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# STUDIES

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## PRIVATE SECTOR WORKSITE HEALTH PROMOTION ACTIVITIES IN NORTH CAROLINA: RESULTS FROM THE 1994 SURVEY

by

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### ABSTRACT

The State Center for Health and Environmental Statistics, in conjunction with the Governor's Council on Physical Fitness and Health and the Division of Adult Health Promotion, conducted a mail survey of North Carolina private sector worksites to determine the extent of health promotion activities. The survey was mailed to a statewide stratified random sample of 1,050 private sector worksites with 10 or more employees. The overall response rate was 53.6 percent.

The results showed that health promotion activities are most common at worksites with 100 or more employees. Worksites of 10-49 and 50-99 employees, which represent the bulk of North Carolina's workers, have fewer health promotion activities. For example, over 35 percent of large worksites offer their employees periodic physical exams, while less than 17 percent of small and medium-sized worksites offered these exams. Comparable figures for nutrition education classes are 13 percent and 3 percent, respectively.

Health promotion activities at North Carolina worksites consist primarily of written materials on selected topics. More active programs are less common. Smoking restrictions and support for quitting smoking are prevalent in North Carolina worksites of all sizes. Much of the impetus for smoking restrictions comes from the workers themselves.

Finally, there is interest among worksites in expanding health promotion programs and in receiving assistance from local health departments.

### Acknowledgments

The following people made important contributions to this survey: Carol Kline and Mark Phelps of the Governor's Council on Physical Fitness and Health, Miriam Sutton and Carolyn Crump of the UNC Center for Health Promotion and Disease Prevention, and Jim Martin and Eugene Lengerich of the Division of Adult Health Promotion. Funds for this survey were provided in part by grant no. U82/CCU408574-01 from the Healthy People 2000 program within the National Center for Health Statistics, Centers for Disease Control and Prevention, US Public Health Service, and by the Division of Adult Health Promotion.



## INTRODUCTION

In recent years, efforts to promote healthy behaviors among the public have focused on the worksite as a means of reaching large groups of people. As many as two-thirds of companies report having some kind of worksite health promotion program.<sup>1</sup> One recent national survey found that over 80 percent of private worksites offered health promotion activities to their employees.<sup>2</sup>

Some researchers and policy makers, however, believe that these findings vastly overestimate the extent of programs available to employees, because they include worksites with 50 or more employees only.<sup>3</sup> A substantial portion of the US workforce works at sites with less than 50 employees<sup>4</sup>, and these small worksites are less likely to offer health promotion activities.<sup>3</sup>

The North Carolina survey was undertaken to determine the extent and nature of health promotion activities at private sector worksites with 10-49, 50-99, and 100 or more employees. This information will be used in planning health promotion programs and as baseline data to monitor changes in worksite health promotion in the state.

A clear definition of *health promotion activities* has eluded policy makers, researchers, and field workers alike. For clarity, the present survey avoided asking about "health promotion activities" as such. For example, the questionnaire asked directly about blood pressure and cholesterol screening, the availability of low-fat snacks, and stress reduction counseling without requiring the respondent to identify these activities as "health promotion."

## METHODS

The sample for this survey was selected from a listing provided by the North Carolina Employment Security Commission of all worksites reporting to the Commission. The sample was restricted to the private sector because the Commission's listing would not give a valid sample of public sector worksites. Worksites with less than 10 employees were not included in this survey.

A small percentage of the worksite records listed in the Employment Security Commission file were, in fact, company listings representing more than one worksite. If one of the selected sample members fell in this category, a list of all of their worksites was obtained from which one worksite was selected at random. Although this procedure yields a different probability of selection for those worksites listed together as one company, these sites were few and did not have an appreciable effect on the validity of the sample.

A stratified random sample was selected according to worksite size, i.e., 10-49 employees (small worksites), 50-99 employees (medium worksites), and 100 or more employees (large worksites) with different probabilities of selection across strata. Selected worksites were called before the questionnaire was mailed to find out the name and address of the person best suited to provide the requested information. Nearly all of the questionnaires, therefore, were mailed to an individual rather than just to the company.

Initially, 350 worksites in each size category (1,050 total) were mailed questionnaires. Although the sample was selected according to the number of employees listed in the sampling frame, the questionnaire asked about the number of employees at the worksite. Responses that indicated less than 10 employees were ineligible and were excluded from the analysis, as were the few sample members that turned out to be public sector worksites. This left a total of 948 eligible sample members (274 small worksites, 338 medium worksites, and 336 large worksites).

Two rounds of follow-up phone calls were made to worksites that did not return questionnaires, and additional questionnaires were mailed as appropriate. The initial mailing was accompanied by a cover letter signed by the Governor. The initial mailing was sent out shortly before Thanksgiving 1993, and the last questionnaires were received in June 1994.

The questionnaire results were poststratified by region (coast, piedmont, mountains), industry type (standard industrial code, first digit), and number of employees as indicated in the sampling frame (10-49, 50-99, 100+). Weights were developed that adjusted the responses to the distribution by region, industry type, and number of employees to the respective distribution in the Employment Security Commission list from which the sample was drawn (i.e., the sampling frame). This procedure improves the validity of the prevalence estimates and adjusts for nonresponse and the unequal probabilities of selection. Except for the response rates (table 1), all of the results presented in this report are population estimates weighted as described above. The worksite size used in this report is based on the number of employees listed in the sampling frame. The percentages in the figures have not been adjusted for nonresponse to individual questions.

## RESULTS

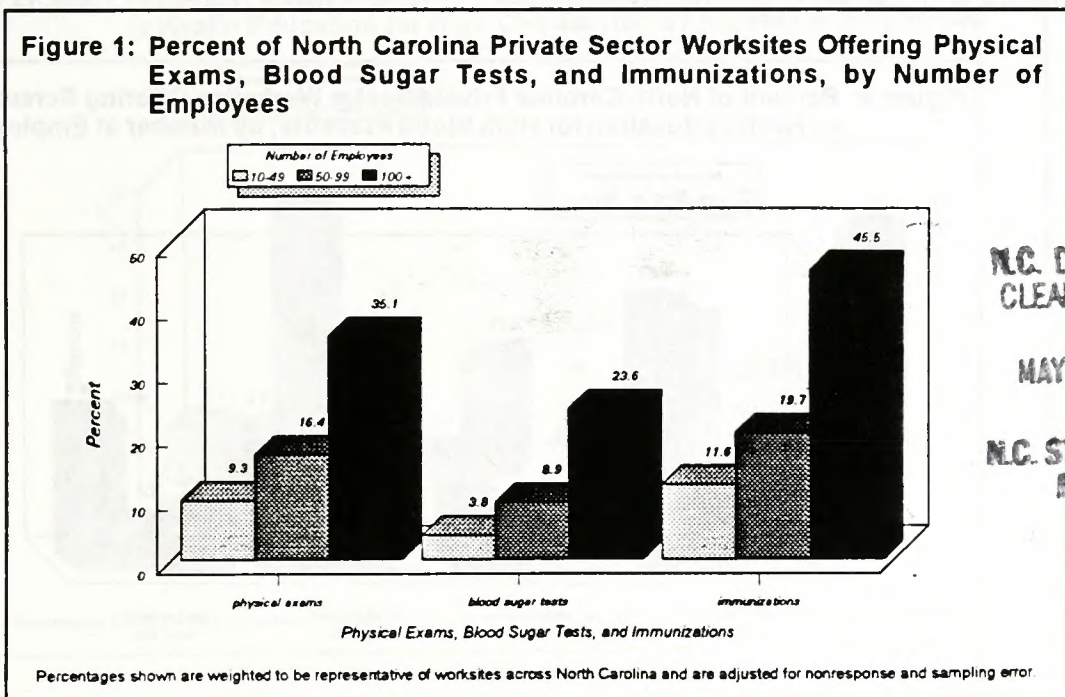
Overall, 53.6 percent of questionnaires were returned. Response was markedly greater in the large worksites (73.2 percent) than in the small and medium worksites (58.3 percent and 37.9 percent, respectively). (See table 1.)

Number of Employees	Number of Respondents	Response Rate (%)
10-49	160	58.4
50-99	128	37.9
100+	246	73.2

### Physical Exams, Blood Sugar, and Immunizations

Figure 1 shows that physical exams or immunizations were offered at 9 to 45 percent of worksites. Blood sugar tests were offered at fewer worksites. All three programs were offered more frequently at large worksites than at small ones.

Figure 2 shows that respondents from 10 to 24 percent of worksites indicated employer interest in starting new physical exam, blood sugar testing, or immunization programs or in expanding existing programs. Interest is greatest for physical exams, and at worksites with 100 or more employees.

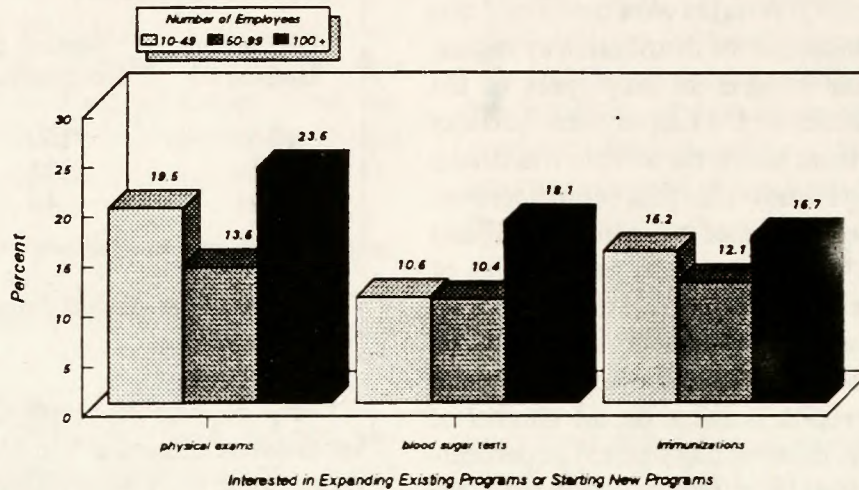


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**Figure 2: Percent of North Carolina Private Sector Worksites Interested in Expanding Existing Programs or Starting New Programs for Physical Exams, Blood Sugar Tests, and Immunizations, by Number of Employees**



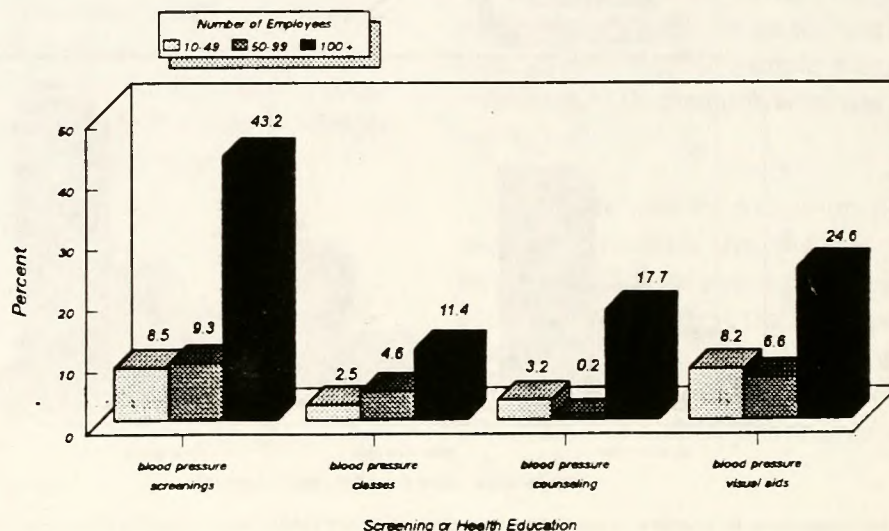
Percentages shown are weighted to be representative of worksites across North Carolina and are adjusted for nonresponse and sampling error.

