

**A COMPARISON OF A METROPOLITAN SURVEY  
OF WORKSITE HEALTH PROMOTION  
ACTIVITIES WITH THE NATIONAL  
WORKSITE SURVEYS**

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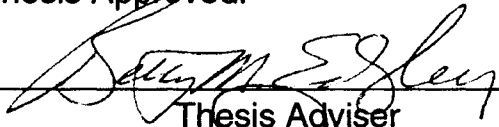
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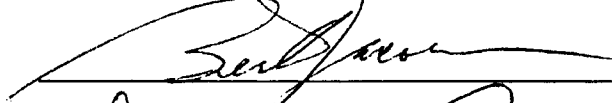
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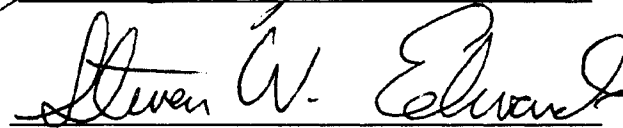
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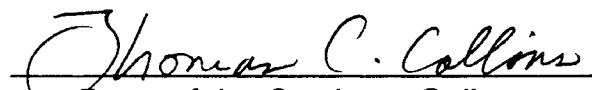
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# **CHAPTER I**

## **Introduction**

During the 1980's, Americans were introduced to the fitness boom. The surge towards exercise, physical fitness, and overall behavioral changes that lead to a healthier lifestyle was wide spread (Stephens, 1987). In conjunction with the civil movement, the American health care system has undergone a pervasive revolution towards preventive care (Breslow, 1990; Mason, 1990). This movement in health care was spawned by the Surgeon General's report in 1979 which called for a refocusing of resources towards health promotion and disease prevention during the eighties(ODPHP, 1979). The impetus for this migration towards prevention, fitness, and health varies since every individual has unique reasons for participating in a healthy lifestyle. One of the number one reasons for participation in a healthy lifestyle is an effort to prevent certain diseases and ailments which are pervasive among Americans.

Throughout the decade of the eighties the number one cause of death was cardiovascular disease(CVD). In 1989 cardiovascular diseases killed almost one million Americans nearly equalling the number of deaths caused by cancer, accidents, pneumonia, influenza, and all other causes of death combined. Almost fifty percent of all deaths are caused by cardiovascular diseases and more than one in four Americans suffer from some form of cardiovascular disease(American Heart Association, 1991). CVD is not an unpredictable or unpreventable condition. According to the American Heart Association (1991) the risk

factors for CVD's are: (a) Heredity, (b) Gender, (c) Age, (d) Smoking, (e) Hypertension, (f) Serum cholesterol levels, (g) Obesity, and (h) Physical inactivity. Diabetes and Stress are also contributing factors. Of the ten leading causes of death among Americans, half are related to improper diet and a lack of exercise (DHHS, 1990). Exercise receives considerable attention because it is not only the direct solution to physical inactivity but it has been supported by a vast body of research, as a factor in the primary prevention and the reversal of several other risk factors and/or their subsequent ailments such as (a) coronary heart disease(CHD), (b) hypertension, (c) obesity, (d) elevated serum cholesterol levels, and (e) chronic obstructive pulmonary disease (COPD) (Atkins & Kaplan, 1984; Harris, Casperson, DeFries, & Estes, 1989; Kottke, Casperson, & Hill, 1984; Ornish et al., 1990; Pavlou et al., 1989; Reaven, McPhillips, Barrett-Conner, & Criqui, 1990).

Interventions or lifestyles which focus on risk factor reduction can make a difference in mortality statistics. As printed in "Research Facts-Update 1992" published by the American Heart Association(AHA), even though cardiovascular disease is still the number one killer of Americans, the age-adjusted death rates for all CVD's have decline by 23.4 percent from 1979 to 1989. The age-adjusted death rates for heart attacks and strokes have declined 30 and 31.5 percent, respectively, for the same time frame. These declining mortality rates can be attributed to advances in medical treatment and healthier lifestyles(American Heart Association, 1991).

The burden of CVD is not confined to the individuals who have developed these ailments. There is a socioeconomic price paid by individuals, families, businesses, organizations, and governments. The AHA estimates that the cost for CVD in 1992 was \$108.9 billion. A solution to this epidemic requires the interest and involvement of everybody. The U.S. Government consolidated all avail-



able data and issued its goals and objectives for the American people in a report called Healthy People 2000. This report specifically addresses the potential for worksite health promotion programs as a mechanism to reach large numbers of people and make a considerable movement to a healthier lifestyle (Healthy People 2000, 1990). The benefits of implementing worksite health promotion are multi-faceted. Not only will the employee receive the physical and psychological benefits of a healthier lifestyle, the employer could receive a host of benefits ranging from reduced cost for insurance premiums, disability benefits, and medical expenses to increased productivity, reduced absenteeism and turnover, and improved employee morale (Shepard, R.J., 1983).

