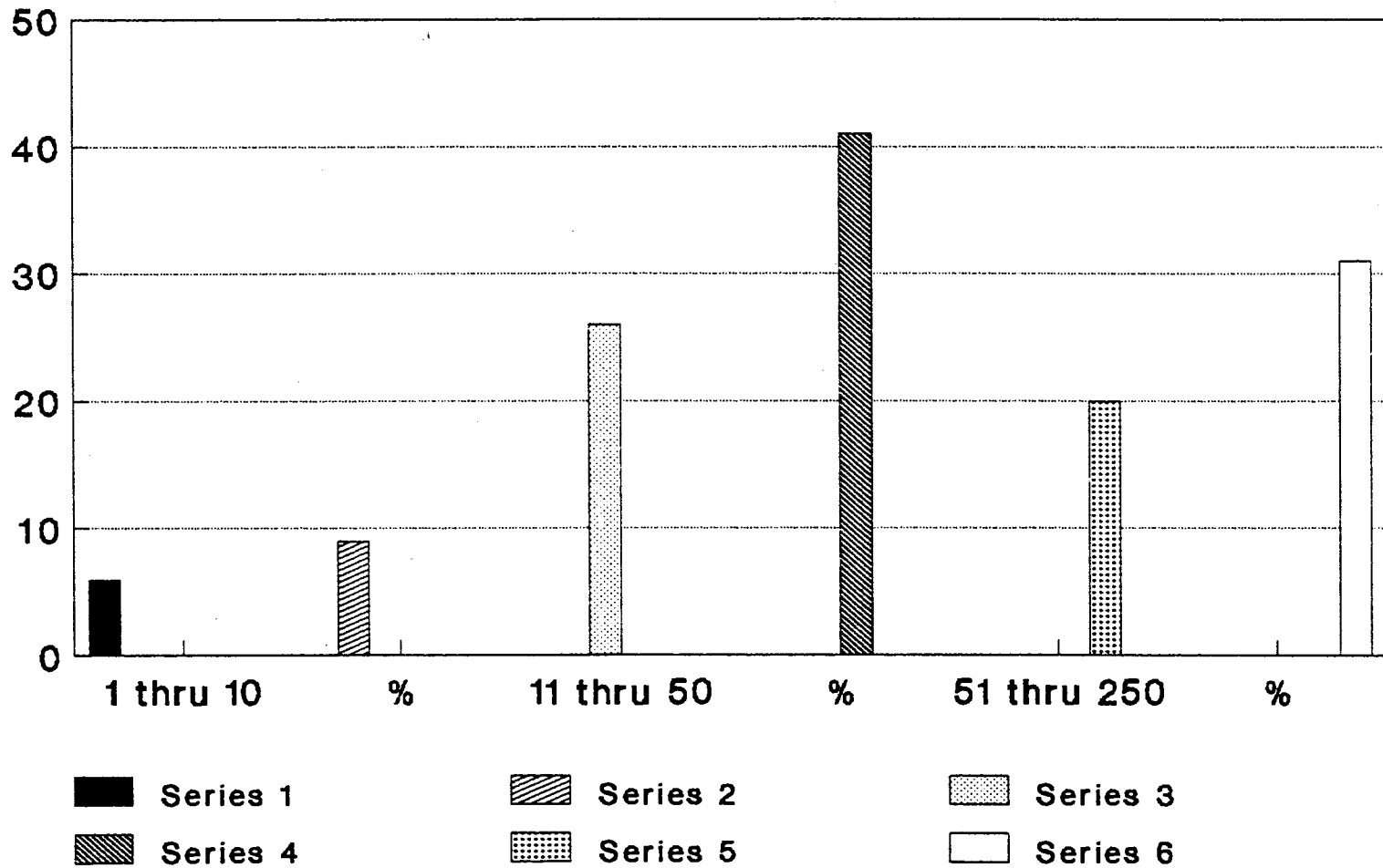
# Business Safety Survey



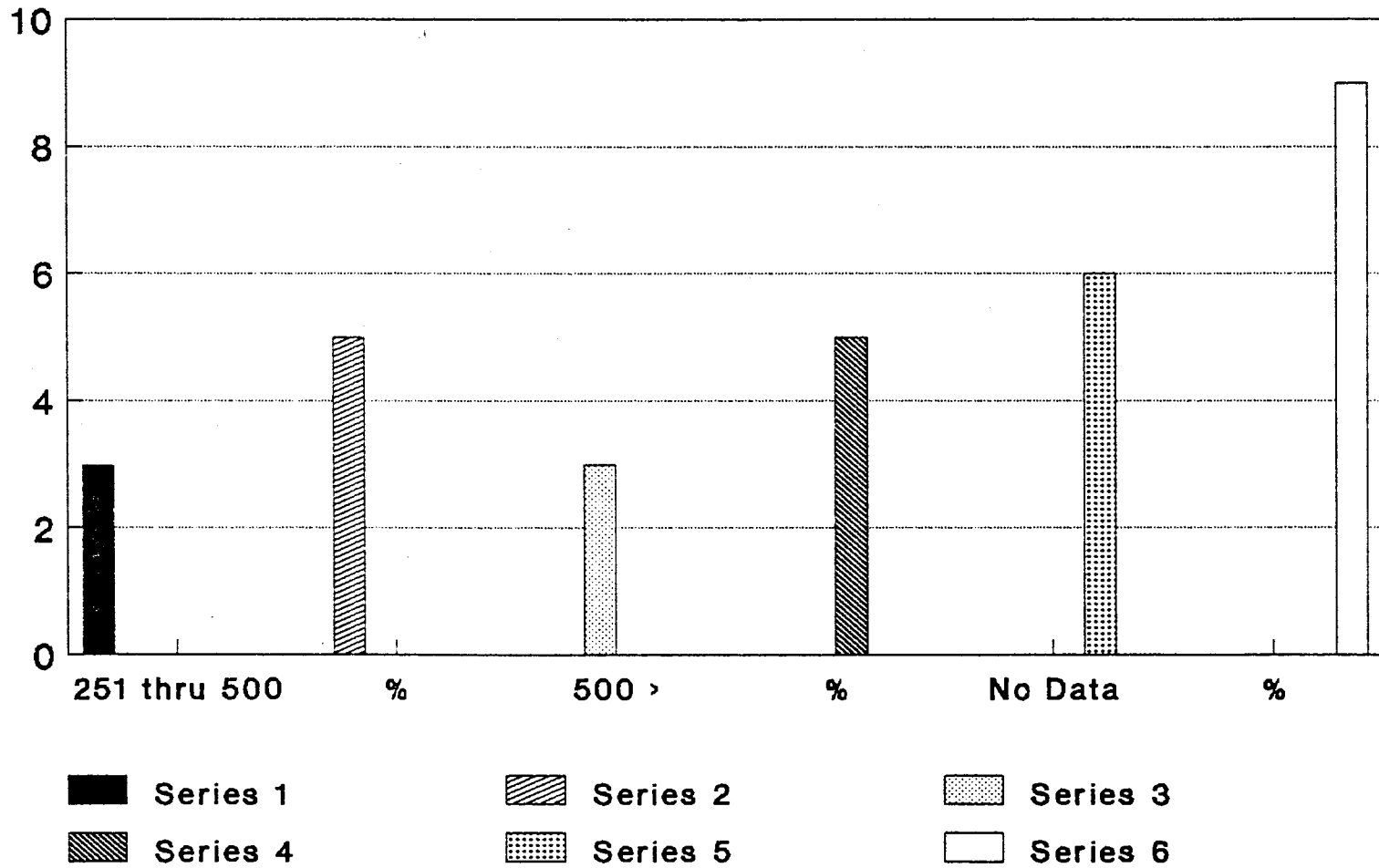
# Type of Business



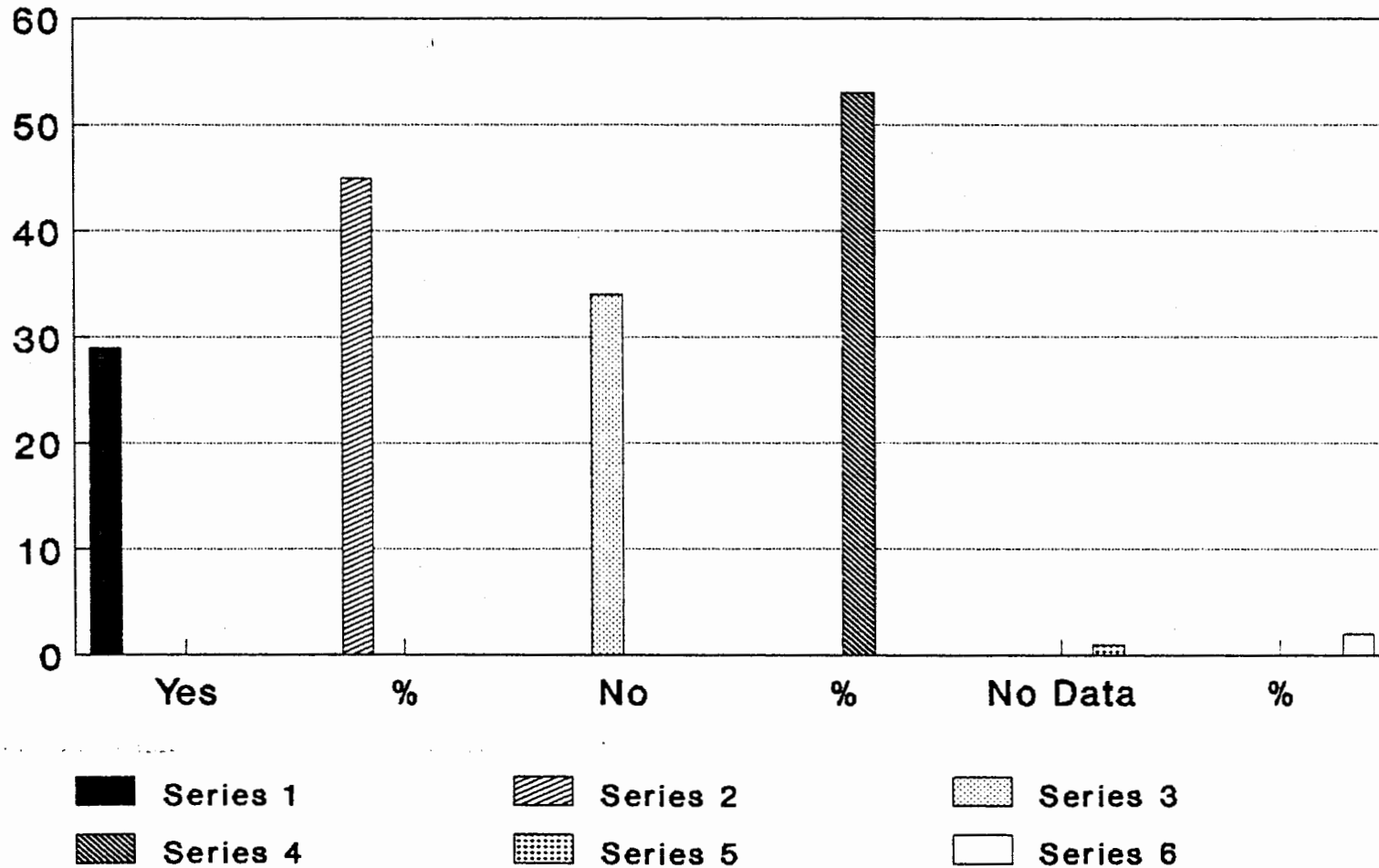