### Blood Pressure, Cholesterol, and Cancer

Only at worksites with 100 or more employees was there an appreciable screening or educational effort for high blood pressure, cholesterol, or cancer. Screening for high blood pressure was reported by respondents at 43 percent of the large worksites, and

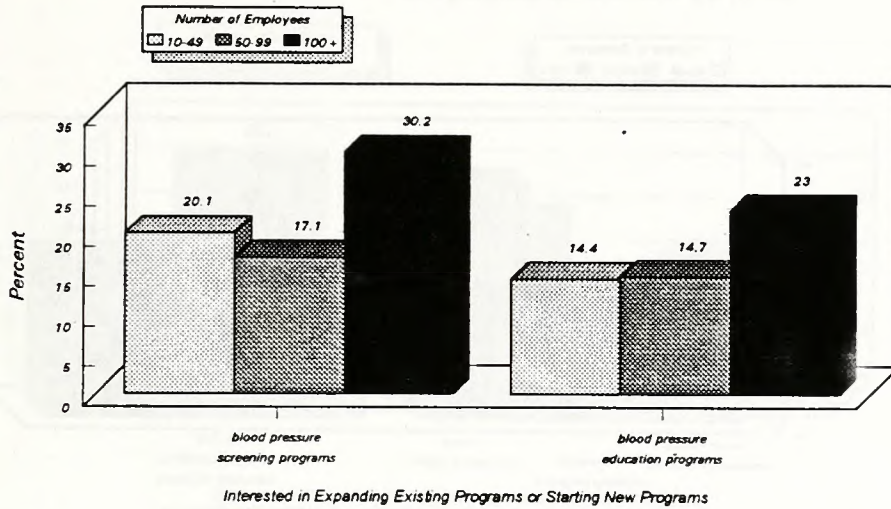
screening for high cholesterol or cancer was reported by respondents at 15 to 27 percent of large worksites. None of these screening or educational activities was reported at more than 10 percent of the worksites with less than 100 employees. Of the educational activities, provision of written materials and visual aids was the most common (figures 3, 5, and 7).

**Figure 3: Percent of North Carolina Private Sector Worksites Offering Screening or Health Education for High Blood Pressure, by Number of Employees**



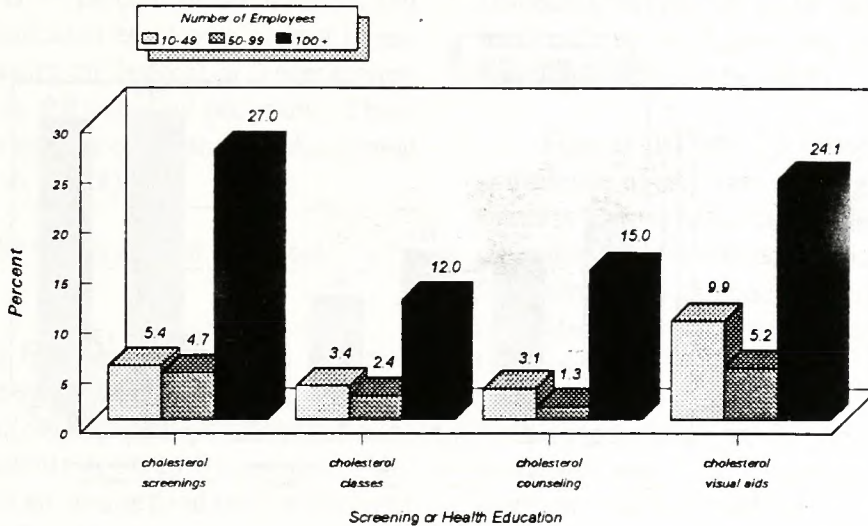
Percentages shown are weighted to be representative of worksites across North Carolina and are adjusted for nonresponse and sampling error.

**Figure 4: Percent of North Carolina Private Sector Worksites Interested in Expanding Existing Programs or Starting New Programs for High Blood Pressure, by Number of Employees**



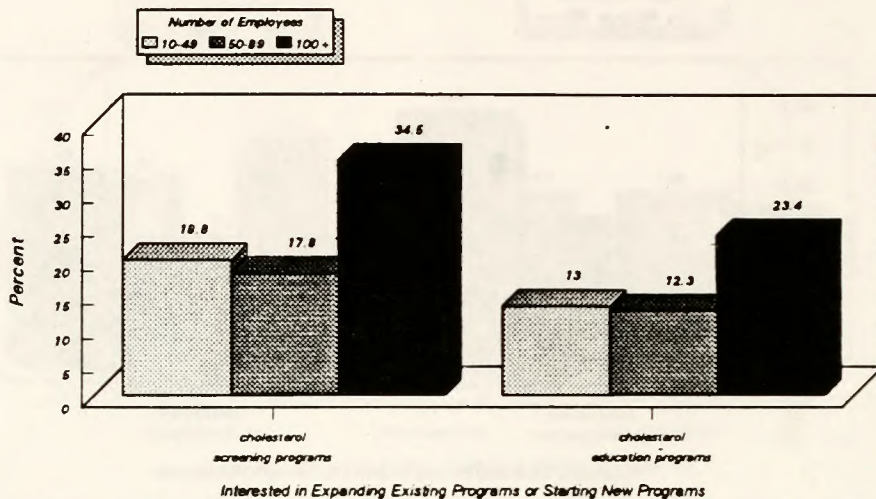
Percentages shown are weighted to be representative of worksites across North Carolina and are adjusted for nonresponse and sampling error.

**Figure 5: Percent of North Carolina Private Sector Worksites Offering Screening or Health Education for High Cholesterol, by Number of Employees**



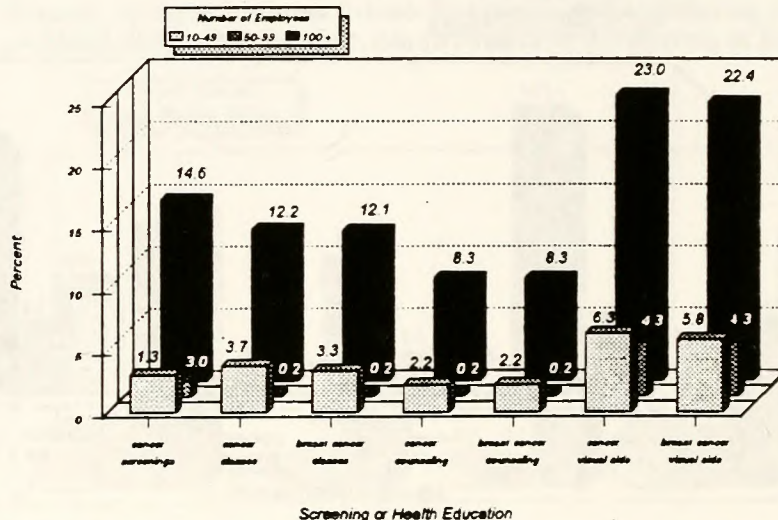
Percentages shown are weighted to be representative of worksites across North Carolina and are adjusted for nonresponse and sampling error.

**Figure 6: Percent of North Carolina Private Sector Worksites Interested in Expanding Existing Programs or Starting New Programs for High Cholesterol, by Number of Employees**



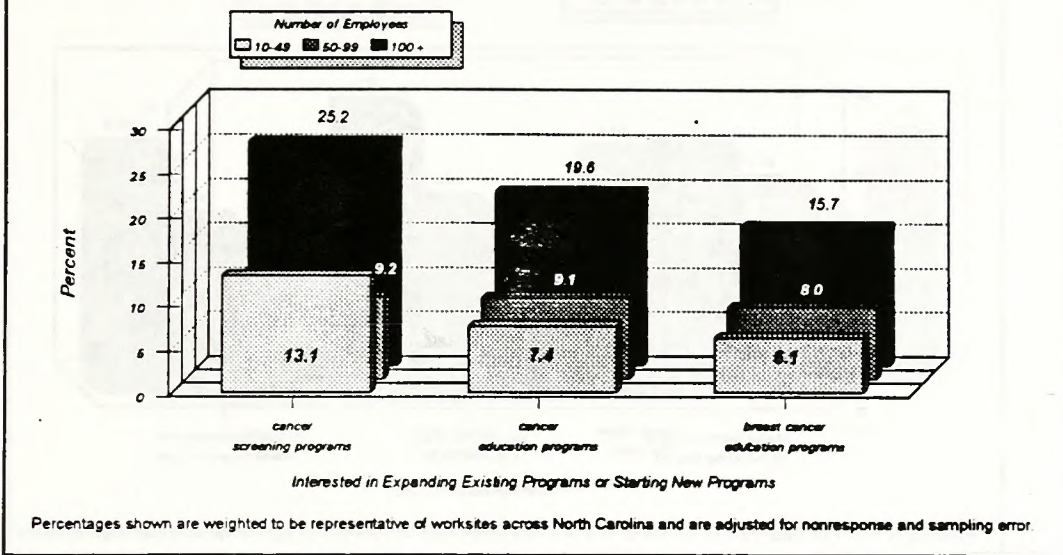
Percentages shown are weighted to be representative of worksites across North Carolina and are adjusted for nonresponse and sampling error.

**Figure 7: Percent of North Carolina Private Sector Worksites Offering Screening or Health Education for Cancer, by Number of Employees**



Percentages shown are weighted to be representative of worksites across North Carolina and are adjusted for nonresponse and sampling error.