### **Significance of the Study**

A high priority was set by the Healthy People 2000 report for state and local surveillance systems to provide comparisons to baseline data and also track the progress of individual objectives. There are fifteen objectives that specifically address the worksite (Objectives 1.10, 2.16/.20/.21, 3.11, 4.14, 6.11, 8.6/.7, 10.6/.12/.13/.14, 15.16, 17.19). These objectives cover areas such as physical activity / fitness, nutrition, tobacco / alcohol / drug use, educational programs, employee safety, and health screenings. The present study is an important step in evaluating the current status of employer-sponsored health promotion programs among metropolitan businesses. The study also provides a local database on which to compare and add to the national database for which the goals and objectives are set. The following objectives were addressed:

1. To establish a database for a particular Metropolitan city on the

- availability of employer-sponsored health promotion programs.
2. To create a more practical surveillance tool which can be used on the state and local levels to help track the progress of the Healthy People 2000 goals.
  3. To identify the existing potential for new programming within the companies in a particular Metropolitan city.

### **Statement of the Problem**

The problem was to compare the results of a metropolitan survey of work-site health promotion activities with the published data in the Healthy People 2000 report as established through the two national surveys, 1985 and 1992.

### **Hypotheses**

The hypotheses were tested at the .05 level of significance.

#### **Hypothesis 1:**

There is no significant difference in the number and variety of health promotion programs offered in companies with 100-249 employees (medium) as compared to those employers with 250-749 (large) and 750 + employees (very large) from within the 1993 Metropolitan survey.

### Hypothesis 2:

There is no significant difference in the proportion and variety of the companies offering health promotion programs within the Metropolitan survey as compared with the proportions and variety of programs found in the "National Survey of Worksite Health Promotion Activities", 1985 and 1992.

### Assumptions

This study was based on the following underlying assumptions:

1. The surveillance tool utilized will effectively cover the same subject matter as the national survey.
2. Respondents will be honest and provide an accurate company profile.
3. Respondents will be representative of the Metropolitan area being surveyed.

### Delimitations

The study was delimited as follows:

1. Target population was limited to those area businesses which were on the list provided by the local Chamber of Commerce.
2. Subjects were categorized into company size based on the number of employees, with the categories being dictated by the original studies.
3. Survey content consisted only of those programs identified in the original '85 and '92 National studies.

## **Limitations**

The following limitations may influence the results of this survey.

1. Target population were all the companies who are members of the local Chamber of Commerce and on the Areas Top Employers List, thus eliminating a true random sampling of all the Metropolitan businesses.
2. Survey and procedures used in the National studies were modified in order to administer a survey for metropolitan worksite health promotion activities in a written format.

## **Definition of Terms**

The following definitions provide the reader with an understanding of the terms utilized within this study.

**Health Promotion Activities and Programs.** The terms activities and program are used synonymously throughout this study and refer to any formal program, policy or effort within the given subject area to help identify, educate, promote, and enhance the employee's health.

**Company Size.** The categorization of company size was derived from the original national survey. Medium company = 100-249 employees; Large company = 250-749 employees; and Very Large company = 750 + employees. The category

for Small company = 50-99 employees was not utilized for this survey.

National Survey of Worksite Health Promotion Activities (1985 & 1992). The national surveys which were conducted by the Office of Disease Prevention and Health Promotion (ODPHP), Department of Health and Human Services (DHHS) and considered the database on which this study will compare its results. Frequently referred to within this study as "'85 &'92 National survey".

Metropolitan Survey of Worksite Health Promotion Activities (1993). This is the surveillance tool created for and implemented by this study to assess the proportion of worksite health promotion activities for a metropolitan city in the Mid-southwest and is frequently referred to within this study as the "'93 Metro survey".

Healthy People 2000 report. This report by the federal government spells out the expected goals for health care within the U.S. by the year 2000. The 1985 National survey was utilized as baseline data to set the projected goals. The 1992 National survey was performed to monitor the progression of these programs. These projections are considered to be the standard and goal for each area being surveyed. Often referred to in this study as the "2000 goals".