# Employees



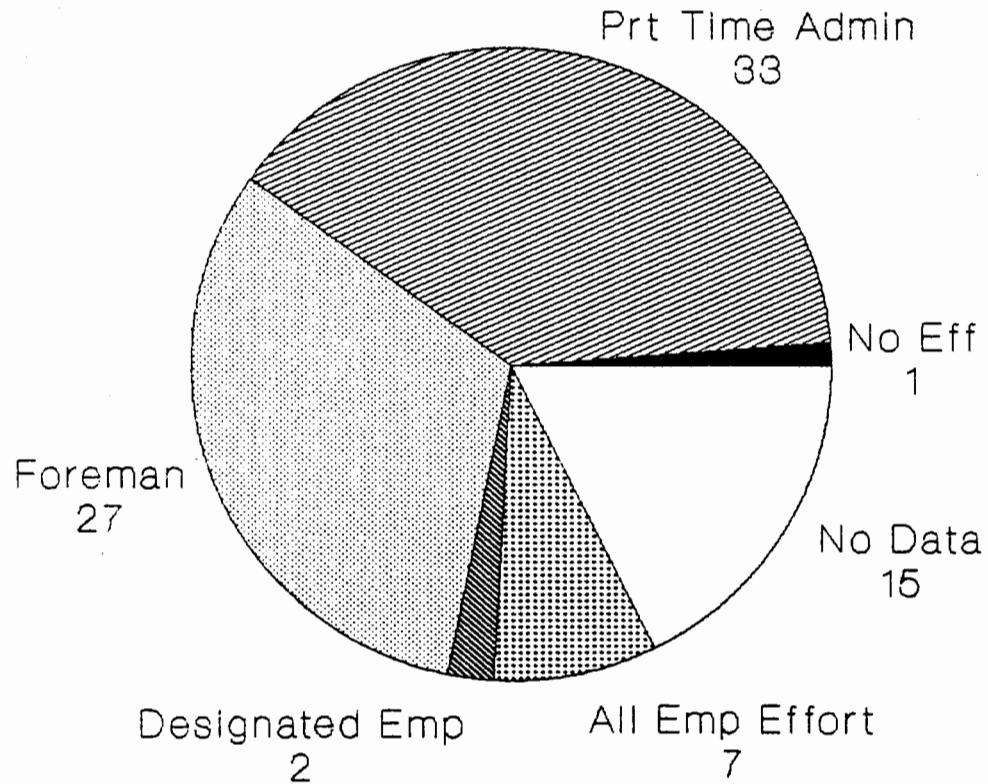
# Employees



# Safety Department

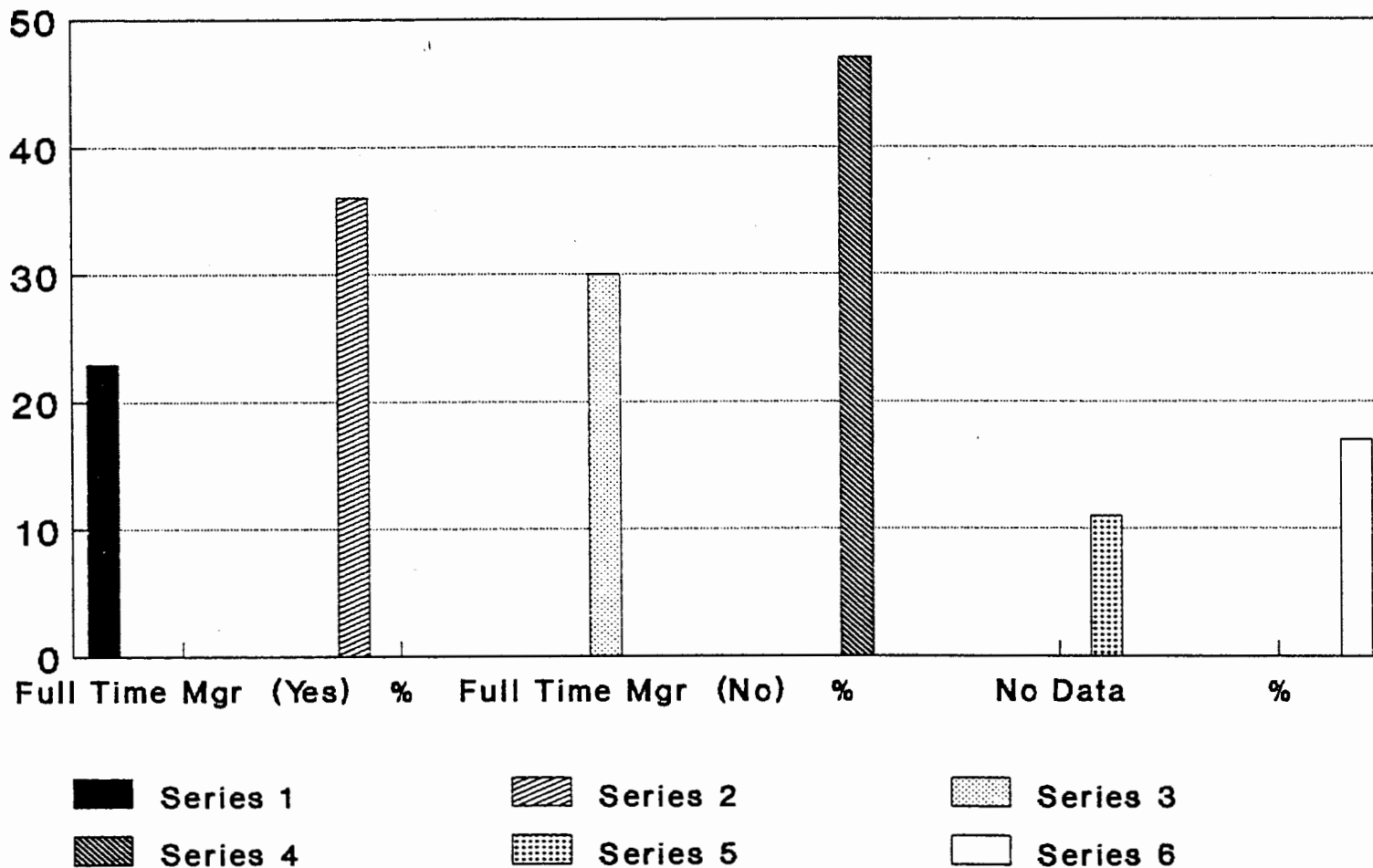


# Safety Management

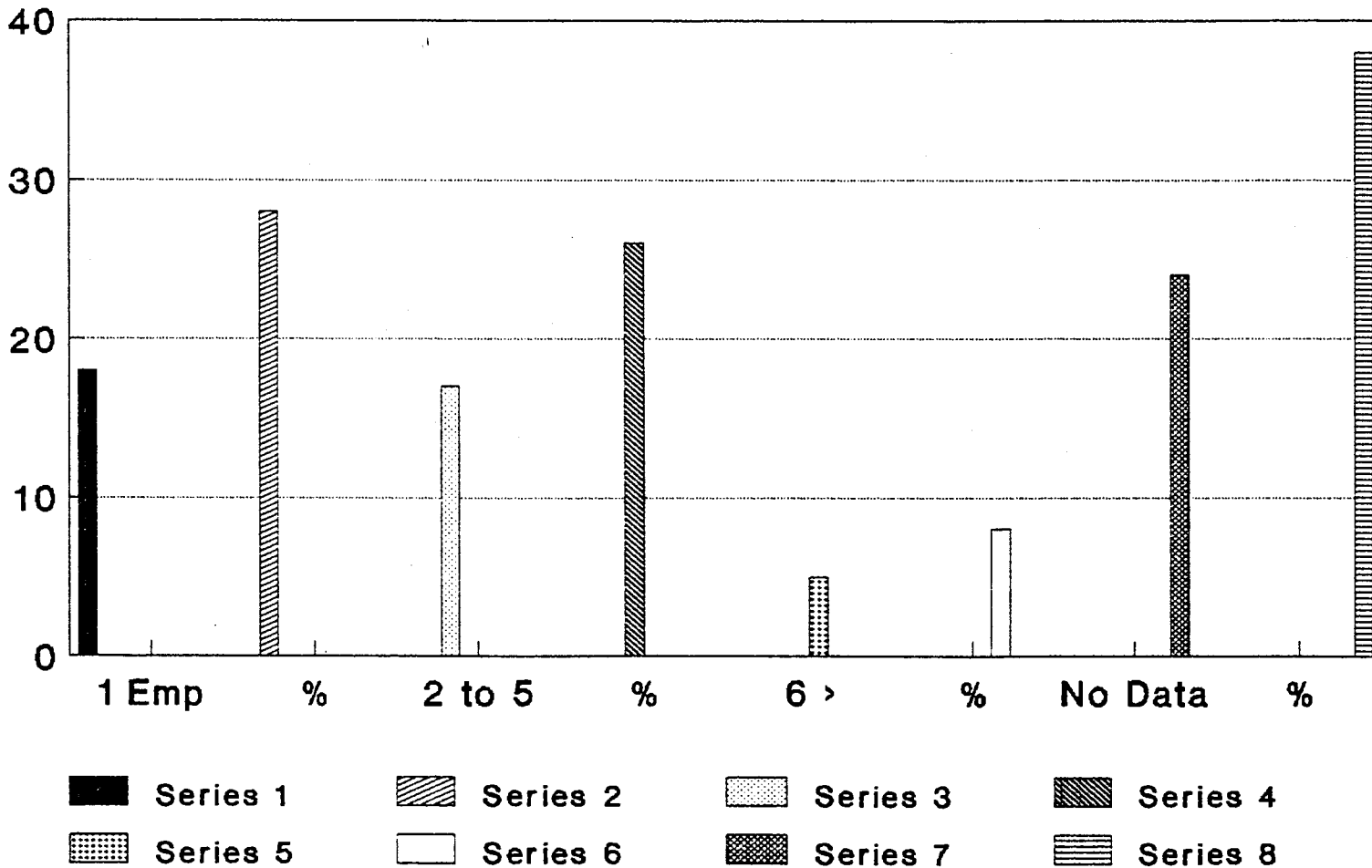