**Figure 8: Percent of North Carolina Private Sector Worksites Interested in Expanding Existing Programs or Starting New Programs for Cancer, by Number of Employees**



Respondents at 25 to 35 percent of the large worksites and 9 to 20 percent of the medium and small worksites indicated employer interest in expanding blood pressure, cholesterol, or cancer screening programs or in starting new programs. There was less interest in starting or expanding educational efforts (figures 4, 6, and 8).

### **Nutrition, Weight Control, and Physical Fitness**

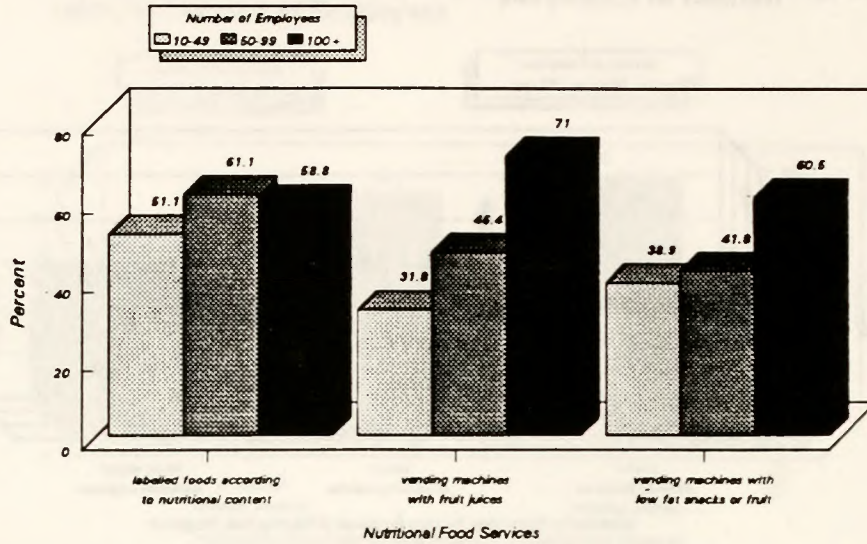
Respondents from most worksites reported having an on-site food service or food or drink vending machines (over 80 percent of worksites of any size). Respondents at 51 to 61 percent of the worksites that have an on-site food service reported that at least some of the foods are labeled according to their nutritional content. Vending machines have fruit juices or low-fat snacks at 61 to 71 percent of

the large worksites that have food or drink vending machines, but only at 32 to 46 percent of the small and medium worksites that have food or drink vending machines (figure 9).

Figures 10 and 11 show the relatively low prevalence of nutrition and weight control educational programs in North Carolina worksites. Those programs that are offered are located primarily in the large worksites and consist mostly of making written materials on nutrition or weight control available to the workers.

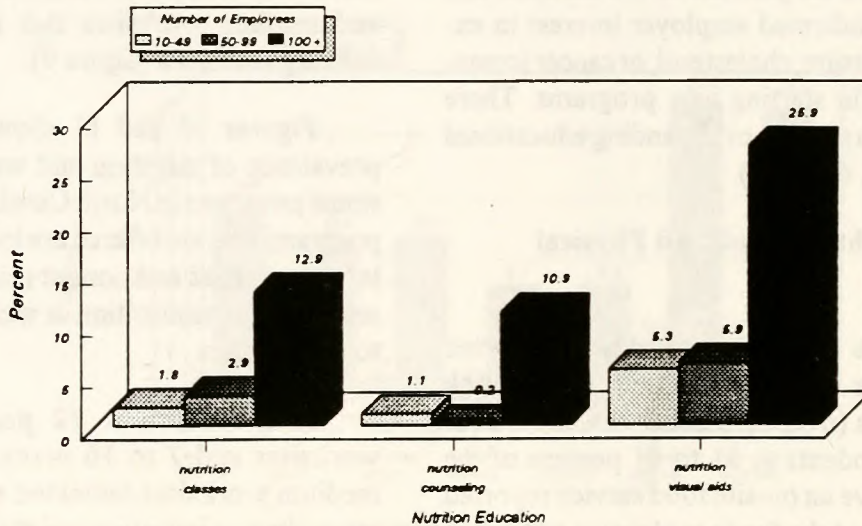
Respondents at 22 percent of the large worksites and 7 to 16 percent of the small and medium worksites indicated employer interest in expanding or initiating weight control or nutrition programs (figure 12).

**Figure 9: Percent of North Carolina Private Sector Worksites with On-Site Food Services Offering Selected Food Services, by Number of Employees**



Percentages shown are weighted to be representative of worksites across North Carolina and are adjusted for nonresponse and sampling error.

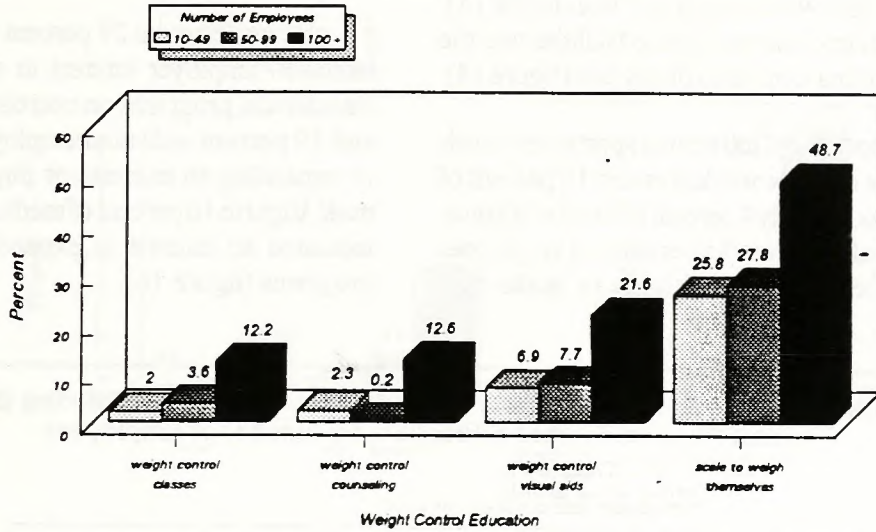
**Figure 10: Percent of North Carolina Private Sector Worksites Offering Nutrition Education, by Number of Employees**



Percentages shown are weighted to be representative of worksites across North Carolina and are adjusted for nonresponse and sampling error.

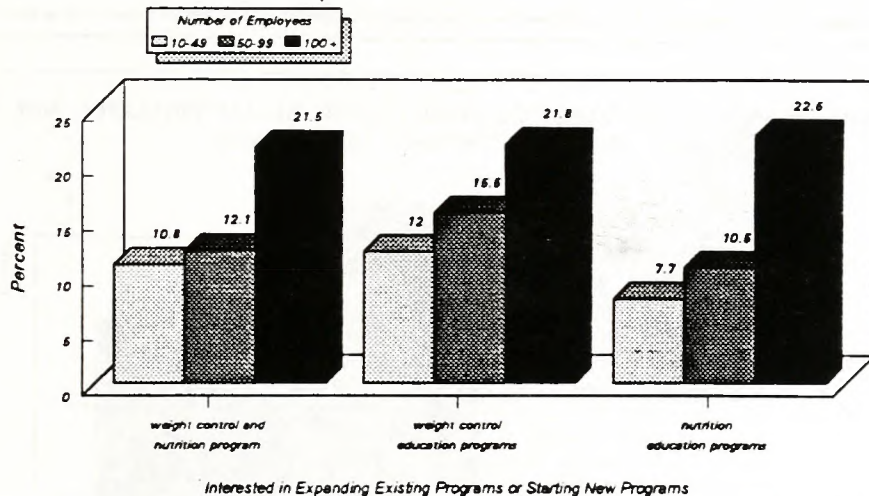


**Figure 11: Percent of North Carolina Private Sector Worksites Offering Weight Control Education, by Number of Employees**



Percentages shown are weighted to be representative of worksites across North Carolina and are adjusted for nonresponse and sampling error.

**Figure 12: Percent of North Carolina Private Sector Worksites Interested in Expanding Existing Programs or Starting New Programs for Nutrition or Weight Control, by Number of Employees**



Percentages shown are weighted to be representative of worksites across North Carolina and are adjusted for nonresponse and sampling error.

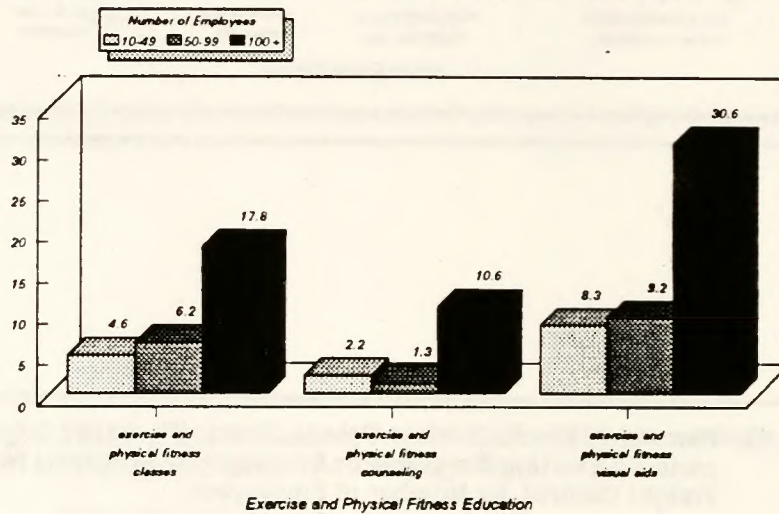
Except for written materials at the large worksites, educational programs on exercise and physical fitness were available at few worksites of any size (figure 13). Similarly, a lack of exercise and fitness facilities was the rule at North Carolina worksites of any size (figure 14).

Company-sponsored intramural sports were available at 34 percent of large worksites and 16 percent of medium worksites, but only 4 percent of small worksites. Sixteen percent of large worksites offered employees subsidized membership in a health spa or health club

(figure 15). Physical fitness programs of any type were uncommon at small worksites.