## **CHAPTER II**

### **Review of Literature**

Most Health Promotion activities address the major risk factors which can be modified through intervention and lifestyle changes in order to enhance an individual's health. Thus, most programming includes cardiovascular disease (CVD) risk factors. The review of literature will focus on the body of knowledge that exist on CVD and the effect of interventions such as exercise to help rehabilitate and prevent such disease. The influence of nutrition education, smoking cessation, and stress management on CVD will be investigated as well. Attention will also be placed on illuminating the progress and impact that worksite health promotion programs have had in the last decade.

### **Cardiovascular Disease**

As mentioned earlier, cardiovascular diseases are the number one cause of death in America (AHA, 1991). The risk factors associated with heart disease are (a) gender, (b) age, (c) family history of premature CVD, (d) personal medical history, (e) smoking, (f) hypertension, (g) total cholesterol levels, (h) obesity, and (i) sedentary lifestyle (AHA, 1991). These risk factors are utilized for one of two reasons: (a) rehabilitation from existing heart conditions, and/or (b) prevention

from inducing heart disease. A combination of modalities such as exercise, proper nutrition, smoking cessation, and stress management are utilized in the efforts to rehabilitate and or prevent these ailments.

### **Exercise:**

**Rehabilitation.** According to Squires, Gau, Miller, Allison, and Lavine (1990) in their report on the status of Cardiovascular Rehabilitation, exercise is important for the retardation or reversal of coronary artery disease since most patients who suffer a myocardial infarction "will eventually die as a direct result of their coronary artery disease" (p. 731). It has been seen that after bypass surgery the continued progression of disease is linked with continued (a) smoking, (b) elevated total serum cholesterol, (c) hypertension, (d) sedentary lifestyle, and (e) elevated fasting blood glucose levels, all of which are direct risk factors of heart disease (Campeau et al. , 1984; Moise, Theroux, Taeymans, & Waters, 1985; Raichlen, Healy, Achuff, & Pearson, 1986). It has been established that modifications of these risks can reduce the progression of coronary artery disease, even future mortality (Squires et al. , 1990).

In a study titled The Lifestyle Heart Trail, Dr. Dean Ornish (1990) and colleagues investigated the effects of a regular healthy lifestyle regimen on the reversal process of coronary heart disease. The experimental group consisted of 22 subjects who all participated in a lifestyle paradigm consisting of: (a) a low fat vegetarian diet, (b) moderate aerobic exercise, (c) stress management training, (d) cessation from smoking, and (e) support groups. After one year, "patients in

the experimental group showed significant overall regression of coronary atherosclerosis" (p. 132). From this study the researchers concluded that even small changes in lifestyle could slow the progression of atherosclerosis with even more substantial changes producing a halting or even reversal of coronary atherosclerosis (Ornish et al. , 1990).

The goal for people who have CVD, is to achieve whatever degree of chronic adaptation to exercise that they can. These physiological adaptations will enhance their cardiovascular system to the point of recovery from disease. Exercise can provide impressive benefits for most cardiac patients, including a reduction in symptoms of (a) angina pectoris, (b) exercise induced dyspnea, (c) fatigue, and (d) claudication (Squires and Gau, 1987). One of the most important adaptations occurs in maximal oxygen uptake ( $VO_{2max}$ ), which is a measure expressing the body's ability to transport oxygen functionally. Improvements of 10 to 30% or more in  $VO_{2max}$  of cardiac patients can be expected (Squires et al., 1990). In the same report, it was noted that a patient's improvement in  $VO_{2max}$  is inversely proportional to the exercise capacity before training. Cardiac patients' fitness levels will continue to increase even after they have raised their  $VO_{2max}$ . This increased fitness level adds to the physical work capacity which results in a smaller portion of the  $VO_{2max}$  during routine activities. As a direct result, tasks are performed with less (a) fatigue, (b) dyspnea, and (c) perceived exertion; the productivity and quality of life for the patient may be considerably enhanced (Squires & Gau, 1987).

Several studies indicated that as a result of exercise training, improvements were made in arterial-mixed venous oxygen difference ( $A-VO_{2diff}$ ) due to an increase in (a) blood volume, (b) capillary density, and (c) oxygen extraction from the capillaries. These studies also found an increase in cardiac output which would account for the augmentation in  $VO_{2max}$ . It was further noted that



an increase in maximal heart rate could be expected (Hagberg, Ehsani, & Holloszy, 1983; Kennedy, Spiekerman, Linday, Mankin, Frye, & McCallister, 1976). Research has indicated that the double product value, which is derived by multiplying the heart rate by the systolic arterial blood pressure, can be improved through exercise training. Indicating that the myocardial tissue would be demanding less oxygen during exercise which could prove to be highly beneficial to those suffering from ischemic heart disease (Trap-Jensen, & Clausen, 1971).