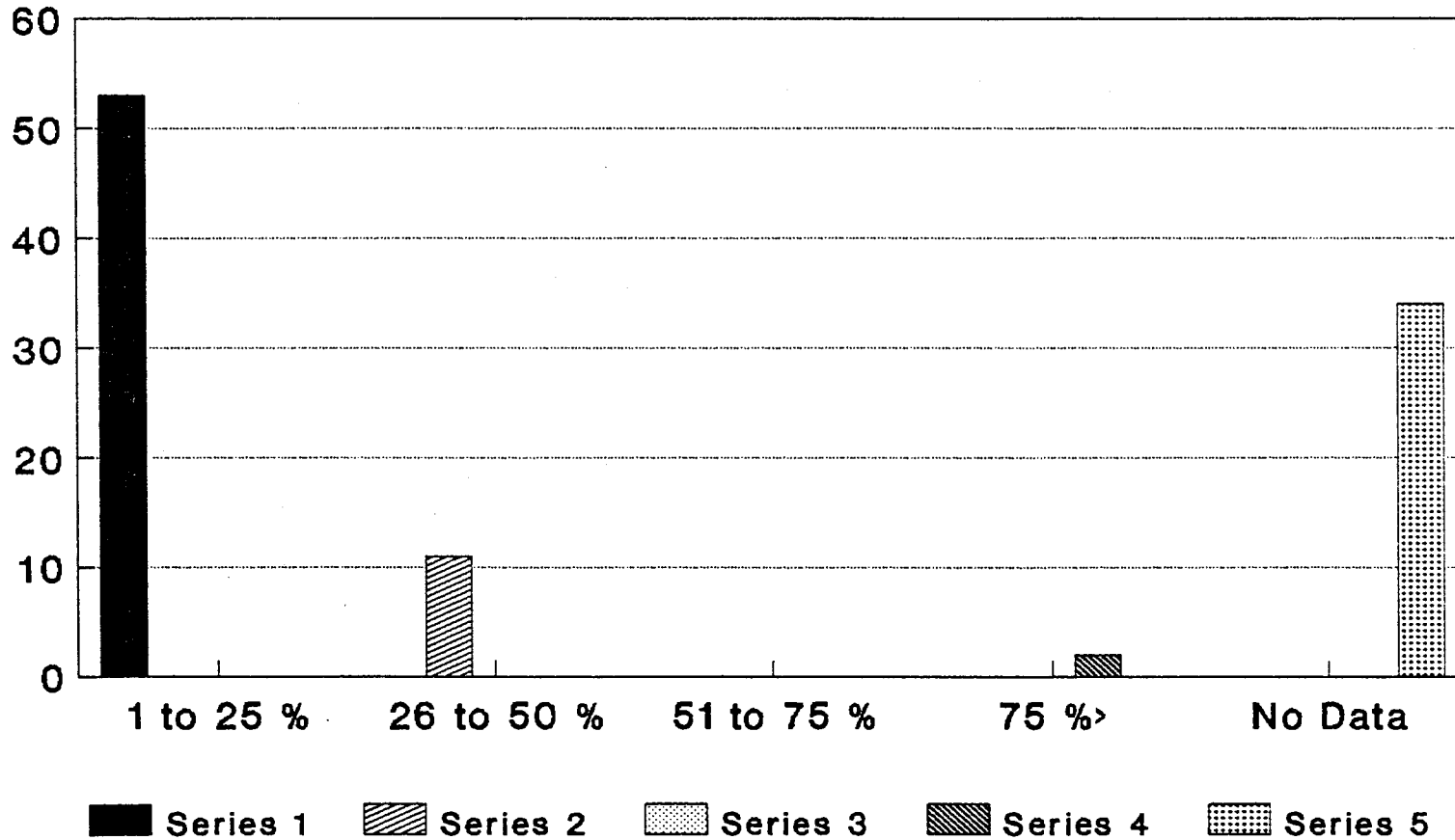
# Safety Division Management



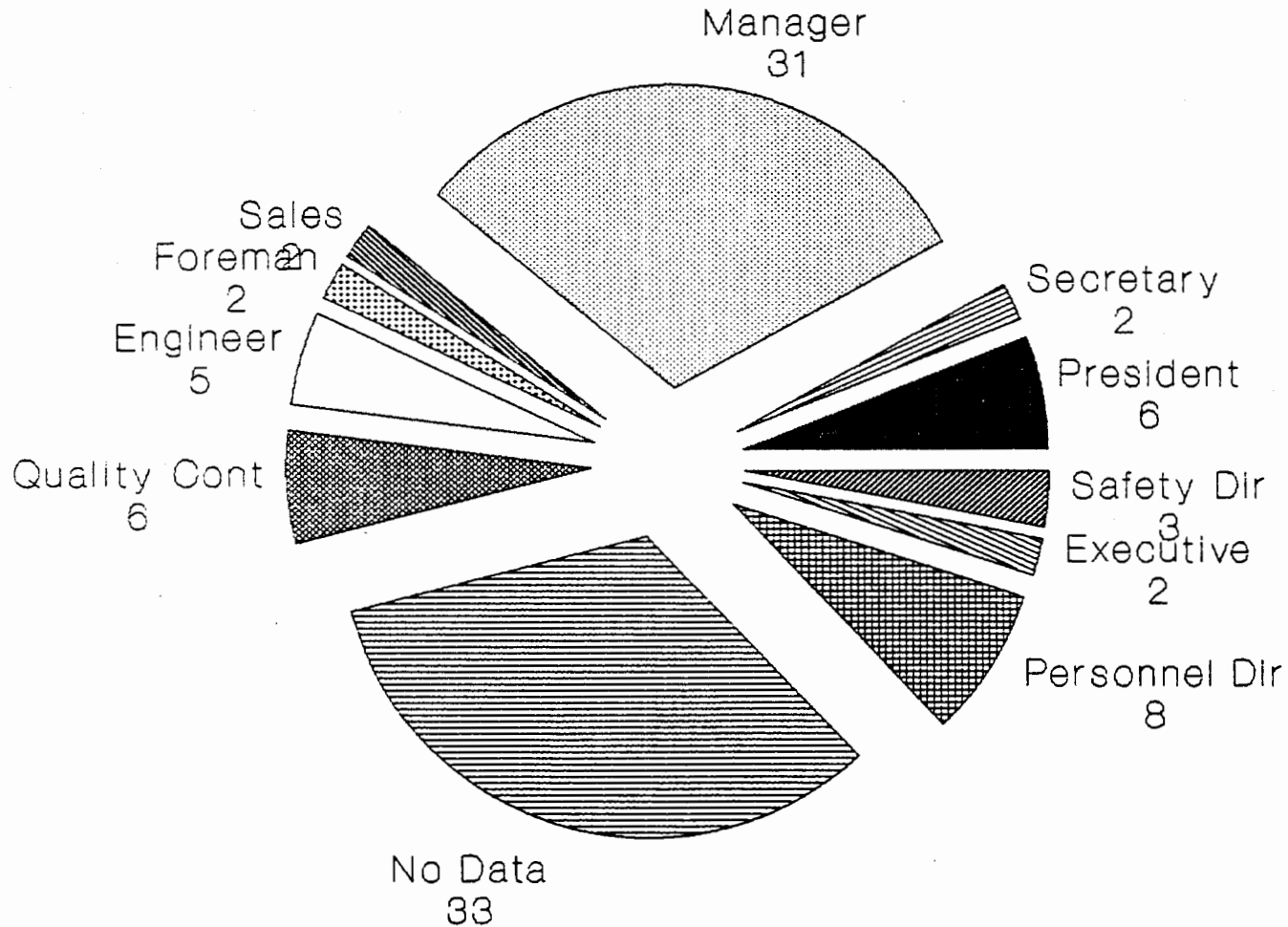
# Safety Dept Employee Level



# Managers Time Division