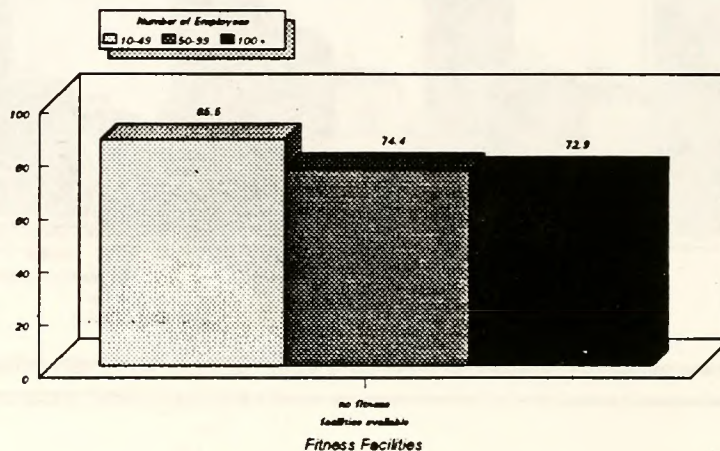
Respondents at 28 percent of the large worksites indicated employer interest in starting or expanding educational programs on exercise and physical fitness, and 19 percent indicated employer interest in starting or expanding an exercise or physical fitness program itself. Eight to 16 percent of medium and small worksites indicated an interest in expanding or starting these programs (figure 16).

**Figure 13: Percent of North Carolina Private Sector Worksites Offering Exercise and Physical Fitness Education, by Number of Employees**



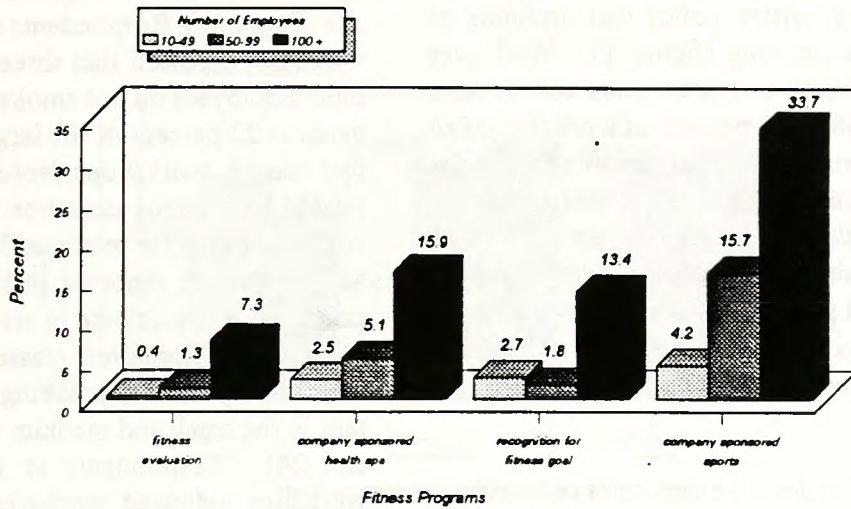
Percentages shown are weighted to be representative of worksites across North Carolina and are adjusted for nonresponse and sampling error.

**Figure 14: Percent of North Carolina Private Sector Worksites Not Offering Fitness Facilities, by Number of Employees**



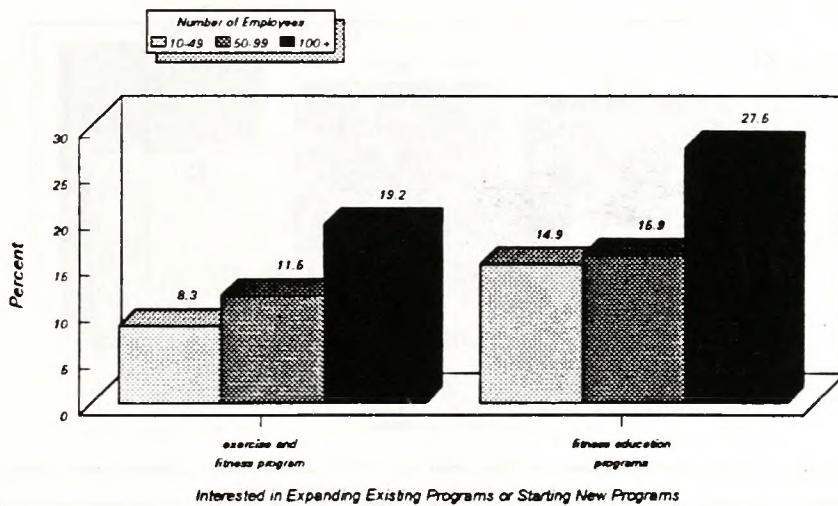
Percentages shown are weighted to be representative of worksites across North Carolina and are adjusted for nonresponse and sampling error.

**Figure 15: Percent of North Carolina Private Sector Worksites Offering Fitness Programs, by Number of Employees**



Percentages shown are weighted to be representative of worksites across North Carolina and are adjusted for nonresponse and sampling error.

**Figure 16: Percent of North Carolina Private Sector Worksites Interested in Expanding Existing Programs or Starting New Programs for Fitness, by Number of Employees**



Percentages shown are weighted to be representative of worksites across North Carolina and are adjusted for nonresponse and sampling error.

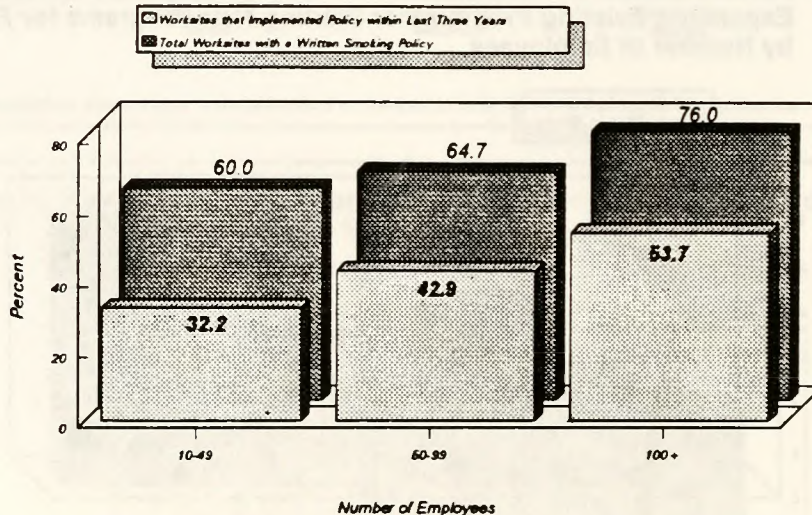
## Smoking

Respondents at 60 to 76 percent of worksites reported having a written policy that prohibits or severely restricts smoking (figure 17). Well over half of these policies are three years old or less. Respondents at 48 to 60 percent of worksites of all sizes cited requests from employees as a reason for their smoking policy (figure 18). Other important reasons were health and safety concerns (68 to 71 percent of worksites) and decision from top management (63 to 71 percent). Respondents at 12 to 30 percent of worksites that do not have a smoking policy reported employer interest in having one (figure 19).

When asked to describe their rules on smoking, respondents at 81 to 86 percent of worksites reported that smoking was not allowed anywhere

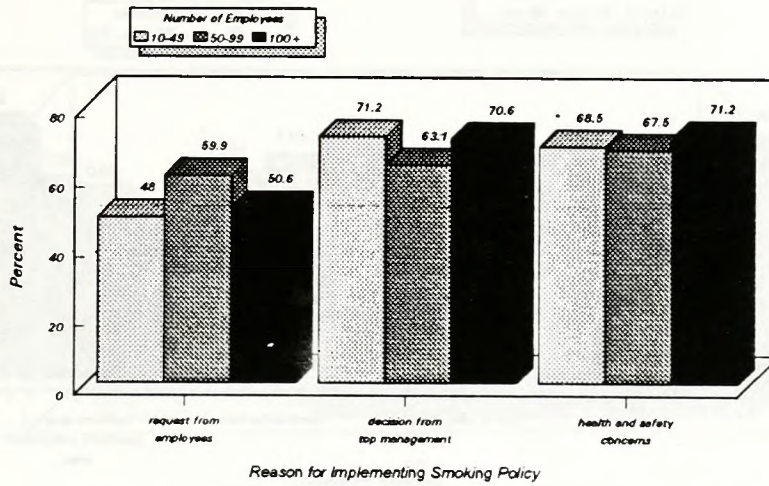
inside or that smoking was restricted to separately designated areas (figure 20). The majority of worksites do not have cigarettes available for sale on site (figure 21). Respondents at 37 to 68 percent of worksites reported that three-quarters or more of their employees do not smoke (figure 22). Respondents at 22 percent of the large worksites reported that classes, workshops, lectures, or special events related to smoking cessation were offered to their workers during the previous 12 months (figure 23), and 20 percent reported that employees were encouraged to participate in stop-smoking programs (figure 24). Incentives, classes, and counseling to help employees stop smoking are almost non-existent in the small and medium worksites (figures 23 and 24). Respondents at 11 to 28 percent of worksites indicated employee interest in starting new stop-smoking programs or expanding existing ones (figure 25).

Figure 17: Percent of North Carolina Private Sector Worksites with a Written Smoking Policy, by Age of Policy and Number of Employees



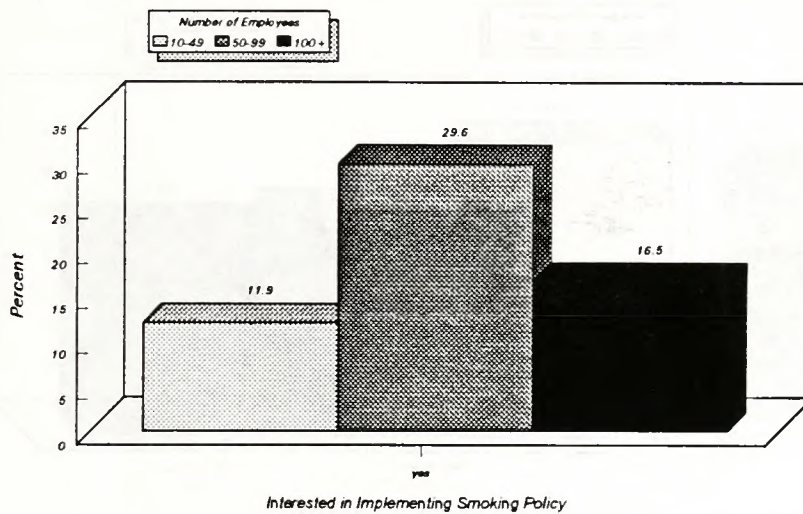
Percentages shown are weighted to be representative of worksites across North Carolina and are adjusted for nonresponse and sampling error.