Prevention. Knowing that CVD is the leading cause of death in America (AHA, 1991), it is estimated that on the average one out of every five people will acquire CVD before the age of sixty ( Stephens, Jacobs, & White, 1985). So how can we prevent this alarming statistic from becoming a reality? In a collective report to the U.S. Preventive Services Task Force, Harris, Caspersen, DeFriese, and Estes (1989) reported that physical activity has been associated with the prevention of a list of medical conditions, including CVD. This association between physical activity and the prevention of some chronic diseases is further supported by several studies (Leon, Connett, Jacobs, & Rauramaa, 1987; Powell, Thompson, Caspersen, & Kendrick, 1987). Exercise has also been shown to improve health efficiently for those individuals who enjoyed the particular type of exercise in which they were participating in (Hatziandreu, Kaplan, Weinstein, Caspersen, & Warner, 1988).

The power of physical activity as a preventive tool can be seen when its absence is studied. In a study by Keeler, Manning, Newhouse, Sloss, and Wasserman (1989) the external cost of a sedentary lifestyle was examined. The researchers found that people who lead a sedentary lifestyle incurred higher medical cost over their lifetime and that at age 20 they had 10 months less life

expectancy. The total cost incurred by society for each sedentary person was estimated to be \$1,900. This financial burden on society and the sedentary person, along with reduced life expectancy, could be alleviated with the implementation of regular physical activity (Keeler et al. , 1989).

There is some criticism of studies that draw conclusions of an association between physical inactivity and CVD. This criticism is that the association between the two is a result of self-selection on behalf of the subjects rather than a true protective effect of physical activity. The criticism is based on the assumption that people who choose to be physically active are inherently more healthy thus having a lower risk of CVD (Harris et al.,1989). However, there is evidence that self selection is unlikely to explain the association between physical activity and CVD. The Harvard College Alumni Study (HCAS), Paffenbarger, Hyde, Wing, and Steinmetz (1984), compared the current physical activity level of alumni to their own level of activity while in college. The study found that college athletes who became inactive as alumni had the same risk factors as those alumni who had remained inactive the entire time. Conversely, those who were inactive in college and presently are active have the exact same magnitude of risk reduction for CVD as collegiate athletes who remained active as alumni. This study suggest that a person's current level of physical activity, rather than constitutional factors or past physical activity experience, is the important factor in CVD risk reduction. Thus, preventative measures can be taken at any age and still have an effect on reducing the risk of CVD.

It has been shown that exercise can provide benefits such as controlling lipid and lipoprotein levels in the blood (Reaven et al., 1990). These substances are more commonly known as triglycerides and serum cholesterol, respectively. There are several types of cholesterol commonly measured: (a) high density lipoprotein (HDL), and (b) low density lipoprotein (LDL). Due to their individual

functions, HDL's are a more desirable form of lipoprotein, within moderation (Nieman, 1990). Reaven et al. (1990) studied the effects of exercise on HDL and triglyceride levels in an older population. This study found that exercise levels, which are obtainable by older adults, may significantly improve HDL cholesterol levels; thus, reducing the risk of ischemic heart disease.

Evidence indicates that exercise can improve an array of physiological components all of which are beneficial. What levels of exercise are needed for these benefits to occur? The American College of Sports Medicine (1986) recommends that a healthy population should engage in activities that utilize large muscle groups over a prolonged period of time in a rhythmical and aerobic nature. This activity should be performed at 65 to 90% of maximal heart rate or 50 to 85% of VO<sub>2</sub>max for 15 to 60 continuous minutes and performed three to five times per week. The guidelines vary for cardiac patients depending on the severity of their individual cases. According to a study done by Wenger and Bell (1986) beneficial effects can be obtained when exercise is performed at 50 to 100% VO<sub>2</sub>max for 15 to 45 minutes, two to four times per week. In a critique of the study, Harris et al. (1989) noted that the study did not investigate activity levels below what was mentioned, thus, the findings could not rule out the possibility of beneficial changes at lower levels of activity. Harris and his associates (1989) did examine the effects of lower intensity activities and found that when activities are performed at 50 to 70% VO<sub>2</sub>max over 35 to 45 minutes the beneficial effects matched and even exceeded improvements gained from higher intensities (90 to 100% VO<sub>2</sub>max for 25 to 35 minutes).