Spent on Safety Duties

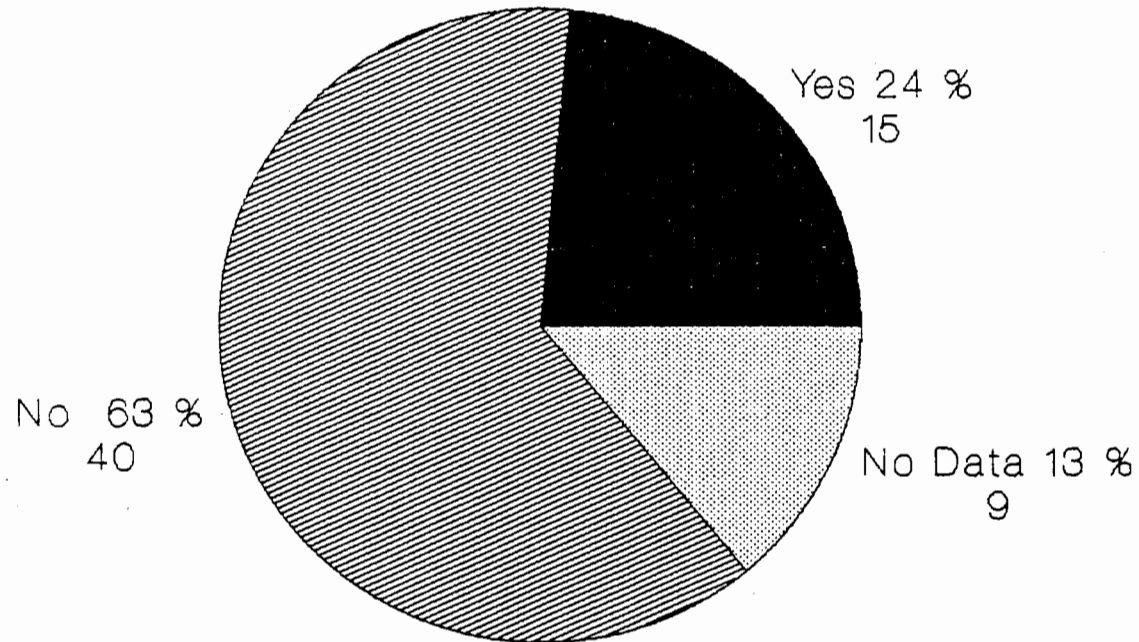


# Safety Dept Manager Primary Title



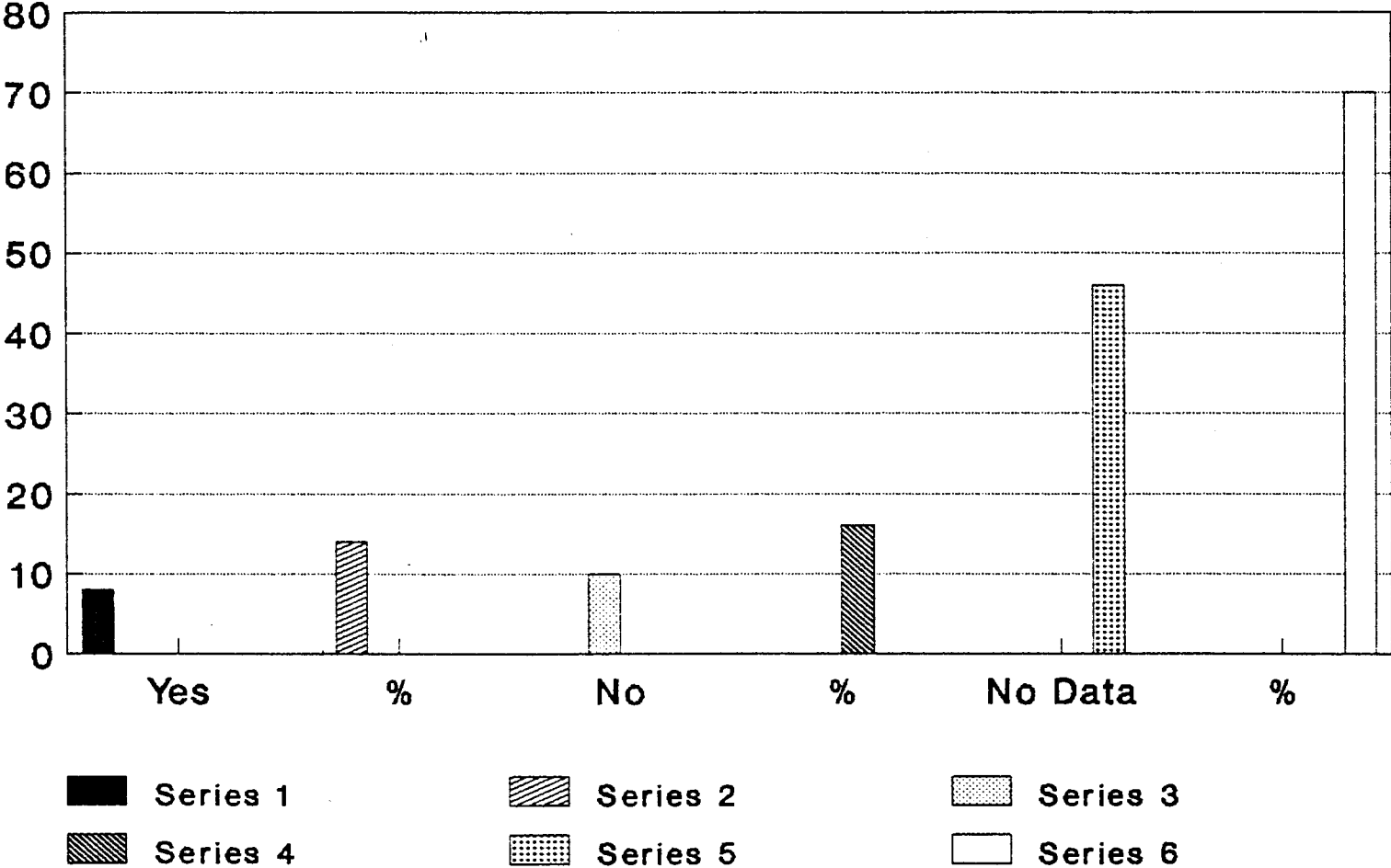
Percentages