**Figure 18: Reasons for Implementing a Written Smoking Policy (percent) from among North Carolina Private Sector Worksites that Have a Written Policy, by Number of Employees**



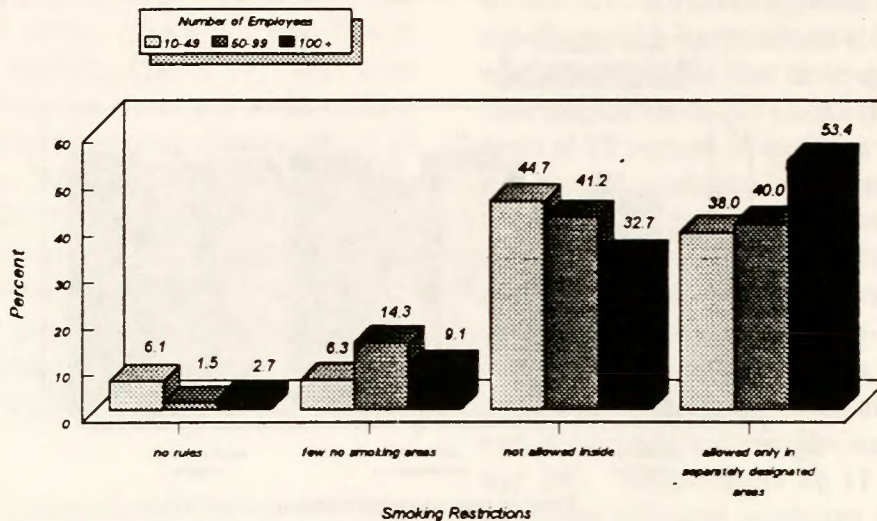
Percentages shown are weighted to be representative of worksites across North Carolina and are adjusted for nonresponse and sampling error.

**Figure 19: Percent of North Carolina Private Sector Worksites without a Written Smoking Policy Interested in Implementing a Smoking Policy, by Number of Employees**



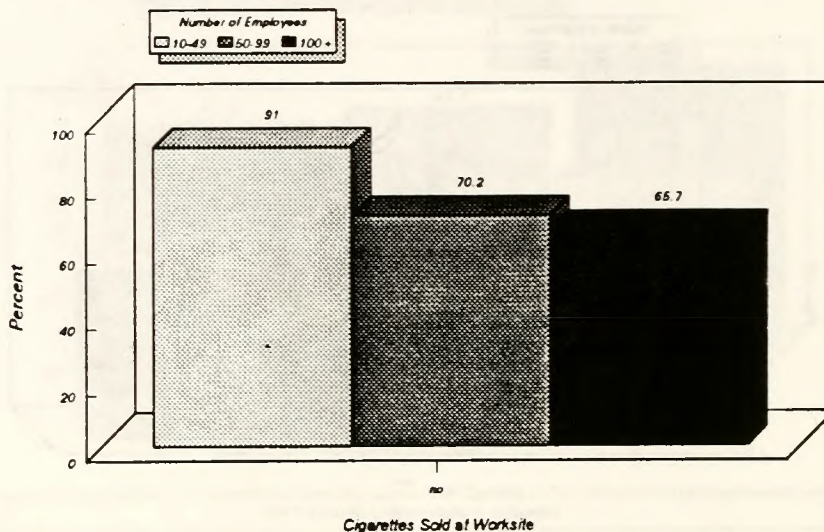
Percentages shown are weighted to be representative of worksites across North Carolina and are adjusted for nonresponse and sampling error.

**Figure 20: Percent of North Carolina Private Sector Worksites with Smoking Restrictions, by Type of Restriction and Number of Employees**



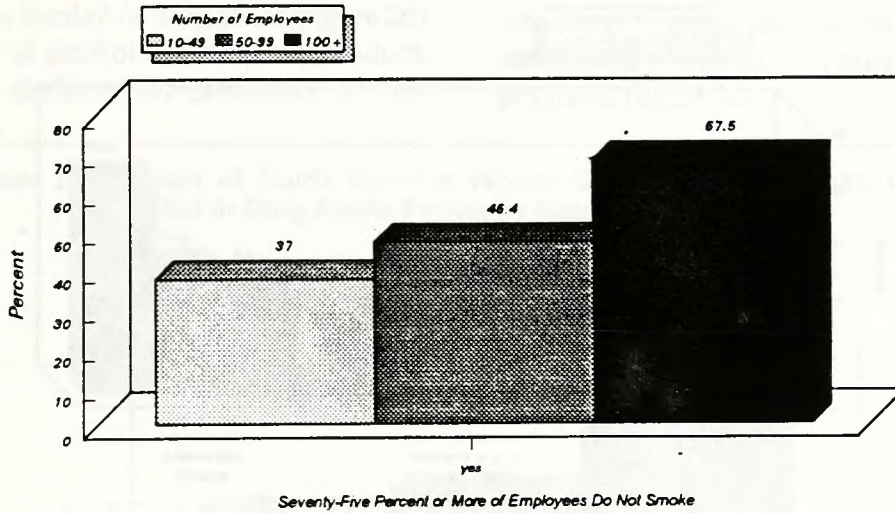
Percentages shown are weighted to be representative of worksites across North Carolina and are adjusted for nonresponse and sampling error. Percentages do not add to 100% because the question was not answered by some respondents.

**Figure 21: Percent of North Carolina Private Sector Worksites in which Cigarettes are Not Sold, by Number of Employees**



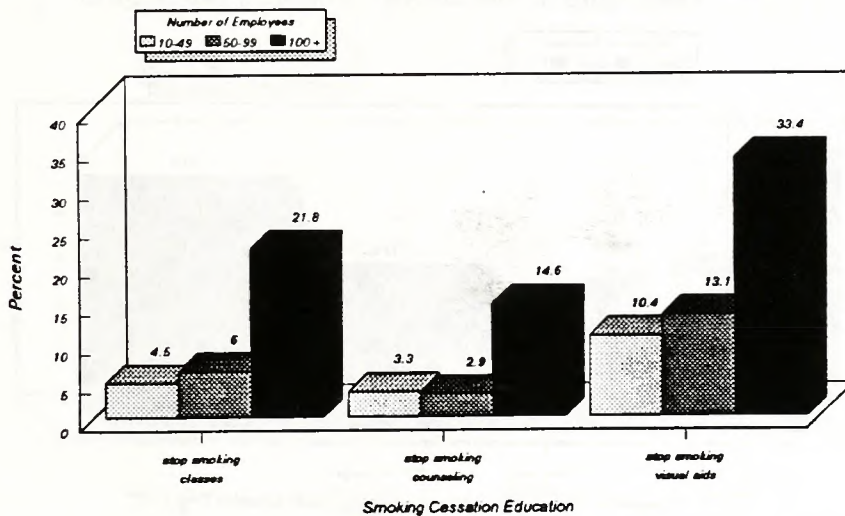
Percentages shown are weighted to be representative of worksites across North Carolina and are adjusted for nonresponse and sampling error.

**Figure 22: Percent of North Carolina Private Sector Worksites in which Seventy-Five Percent or More of the Employees Do Not Smoke, by Number of Employees**



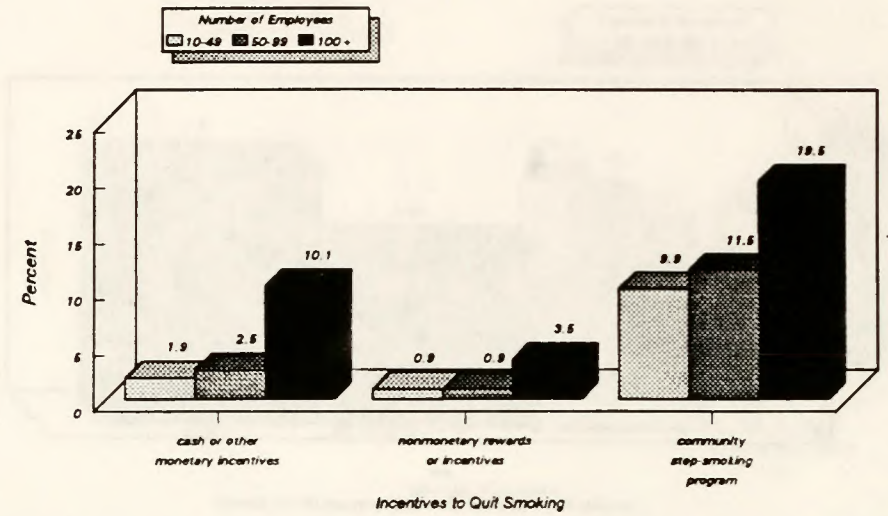
Percentages shown are weighted to be representative of worksites across North Carolina and are adjusted for nonresponse and sampling error.

**Figure 23: Percent of North Carolina Private Sector Worksites Offering Smoking Cessation Education During the Previous 12 Months, by Number of Employees**



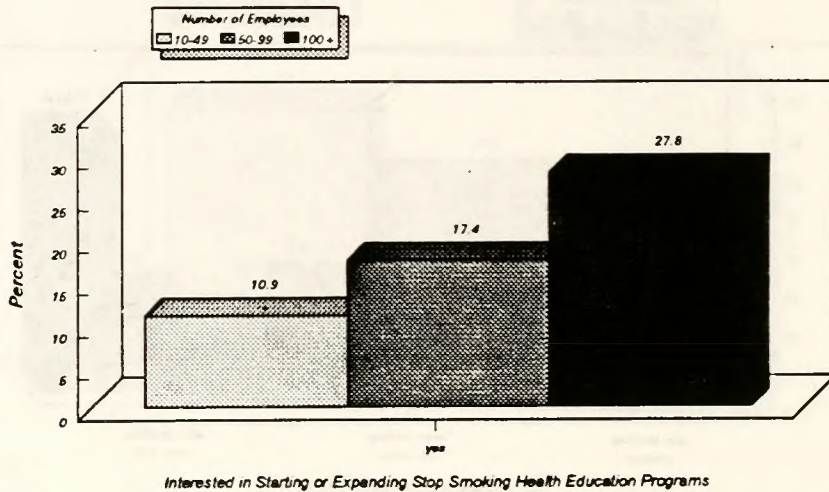
Percentages shown are weighted to be representative of worksites across North Carolina and are adjusted for nonresponse and sampling error.

**Figure 24: Percent of North Carolina Private Sector Worksites Offering Incentives to Quit Smoking, by Number of Employees**



Percentages shown are weighted to be representative of worksites across North Carolina and are adjusted for nonresponse and sampling error.

**Figure 25: Percent of North Carolina Private Sector Worksites Interested in Expanding Existing Programs or Starting New Programs for Smoking Cessation, by Number of Employees**



Percentages shown are weighted to be representative of worksites across North Carolina and are adjusted for nonresponse and sampling error.