## **Health Promotion**

It is evident from the current body of literature that exercise is a powerful intervention in the battle against CVD. Lynch (1990) made the claim that people can get fit without moving a muscle. He suggest that by educating people in such health issues as (a) nutrition, (b) smoking, (c) drinking, and (d) exercise that they will start to participate in a healthier lifestyle. If this were true then the obvious cognitive dissonance regarding health behaviors would not exist such as it does. Estimates indicate that only one fifth of the adult population is physically active at proper levels for cardiorespiratory benefits (Stephens, Jacobs, & White, 1985). As just eluded to, exercise is not an isolated approach but rather in concert with other interventions such as (a) nutrition education, (b) smoking cessation, and (c) stress management in the war on CVD. A number of studies previously cited also concur with this conclusion (Campeau et al. , 1984; Moise, Theroux, Taeumans, & Waters, 1985; Omish et al, 1990; Raichlen, Healy, Achuff, & Pearson, 1986). Gunn and Stevenson (1985) suggest that the most effective way to facilitate lifestyle changes is to utilize an integrated approach. It is also mentioned that a wellness program not only needs to offer a well rounded approach but also needs to provide continuing support (McCauley, 1990; Regen, 1983; White, 1986).

### **Nutrition Education:**

Dietary factors have been linked with five of the top ten leading causes of death among Americans (DHHS, 1990). Proper nutritional habits could alleviate three of the risk factors of CVD; hypertension, serum cholesterol levels, and obesity (AHA, 1991). The American Heart Association has stated that while the cause of 90 - 95 percent of hypertension cases is unknown, most cases can be controlled by medication. In most cases of mild hypertension, dietary steps such as (a) reducing sodium intake, (b) reducing alcohol consumption, and (c) losing weight are attempted before any drugs are prescribed (AHA, 1991). In order for a weight loss program to be successful education, behavioral modification, and nutritional counseling must be included as key components. Exercise and ongoing support are also vital to successful weight loss program (Morgan, 1990). Nutrition education programs could range from formalized weight loss programs, and blood lipid screenings to individual counseling, group classes, special engagements, and informative materials (DHHS, 1993).

### **Smoking Cessation:**

Cigarette smoking accounts for almost 400,000 deaths annually. This includes 21% of all CVD deaths, 87% of lung cancer deaths, and 30% of all cancer cases (DHHS, 1993). It is estimated that the smoking-related illness cost in 1989 was around \$75 billion (DHHS, 1990). Smoking has also been linked to

significant depressive symptoms as well as clinical depression by several epidemiologic and clinical studies (Anda, R. et al, 1990; Perez-Stable, Marin, G. & B., Katz, 1990). Smoking prevalence has been established to be higher in those who are less educated; less than 12 years of education compared to those with 16 or more years (AHA, 1991). The demographic profile of smokers has undergone changes.. According to AHA (1991) smoking has declined in the last twenty-two years by 32 percent. Other studies have shown that while improvements have been seen, these lower percentages are found only among white males. Cessation efforts have been less effective among minority groups and women (Fiore et al, 1989; Grunberg, 1990; DHHS, 1989; Marcus, Shopland, Crane, and Lynn, 1989). It is believed that the same reductions could be seen in these specialized groups if programs are tailored with population-based interventions which address culturally relevant issues (DHHS, 1991). Swartz (1985) in reviewing smoking cessation methods for the U.S. Department of Health and Human Services found that when incentives are offered along with interventions, participation and quit rates improved. It was later reported that the addition of competition to smoking cessation programs enhanced program participation and quit rates (Grunberg, 1990).

### **Stress Management:**

Stress related illnesses are more common today than in earlier generations. Stress is considered a contributing factor to CVD. The direct influence of stress on the heart is not easily measured; however, it is known to augment the intensity or occurrence of four major risk factors (a) smoking, (b) hypertension,

(c) obesity, and (d) physical inactivity (AHA, 1991). A connection between stress and a person's health has been noted. Cassel (1985) performed a study which concluded that a change in mental-emotional state is accompanied by a corresponding change in physical state. This relationship exist in exact reverse as well. In a statement on exercise from the Committee on Exercise and Cardiac Rehabilitation of the Council on Clinical Cardiology, American Heart Association, McHenry et al. (1990) announced that "physical training may prevent or alleviate anxiety and depression in certain people (p.396)." The report also claimed that enhancing cardiovascular function helps restore (a)confidence, (b) self-esteem, and (c) a sense of independence. Additional support for these claims is made by research preformed by Roviaro, Holmes, and Holmsten (1984).