# Safety Consultant Usage Percentages

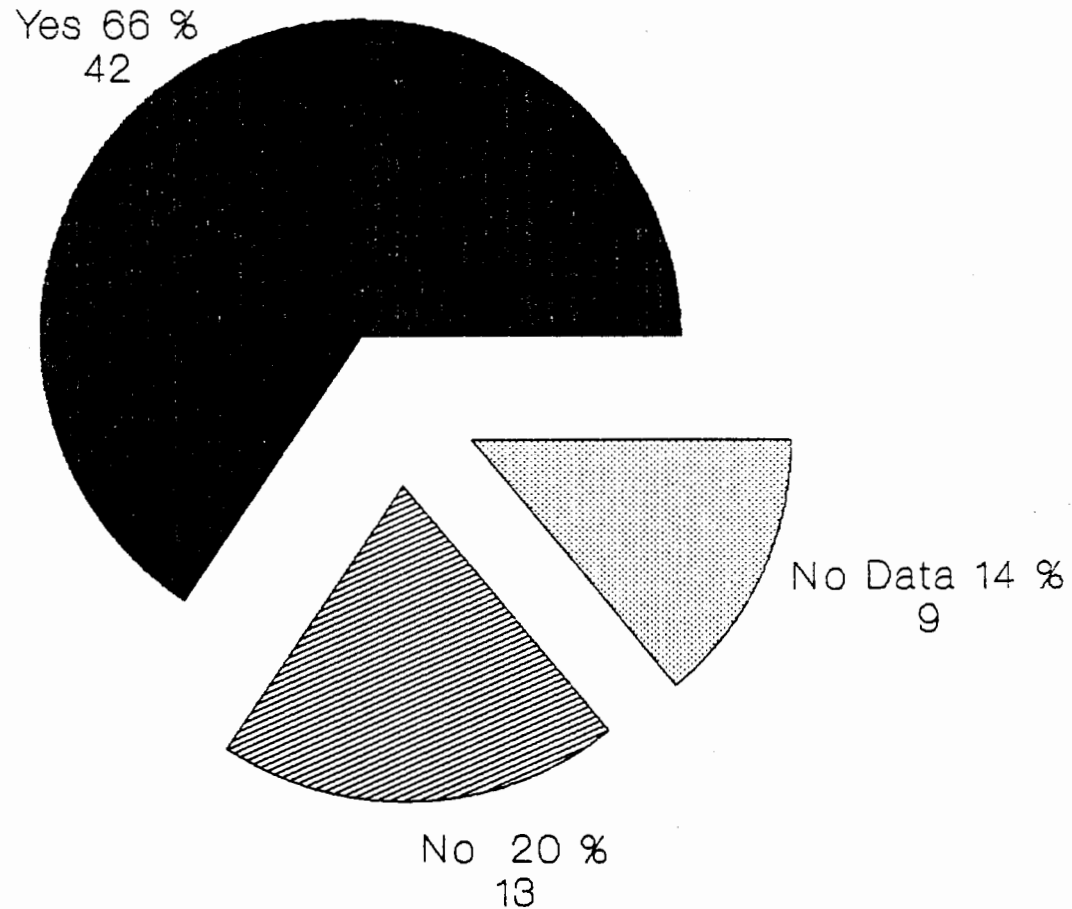


Number

# Safety Contract



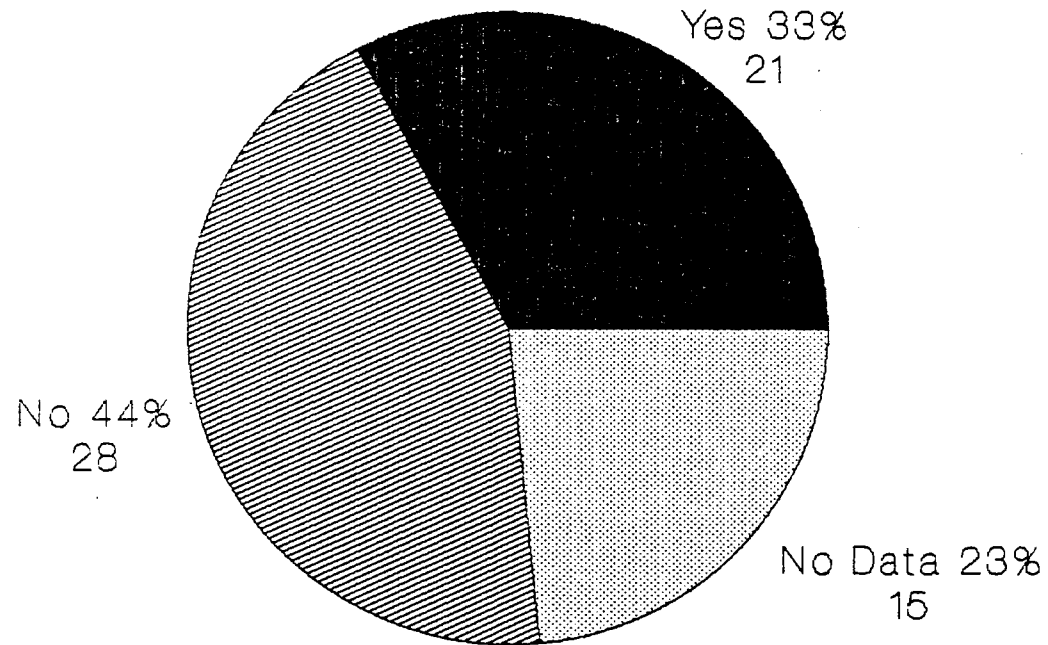
# Confidence in Safety Program Meets OSHA guidelines