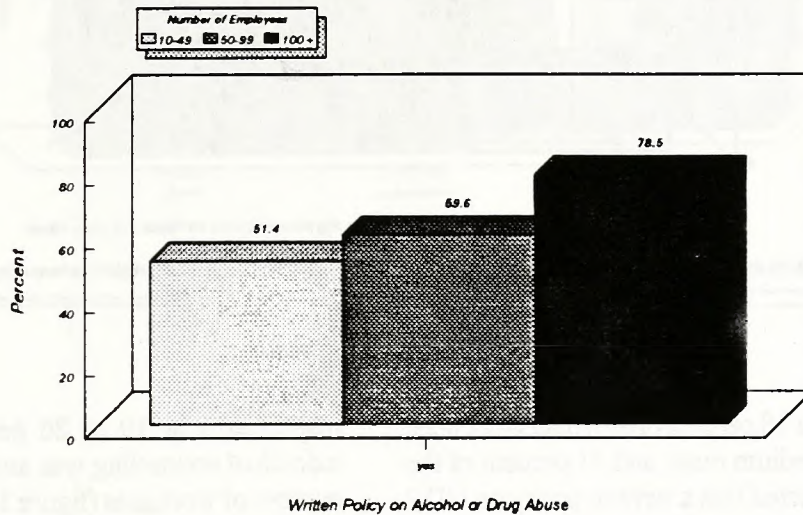


## Alcohol Abuse and Drug Abuse

Seventy-nine percent of the large worksites and 51 to 60 percent of the other worksites have a written policy on alcohol or drug abuse (figure 26). The prevalence of alcohol and drug abuse educational efforts is similar to the prevalence of stop-

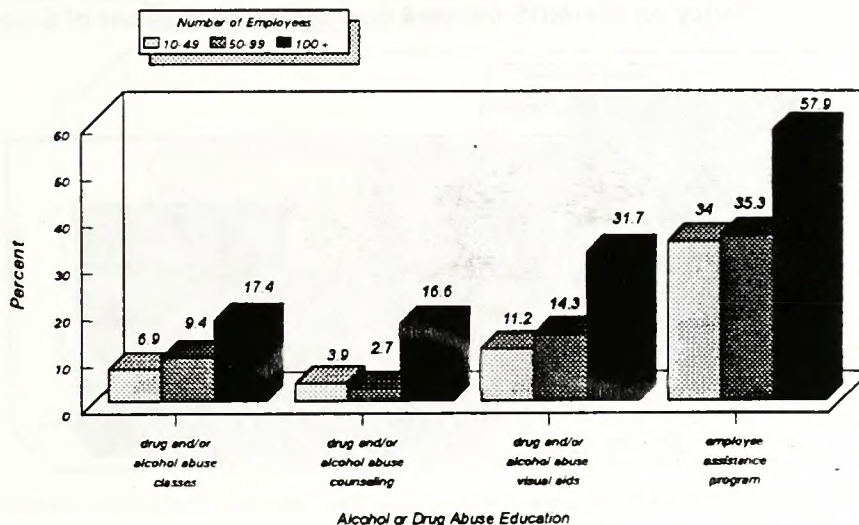
smoking efforts, i.e., some educational program is available at 17 to 32 percent of large worksites (figure 27). Respondents at 18 to 21 percent of the medium and large worksites indicated employer interest in starting new alcohol and drug abuse educational programs or in expanding their existing programs (figure 28).

**Figure 26: Percent of North Carolina Private Sector Worksites with Written Alcohol or Drug Abuse Policy, by Number of Employees**



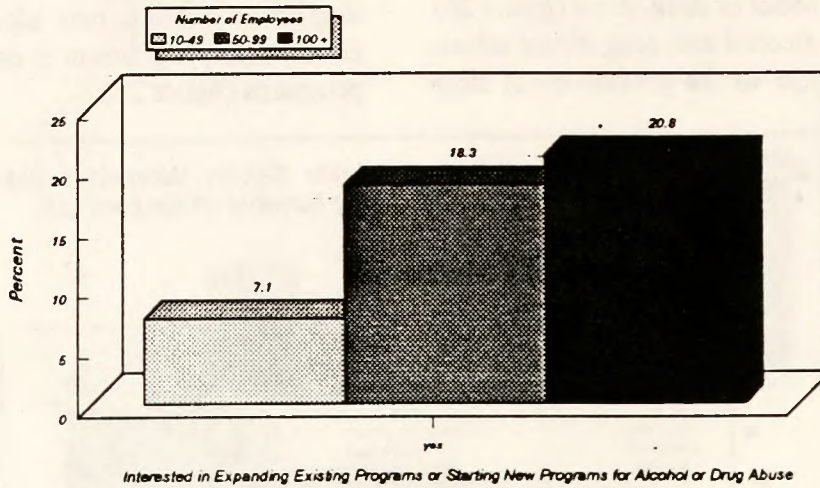
Percentages shown are weighted to be representative of worksites across North Carolina and are adjusted for nonresponse and sampling error.

**Figure 27: Percent of North Carolina Private Sector Worksites Offering Alcohol or Drug Abuse Education, by Number of Employees**



Percentages shown are weighted to be representative of worksites across North Carolina and are adjusted for nonresponse and sampling error.

**Figure 28: Percent of North Carolina Private Sector Worksites Interested in Expanding Existing Programs or Starting New Programs for Alcohol or Drug Abuse, by Number of Employees**



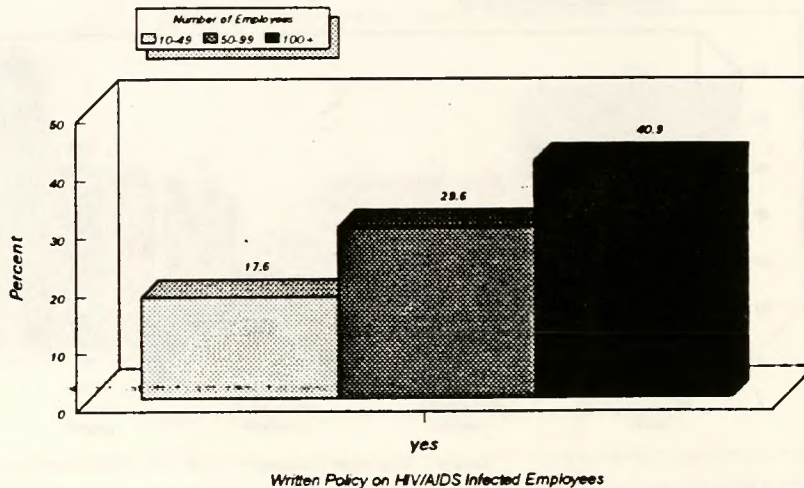
Percentages shown are weighted to be representative of worksites across North Carolina and are adjusted for nonresponse and sampling error.

## HIV/AIDS

Respondents at 18 percent of the small worksites, 30 percent of the medium ones, and 41 percent of the large worksites reported that a written policy on HIV/AIDS was in place at their worksite (figure 29). Written materials and classes, workshops, and other group educational programs on HIV/AIDS were reported by

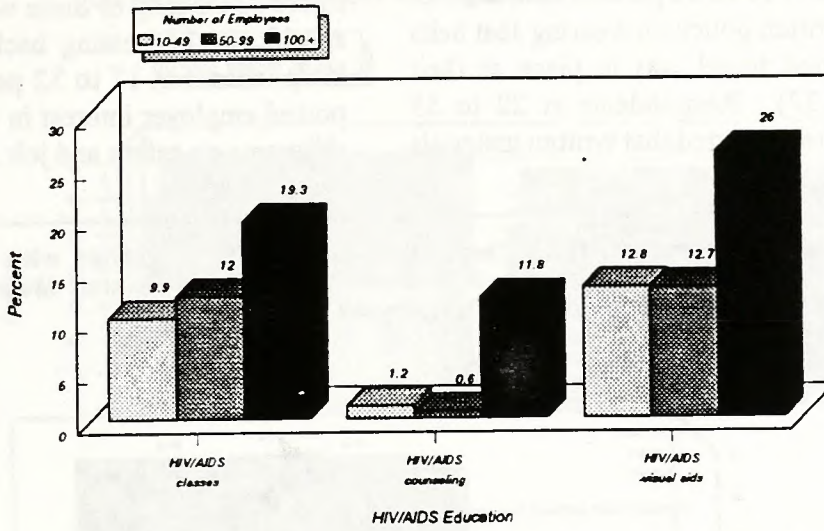
respondents at 10 to 26 percent of worksites, but individual counseling was available at a much smaller number of worksites (figure 30). Respondents at 11 to 15 percent of worksites indicated employer interest in expanding or initiating education programs on HIV/AIDS (figure 31).

**Figure 29: Percent of North Carolina Private Sector Worksites with a Written Policy on HIV/AIDS Infected Employees, by Number of Employees**



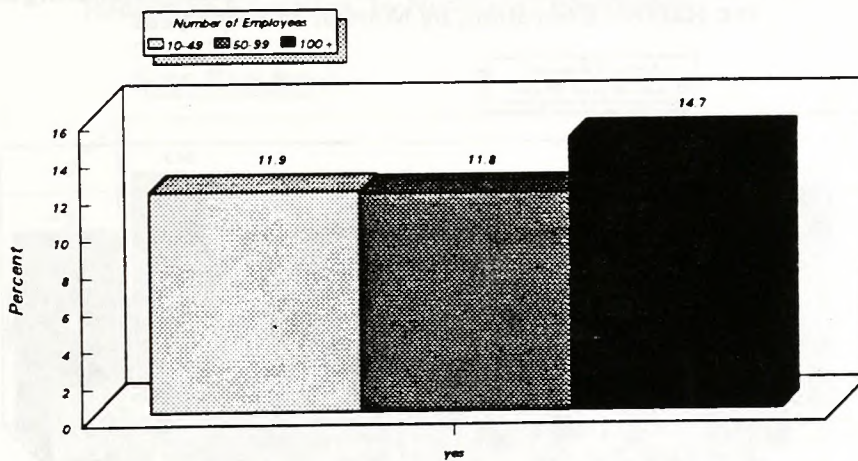
Percentages shown are weighted to be representative of worksites across North Carolina and are adjusted for nonresponse and sampling error.

**Figure 30: Percent of North Carolina Private Sector Worksites Offering HIV/AIDS Education, by Number of Employees**



Percentages shown are weighted to be representative of worksites across North Carolina and are adjusted for nonresponse and sampling error.