The connection between the physical and psychological is the foundation in many stress management programs. Courtney and Escobedo (1989) utilized the fact that stress is a factor in many modern illnesses in developing a stress management program to teach some coping skills to adult patients. The authors suggested that (a) exercise, (b) relaxation, and (c) assertiveness training were integral coping mechanism for the subjects. Romano (1984) described another example of a stress management program incorporating exercise and education as its major components. Exercise and stress have been correlated as having even a more direct causal effect relationship. In a study that compared the effects of aerobic and anaerobic exercise on hormonal responses to stress, it was found that aerobic exercise actually reduced levels of cardiovascular and sympathoadrenal responses during and after mental stress; supporting the proposition that exercise causes both mental-emotional and physiological factors that propagate psychological benefits to be derived by participants (Blumenthal et al., 1990).

Stress management programs utilize a wide variety of interventions to

reduce a person's risk for CVD. Exercise is a major component in many programs (Blumenthal et al., 1990; Courtney, Escabedo, 1989; Mchenry et al, 1990; Ramano, 1984; Roviario, Holmes, Holmsten, 1984). Additional interventions commonly used are (a) numerous resource materials, (b) group classes / workshops / lectures, (c) individual counseling, and (d) special events. Some programs even utilize environmental changes such as job redesigning or reassignment and special rooms for relaxation (DHHS, 1993).

### **Worksite Health Promotion:**

The focus of this study was to determine the prevalence of the above mentioned health promotion activities in the workplace. Employer-sponsored health promotion activities began to appear in the mid-to-late seventies. The worksite was first recognized as an ideal setting for health promotion in 1980 when the government produced the 1990 Health Objectives for the Nation. This report listed the first goals for disease prevention and health promotion activities. In 1985, the Office of Disease Prevention and Health Promotion (ODPHP) of the U.S. Public Health Service (PHS), Department of Health and Human Services (DHHS) conducted the "National Survey of Worksite Health Promotion Activities" to assess the current status of U.S. health promotion activities in the workplace. The survey results along with assessing progress towards the 1990 goals was used as the baseline data for which the goals for the year 2000 were set (DHHS, 1987). These goals were published in the Healthy People 2000 report (DHHS, 1990). In 1992, ODPHP conducted a follow-up survey to assess the current evolution of worksite health promotion and compare updated data to the



1985 study (DHHS, 1993).

The proceeding information is a culmination of the data from both the 1985 survey and the 1992 survey. The 1985 survey revealed that two of the 1990 goals had already been obtained in the areas of exercise / fitness and stress management. The report also called for an increase in worksite activity in the areas of smoking and nutrition (DHHS, 1987). The 1992 survey showed an overall marked increase in every form of intervention. It was also reported that several of the goals for worksite health promotion had been met; Physical activity / Fitness, Alcohol and Drug policies, and Occupant Protection Systems all had already surpassed the goals for these areas as set in the Healthy People 2000 report (DHHS, 1993).

The number of worksites that offered at least one health promotion activity rose from 66 percent in 1985 to 81 percent in 1992. The goal for the year 2000 is 85 percent. The first study found that the most prevalent program offered was Smoking control at 36 percent. Health risk assessments were second with 30 percent, followed by Back care (29 percent) and stress management (27 percent) (DHHS, 1987). The follow up study in 1992, found Alcohol and Drug policies to be the principal program offered (87 percent). Occupant protection system was second at 82 percent, followed by Smoking control (59 percent) and Physical activity / Fitness (42 percent). Back care experienced the smallest increase from 1985 to 1992 with only a three percent increase (29 - 32 percent). Substantial increases were noted in physical fitness (19 percent increase), nutrition education (14 percent), high blood pressure (13 percent), stress management (10 percent), and weight control (9 percent). Information and activities for off-the-job accidents were actually more prevalent in the 1985 results than 1992's data; 2 percent decrease from 1985 to 1992 (DHHS, 1993).

**Physical Fitness**-- This is the only area that at the time of surveillance in

both 1985 and 1992 had exceeded the current set goals. Exercise and physical activities also showed the largest increase in occurrence between the two studies (about a 20 percent increase). The most predominant intervention to enhance employee participation in physical activity was the provision of resource information [65 to 72 percent, 1985 to 1992]. Recreational programs and group classes were measured as the next two most offered modalities [61 and 52 percent, respectively, for 1992 data]. The number of worksites that offered onsite exercise facilities dropped dramatically from 89 percent in 1985 to 12 percent in 1992. Of the worksites which offered onsite facilities for their employees in the 1992 study, 10 percent charged for facility use (DHHS, 1985; 1993). Worksites proclaimed that “improved employee health” and “morale” are the top two benefits from exercise / fitness programs (DHHS, 1985). Refer to Appendix E2 for a comparison of the 1985 and 1992 data for worksites offering fitness programming (DHHS, 1993).