Percentages and Numbers

# Confined Space Compliance

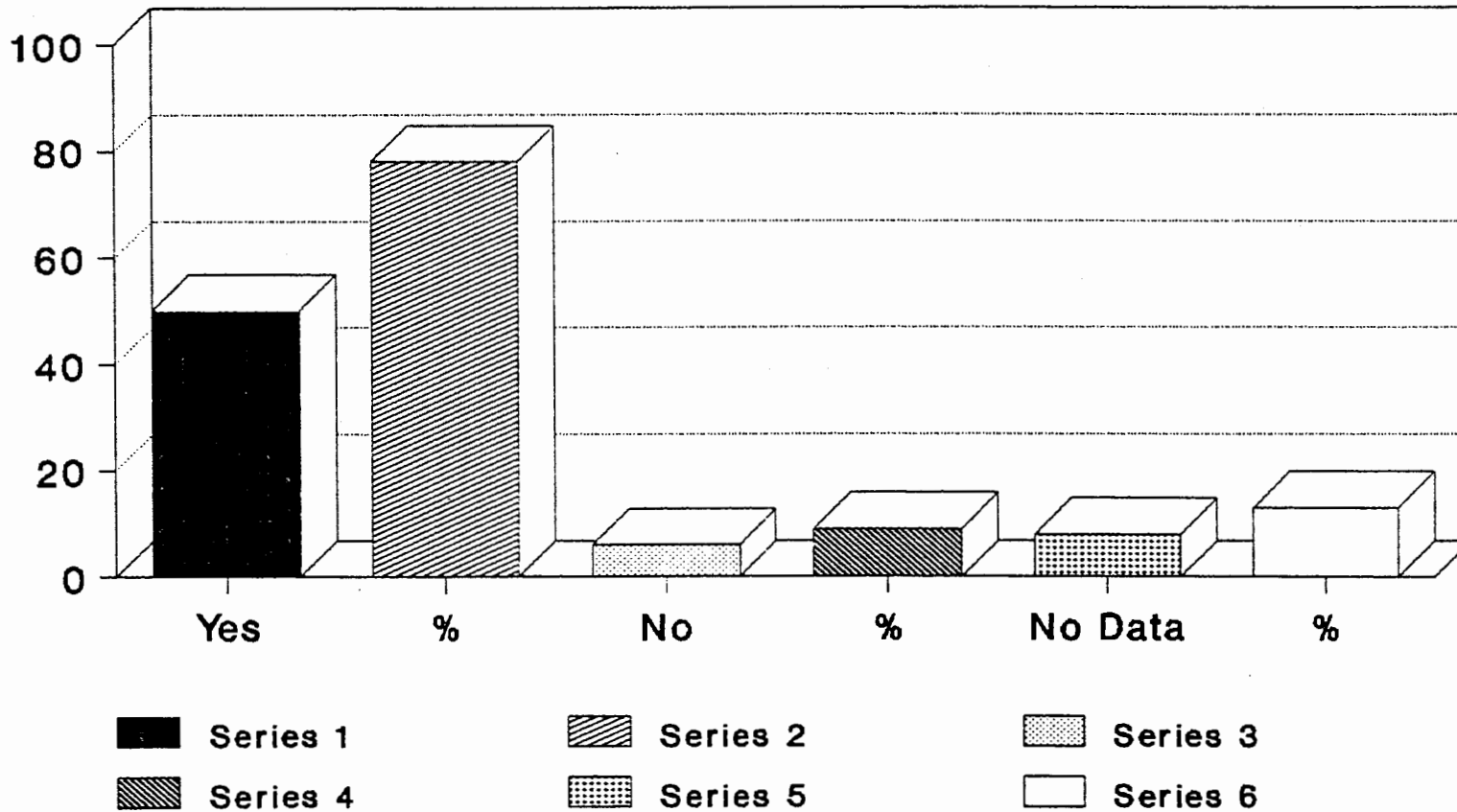
## OSHA 1910.146



Percentages and Numbers

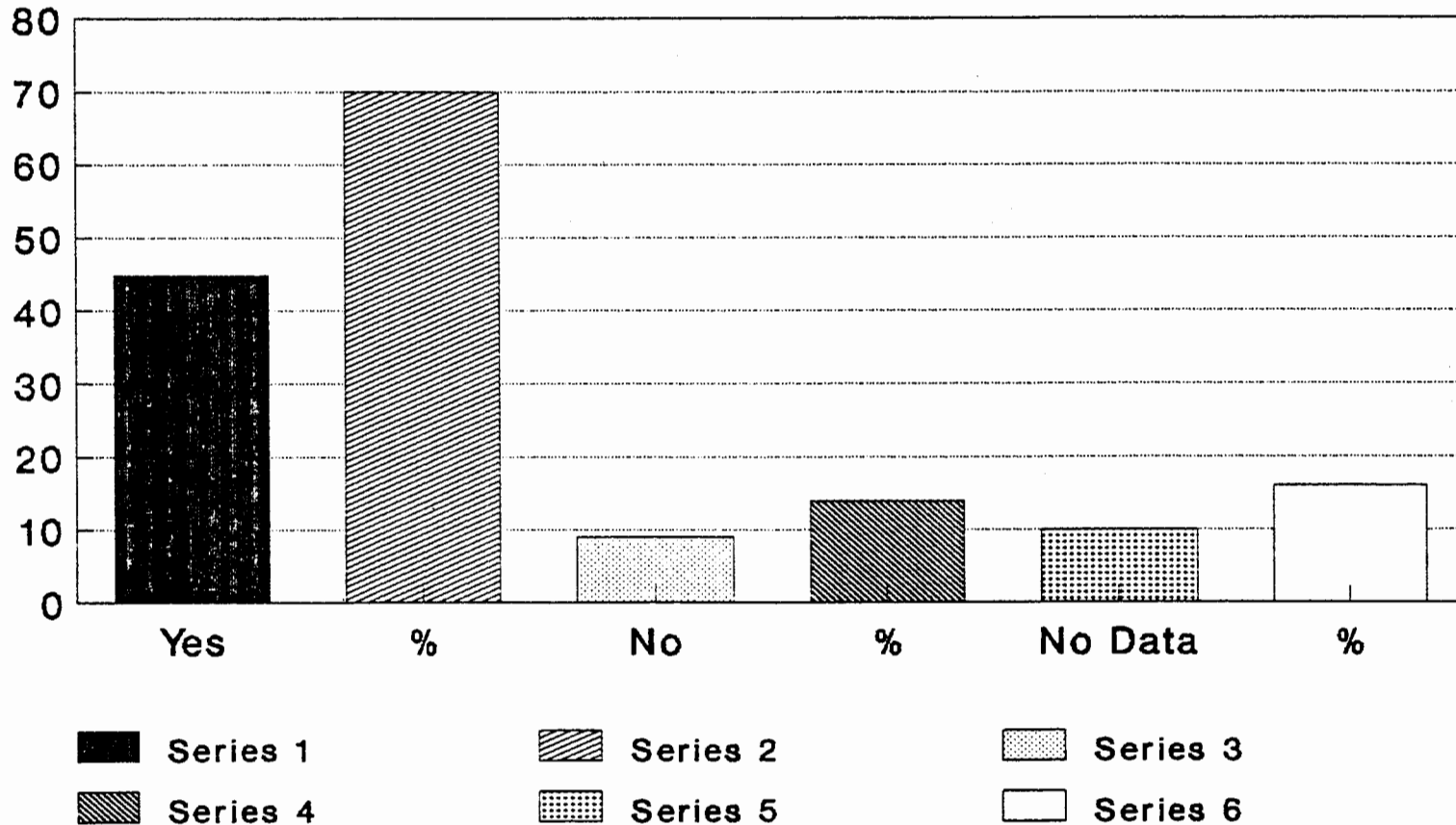