**Figure 31: Percent of North Carolina Private Sector Worksites Interested in Expanding Existing Programs or Starting New Programs for HIV/AIDS, by Number of Employees**



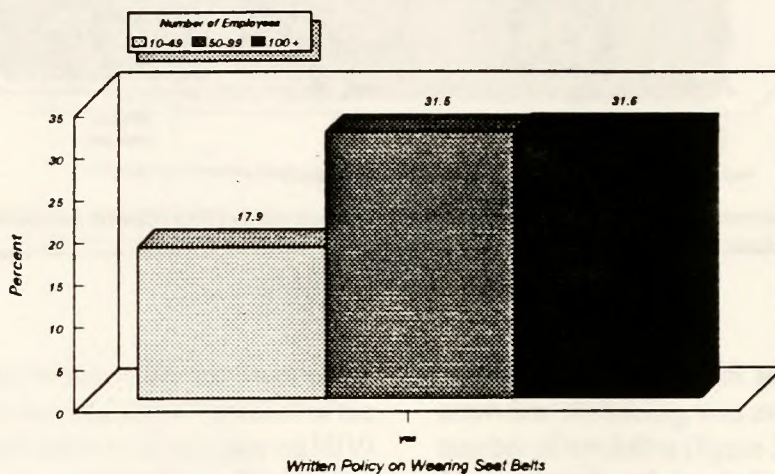
Percentages shown are weighted to be representative of worksites across North Carolina and are adjusted for nonresponse and sampling error.

## Safety, Job Hazards, and Injury Prevention

Respondents at 18 to 32 percent of worksites reported that a written policy on wearing seat belts during work-related travel was in place at their worksite (figure 32). Respondents at 22 to 55 percent of worksites reported that written materials

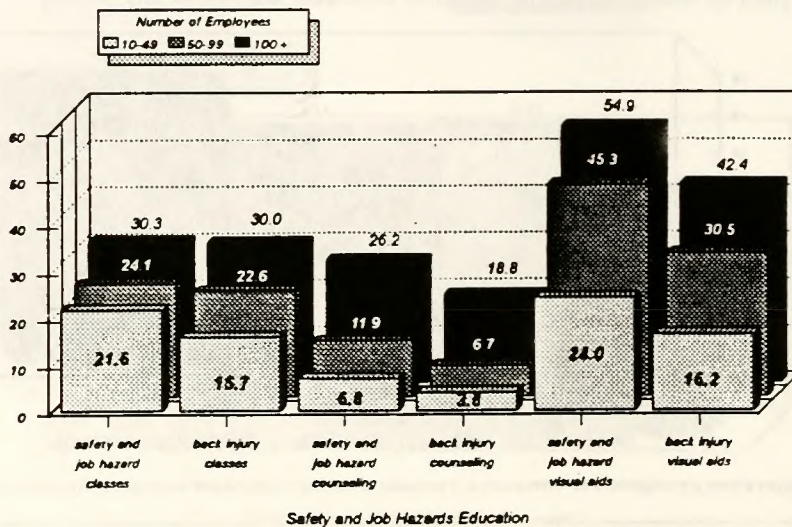
or classes on safety and job hazards were available to their employees (first and fifth sets of bars in figure 33). Many of these worksites had programs specifically addressing back injuries (figure 33). Respondents at 17 to 32 percent of worksites reported employer interest in expanding or initiating programs on safety and job hazards (figure 34).

**Figure 32: Percent of North Carolina Private Sector Worksites with a Written Policy on Wearing Seat Belts During Work-Related Motor Vehicle Travel, by Number of Employees**



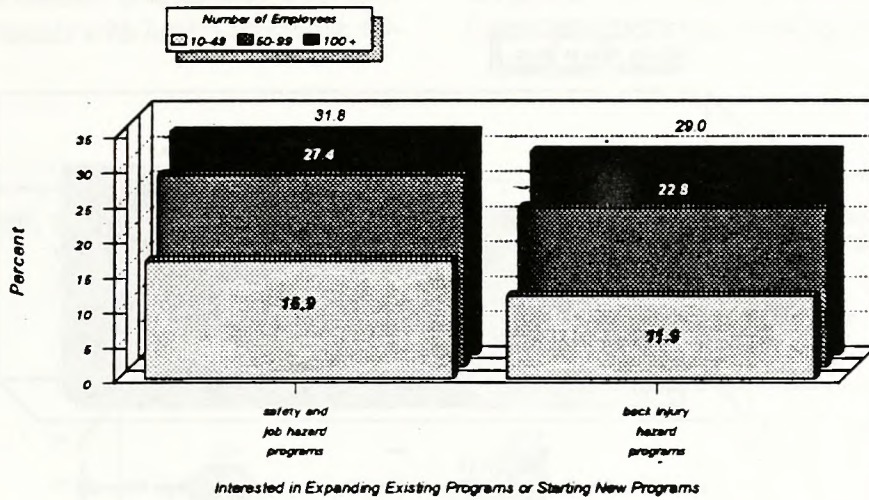
Percentages shown are weighted to be representative of worksites across North Carolina and are adjusted for nonresponse and sampling error.

**Figure 33: Percent of North Carolina Private Sector Worksites Offering Safety and Job Hazards Education, by Number of Employees**



Percentages shown are weighted to be representative of worksites across North Carolina and are adjusted for nonresponse and sampling error.

**Figure 34: Percent of North Carolina Private Sector Worksites Interested in Expanding Existing Programs or Starting New Programs on Safety and Job Hazards, by Number of Employees**



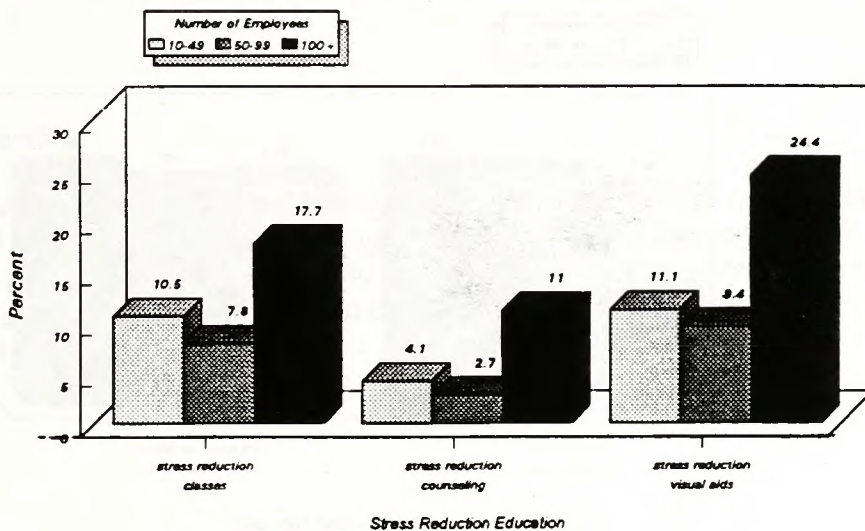
Percentages shown are weighted to be representative of worksites across North Carolina and are adjusted for nonresponse and sampling error.

## Stress Reduction

Except for the provision of written materials in the large worksites, educational programs for stress reduction were uncommon (figure 35). Respon-

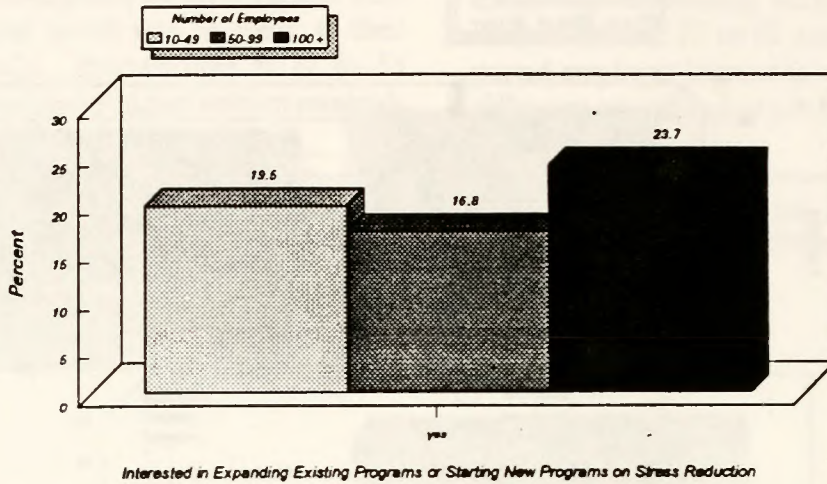
dents at 17 to 24 percent of worksites indicated employer interest in expanding or initiating stress reduction educational programs (figure 36).

**Figure 35: Percent of North Carolina Private Sector Worksites Offering Stress Reduction Education, by Number of Employees**



Percentages shown are weighted to be representative of worksites across North Carolina and are adjusted for nonresponse and sampling error.

**Figure 36: Percent of North Carolina Private Sector Worksites Interested in Expanding Existing Programs or Starting New Programs on Stress Reduction, by Number of Employees**

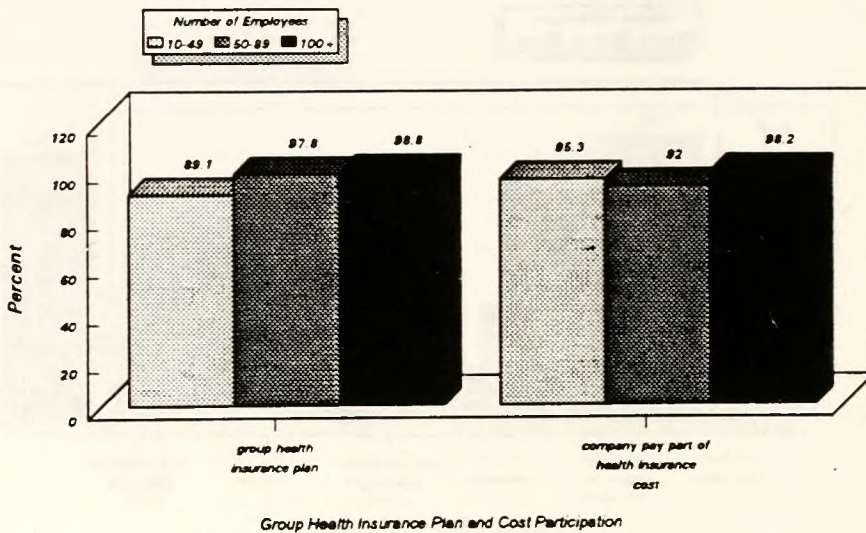


Percentages shown are weighted to be representative of worksites across North Carolina and are adjusted for nonresponse and sampling error.

## Health Insurance

Respondents at nearly all of the worksites reported that a group health insurance plan in which the company paid all or part of the cost was available to their employees (figure 37).