**Nutrition Education**-- This area was specifically identified in the 1985 study as a focus area. The 1992 follow-up survey showed that efforts to enhance nutritional education among worksite health promotion programs was successful. Nutrition made the second highest increase with a 14 percent improvement between the two studies. Information / resources was the number one intervention to promote healthy dietary habits in both measures [89 and 94 percent, respectively]. The 1992 survey found a different medium for dietary enhancement; 60% of worksites now offer vending machines with healthy selections such as (a) fruit, (b) juices, and (c) low fat snacks. Healthy cafeteria selections actually dropped from its 1985 second place rating at 57 percent to a fourth place / 43 percent mark in 1992. Appendix F1 provides a view of the 1992 results per company size and how the overall percentage compares to the goals for the year 2000 (DHHS, 1985; and 1993).

**Smoking Cessation**-- Smoking was another program area specifically addressed in the 1985 study for focused efforts. Smoking Cessation showed marked improvements. The distribution and availability of resource materials became the number one used form of intervention among worksites. This medium increased from 55 percent in 1985 to 91 percent in 1992. The original leading intervention, formal smoking policy, also increased from 77 percent in 1985 to 87 percent for 1992. While improvements were seen from the 1985 survey and the 1992 survey, and the current levels are approaching the year 2000 goals, smoking is the most distant from the goal standards of all measured types of health promotion programs [16 percentage points]. The relationship between current percentages for smoking programs and the year 2000 goals can be viewed in Appendix F2 (DHHS, 1993).

**Stress Management**-- Data from the 1985 survey found stress management to be one of two programs to have already achieved the set goals for 1990. Data from 1992 reveals that the proportion of companies which offer some form of stress management has increased from 27 percent in 1985 to 37 percent in 1992. This new overall level falls short of the year 2000 goal of 40 percent. This disparity is, however, the smallest margin, out of those not already exceeding the area goals, to fulfill before the year 2000; only three percentage points remain to meet the goal. Excluding the smallest worksite population (50 to 99 employees) worksite stress management programs have reached the year 2000 goals. The breakdown of worksite size and stress management availability can be seen in Appendix G1 (DHHS, 1993). Employees receive the worksite's stress management program through information / resource materials and group classes / workshops; 86 and 69%, respectively, according to 1992 data. A good number of worksites offer special rooms or areas designed for relaxation [64 percent both studies] (DHHS, 1985, and 1993).

**Program Site**-- Both the 1985 and 1992 surveys identified the primary location for all health promotion interventions. In analysis of this data three intervention groupings were created; a.) Screenings, b.) Group activities, and c.) Individual counseling. Three primary locations for the interventions were established; a.) primarily Onsite, b.) primarily Offsite, and c.) Equally on and offsite. The 1985 research showed us that exactly half of all screenings were provided offsite followed by 42 percent onsite. Group activities were 80 percent onsite with 11 percent equally on and offsite. Individual counseling was held onsite 77 percent of the time as compared to 12 and 11 percent for equally on and offsite and primarily offsite, respectively. Results from the 1992 study presented a picture of a shift in location of services offered. Screenings dramatically moved onsite at 73 percent. Group activities became even more predominately onsite oriented. Individual counseling, however, shifted more towards offsite programs; but still are held onsite in most programs (DHHS, 1993).

**Payment arrangement**-- The bottom line for any program in the corporate setting are the financial arrangements. There was a shift in the payment structure from 1985 to 1992. Companies started out paying completely for 87 percent of the programs offered in 1985. This figure changed to 66 percent in 1992. The participant's cost for the complete program has increased from one percent in 1985 to six percent in 1992. The shared cost between the company and the employee has also seen an increase from nine percent in 1985 to 17 percent in 1992. Appendix G2 provides a chart to demonstrate who is paying for worksite health promotion (DHHS, 1993).

**Programs per Company Size**-- Universally it is observed that the larger the company the more health promotion activities are offered. It was also noted that the type of company could effect the form or amount of a particular program that is offered. For example nearly twice the number of service industry worksites

offer nutrition activities as compared to agriculture / mining / construction industry worksites (DHHS, 1993).