# Training New Hire Orientation



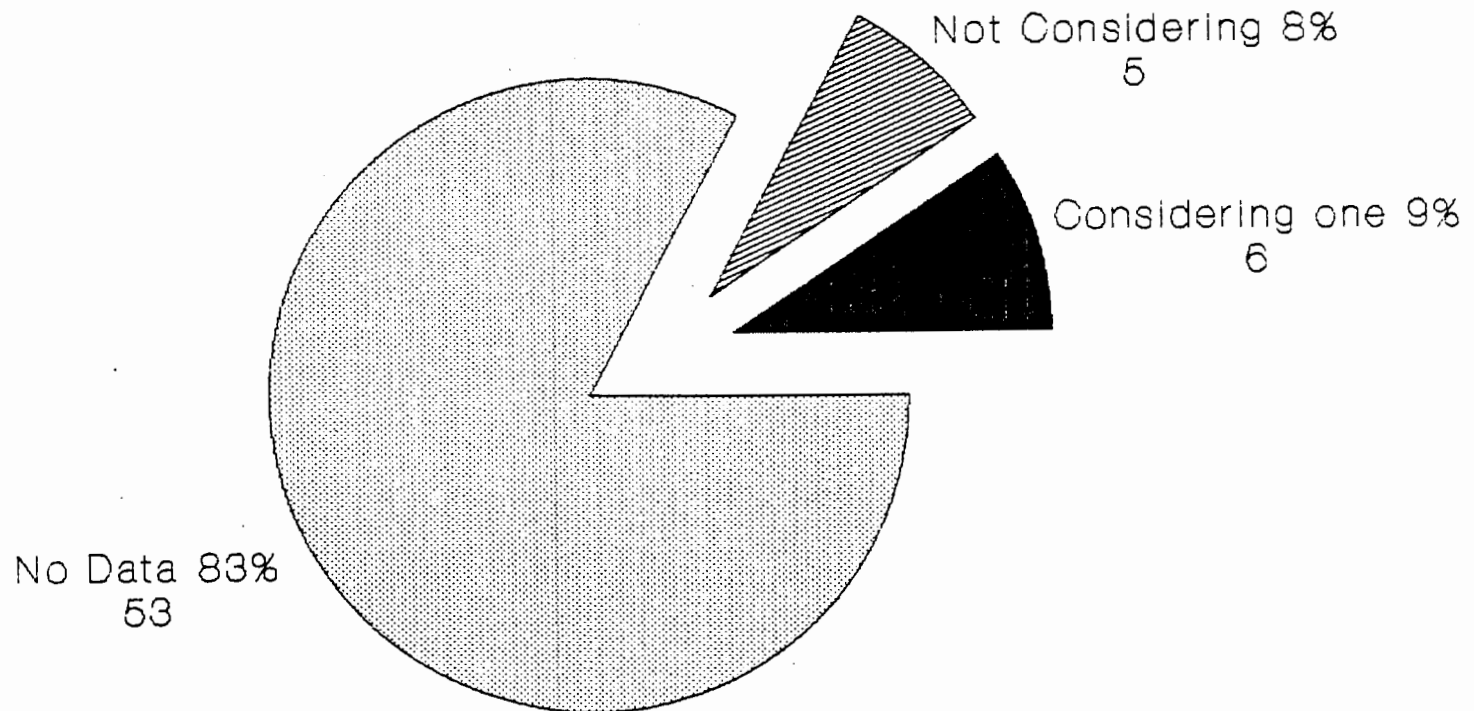
# Training

## Continuous and Update



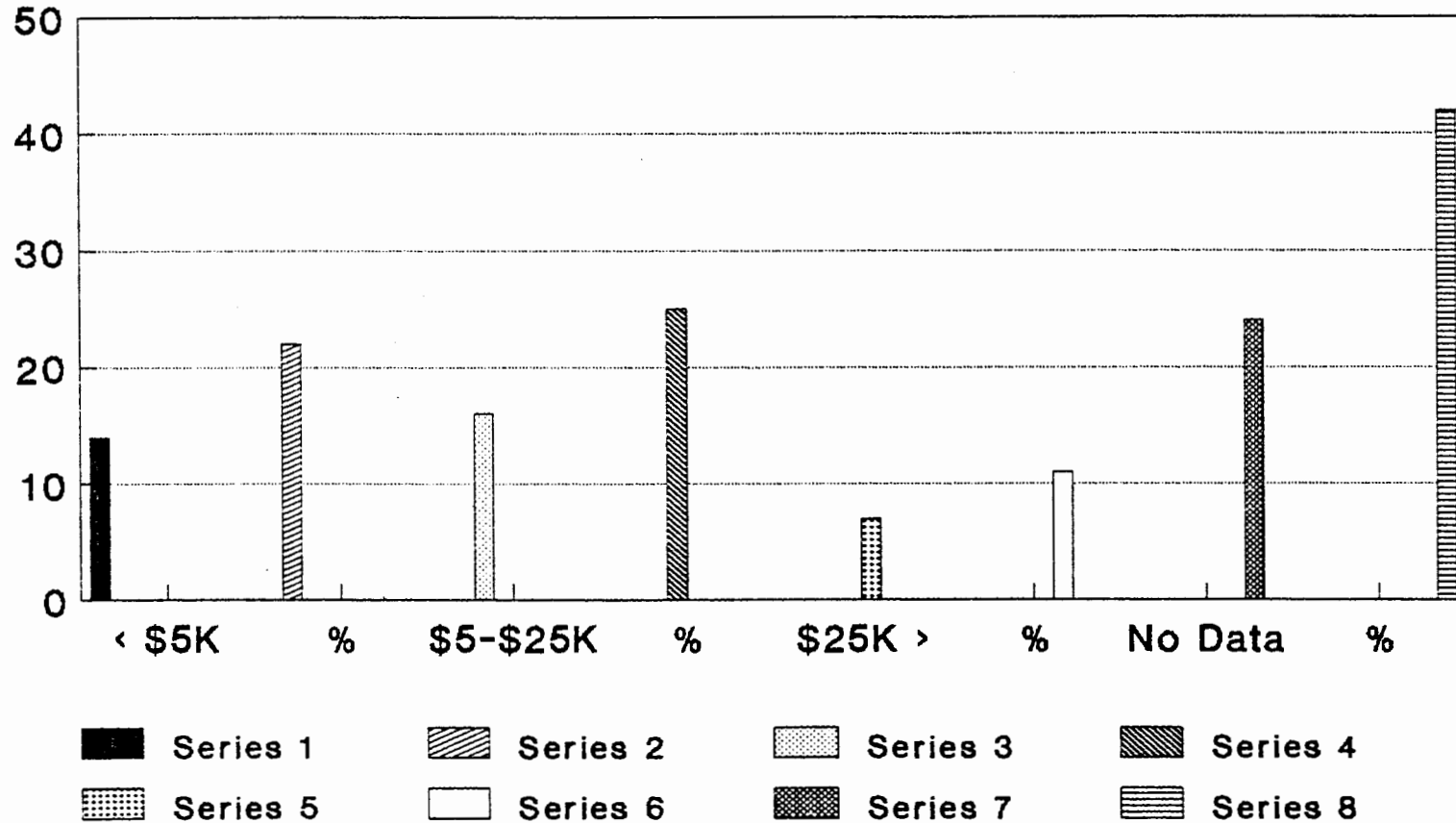
# Program Consideration

## Considering Implementing One