**Figure 37: Percent of North Carolina Private Sector Worksites Offering Employees a Group Health Insurance Plan, by Number of Employees**



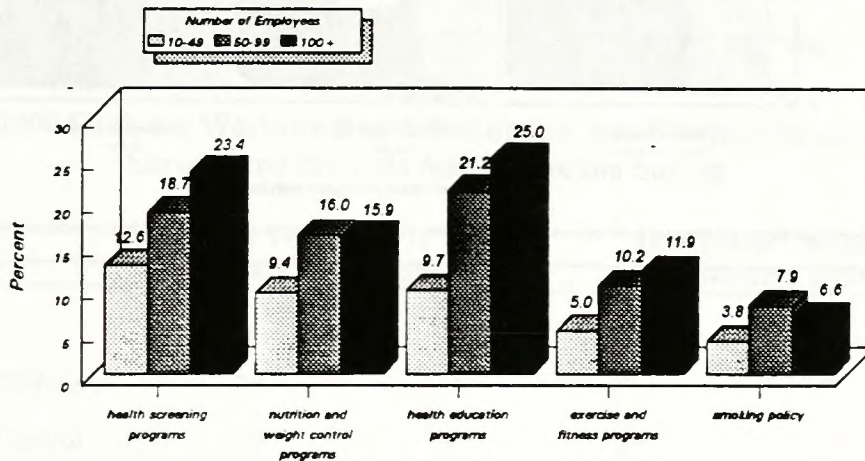
Percentages shown are weighted to be representative of worksites across North Carolina and are adjusted for nonresponse and sampling error.

## Assistance from Local Health Department

Respondents at 9 to 25 percent of worksites indicated employer interest in assistance from their local health departments with health screening, nu-

trition and weight control, and health education programs. There was less interest in assistance for fitness programs and smoking policies (figure 38).

**Figure 38: Percent of North Carolina Private Sector Worksites Wanting Assistance with Health Promotion Programs from Local Health Departments, by Number of Employees**



Want Assistance with Health Promotion Programs from Local Health Departments

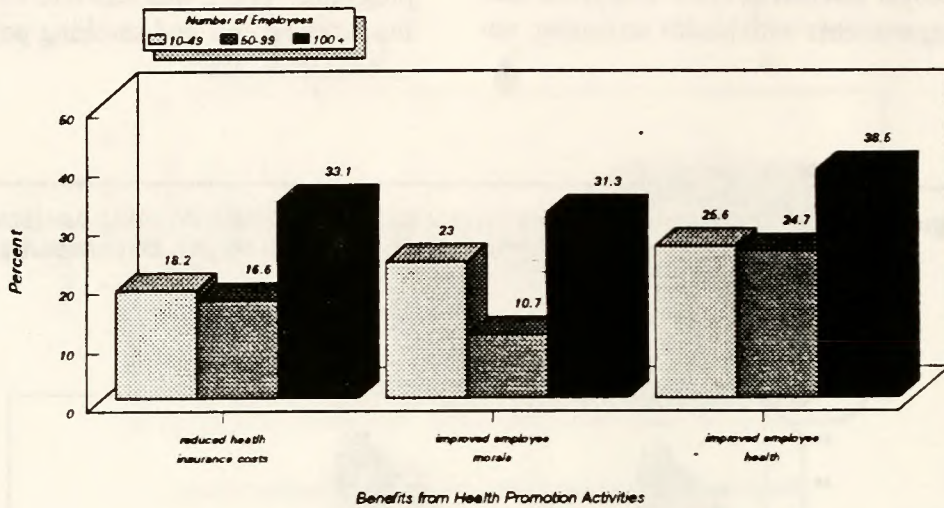
Percentages shown are weighted to be representative of worksites across North Carolina and are adjusted for nonresponse and sampling error.

## Benefits and Barriers

Improved employee health, improved employee morale, reduced health insurance costs (cost containment) (figure 39), reduced absenteeism, and increased productivity were the benefits most often cited for worksite health promotion activities.

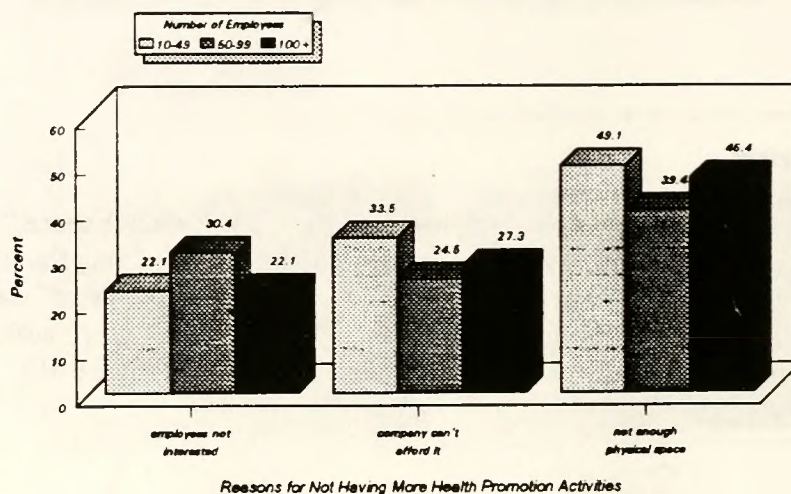
“Not enough space,” “company can’t afford it” (particularly among the small worksites), and “employees not interested” were the main reasons given for not having more health promotion activities at the worksite (figure 40).

**Figure 39: Percent of North Carolina Private Sector Indicating the Three Most Important Benefits from Health Promotion Activities, by Number of Employees**



Percentages shown are weighted to be representative of worksites across North Carolina and are adjusted for nonresponse and sampling error.

**Figure 40: Percent of North Carolina Private Sector Worksites Indicating the Three Most Important Reasons for Not Having More Health Promotion Activities, by Number of Employees**



Percentages shown are weighted to be representative of worksites across North Carolina and are adjusted for nonresponse and sampling error.



## Comparisons with National Data and Year 2000 Goals

Table 2 compares selected findings from the present survey with findings from the recent national worksite health promotion survey<sup>2</sup> and with national Year 2000 goals. Having a written policy on alcohol

and drug abuse and, among large worksites only, having a written policy restricting smoking are the only areas in which North Carolina worksites are close to or exceed the Year 2000 goals. In some areas, such as blood pressure screening and nutrition and weight control, the gap is quite large.

**Table 2**  
**National Year 2000 Goals for Worksite Health Promotion, and Findings for the 1992 National Survey<sup>a</sup> and the 1994 North Carolina Survey**

Activity	National Year 2000 Goal (%)	1992 National Survey <sup>a</sup> (%)	1994 North Carolina Survey (%)		
			10-49	50-99	100+
Blood Pressure Screening	50	29	9	9	43
Nutrition/Weight Control	50	37	2 <sup>b</sup>	4 <sup>b</sup>	13 <sup>b</sup>
Physical Activity/Physical Fitness	—	41	4 <sup>c</sup>	16 <sup>c</sup>	34 <sup>c</sup>
Written Smoking Policy	75	59	55	61	70
Alcohol and Drug Policy	60	87	51	60	79
Seat Belt Policy	75	82	18	32	32

<sup>a</sup>See reference 2. Worksites of 50 or more employees.

<sup>b</sup>Maximum prevalence of nutrition or weight control programs

<sup>c</sup>Company sponsored sports activities

Percentages shown are weighted to be representative of worksites across North Carolina and are adjusted for nonresponse and sampling error



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## DISCUSSION

The response rate to this survey (53.6 percent) was notably higher than response rates to most previous national and local surveys of this type. This may be because individual respondents were identified by name in advance and the questionnaire was mailed directly to them. The signature of the Governor on the cover letter may also have increased response.

A single summary measure of worksite health promotion based on this survey would be of little value. The summary measure would have to include a wide range and intensity of activities, from comprehensive health promotion programs to just having a few posters on the bulletin board. However, several common themes do emerge from the responses.

First, health promotion activities are most often found at worksites with 100 or more employees. Employees at smaller worksites, which represent the bulk of North Carolina's workforce, do not receive as many health promotion activities.

Second, health promotion educational activities at North Carolina worksites consist primarily of written materials. More active programs, such as classes and workshops, are less common.

Third, smoking restrictions and support for stop-smoking programs are commonly found in North Carolina worksites of all sizes. Much of the impetus for smoking restrictions comes from the workers themselves.

Fourth, there is interest among worksites in expanding health promotion programs. Yet, they perceive barriers, such as limited physical or financial resources, that prevent this from happening. There was significant interest in receiving help from local health departments to develop health promotion activities. Finally, our respondents did not readily identify the benefits to the company of existing or potential health promotion activities.

What are the implications of these findings for public health in North Carolina? There is vast potential for using the worksite as a pathway to bring health promotion information and activities to the state's citizenry. Many employers are open to this and are looking to their local health departments for leadership and assistance. This work should focus on small and medium-sized worksites as the group most in need of and most likely to benefit from assistance with worksite health promotion.

Responses to the survey reflected a broad range of needs and preferences among worksites. Any assistance offered should be flexible enough to be adapted to the particular situation of individual worksites. The survey also indicated that virtually all areas of worksite health promotion are in need of expansion. Alcohol and drug abuse policy is the only area in which worksites in North Carolina of all sizes are close to or exceed Year 2000 goals.

Several limitations of this survey should be kept in mind. The reliability and validity of the responses are unknown. These depend to a great extent on the particular individual at the worksite who filled out the questionnaire. Variations in reliability and validity were presumably reduced by seeking to identify the individual most responsible for health promotion at each worksite. However, the extent to which we succeeded in identifying that individual and their knowledge of health promotion activities at their worksite are unknown. Some questionnaires were filled out by full-time health promotion coordinators, while others were filled out by office managers. Therefore, there remain at least two sources of variation in the quality of responses that cannot be estimated in the existing data: variation among individuals at a particular worksite; and variation among worksites in the availability of knowledge about the survey questions. Another limitation of this survey is that it does not include public sector worksites, which account for a sizable proportion of North Carolina's workforce.

The survey's results suggest several recommendations:

- Repeat the survey at a time that allows documentation of the progress and evaluation of promotional efforts that occurred during the interim.
- Conduct a similar survey of public sector worksites to get a more complete picture of health promotion activities available to North Carolina workers.
- Make the monitoring of worksite health promotion activities (contents of vending machines, smoking policies) part of the routine health surveillance efforts of DEHNR divisions.
- Analyze current survey data and link it with data from external sources, such as workman's compensation claims, to provide a more detailed picture of health promotion activities in North Carolina.
- Expand assistance with health promotion activities offered to worksites by DEHNR, local health departments, and other agencies.

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