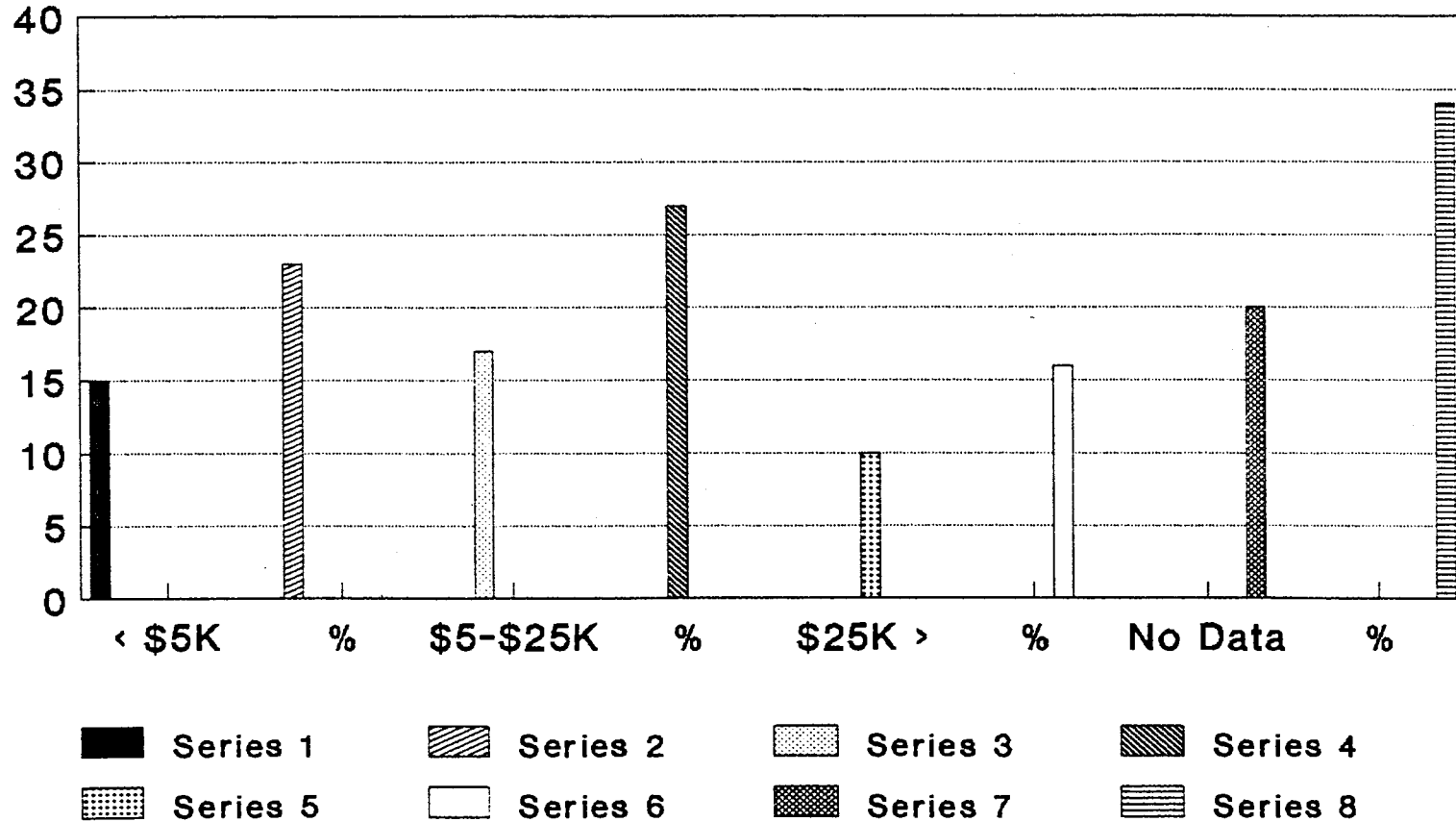


Of the firms that had no Safety Program

# Costs Administering Safety For 1989



# Costs Administering Safety For 1990



# Costs Administering Safety For 1991 (Est)