### **Summary**

The major and contributing risk factors for CVD have been identified and discussed. Research has shown that risk factor reduction is an effective tool in the battle against death from CVD. The assessment of an individual's magnitude of risk is the first step. This assessment can be performed through an a.) physiologic screening, b.) self-reported questionnaire, or c.) a combination of both. Szymanski et al (1991) examined the effectiveness of screening programs in predicting future chronic disease risk factor status in the work place. Their study results showed that while both types of screenings were able to predict future risk, physiologic screenings fared the best. A combination of the two methods was found to have little or no additional predictive ability. There is a vast amount of research directed at the impact of individual interventions on risk factor reduction. Individual interventions such as exercise and smoking cessation have been shown to be effective in reducing even reversing risk factors. It is agreed upon by researchers that the most effective intervention is a combination of a.) physical activity, b.) proper nutrition, c.) smoking cessation, and d.) stress management. (Campeau, et al, 1984; Cassel, 1986; Courtney, 1990)

The worksite has been recognized as an ideal environment to reach large numbers of people with effective interventions. This recognition of the worksite started back in the late 70's and was reemphasized in the federal government's goals for the years 1990 and 2000. The two National Surveys of Worksite Health

Promotion Activities (1985 and 1992) showed that progress is being made in every area of worksite health promotion. Employees are being exposed to an array of healthy lifestyle options. Many programs are extremely convenient to participate in since the majority of all programs are held onsite. Most notably are the health screenings which showed a dramatic shift from offsite in 1985 to onsite for 1992. Another reason for worksite health promotion success is that employers have the ability to offer incentives to participate in and maintain healthy behavior. Incentives were noted as one of the key components of most worksite health promotion programs including the Hershey Foods Corp. (Kenkel, 1992).

Health promotion is a broad dynamic field of discipline which requires a.) education, b.) screening, c.) access to programs, d.) continuing support systems, and e.) incentives / motivation to participate. The worksite is the ideal forum to provide all of these services to the American public.

## **CHAPTER III**

### **Methodology**

In an effort to create a research study to be implemented as a local application the following methods, procedures, and instrumentation were utilized. The methodology needed to allow a quadrilateral comparison between the results of the '93 metro survey and the two national surveys results, '85 and '92, along with the goals published within the Healthy People 2000 report are described within Chapter III.

#### **Sample Design:**

The sample design and selection for the '93 Metro study correlates where applicable with the procedures utilized in the "National Survey of Worksite Health Promotion Activities" conducted by the U.S. Department of Health and Human Services in determining the baseline data of the Healthy People 2000 Report (DHHS, 1987). The '93 metro survey sample was drawn from the "Metropolitan Area Largest Employers List" obtained through the local Chamber of Commerce. Every company on the list was included in the sample to enhance potential response rates. The sample was stratified into three groups based on the number of employees within the organization. The three groups consisted of companies with (a) 100-249 employees, (b) 250-749 employees, and (c) 750 + employ-

ees. These groups mirrored three of the four categories identified in the original national studies (there was not a list of Metropolitan businesses with 50-99 employees available). It was important to replicate the same sample groups for analysis and comparison to baseline data. Company size was determined through the indicated response to question number twelve on the survey (Appendix C). The total number of surveys mailed out was 284.

### **The Instrument:**

Both the 1985 and 1992 national worksite surveys were conducted using a specially created computerized telephone survey format which included an a.) mail out correspondance card to identify a specific individual from each company to act as the survey respondent, and b.) telephone interview which followed a predetermined algorithm of questions dependant upon the respondents answer; the interview took approximately half an hour. The national survey format was modified for the 1993 metropolitan survey which was conducted by mailing out a one page, twelve question instrument designed, by the author, to assess the health promotion aspects offered within each organization (Appendix C). An outline of survey topics from the 1985 National survey was utilized as a framework in creating the 1993 Metropolitan survey. Each of the twelve questions with their multiple choice responses from the 1993 metro survey were designed to cover the base root for each of the topics covered in the 1985 national study question algorithm resulting in a surveillance tool that covers all the major aspects which embodied the instrument used in the 1985 and 1992 "National Survey of Worksite Health Promotion Activities". The one page twelve



question survey format along with an instruction sheet and cover letter were used in an effort to expedite the survey's completion and return from company personnel whom have little time or motivation for responding to such instruments (Appendix B-C).

The 1993 metro survey ascertained which activities were offered to employees in the following health promotion areas: (a) health screenings and health risk appraisals, (b) smoking cessation classes, materials, or policies, (c) high blood pressure treatment and control, (d) weight control, (e) nutrition education, (f) exercise and fitness, (g) stress management, (h) back care / problem prevention, and (i) accident prevention. The prevalence of existing health promotion activities was addressed along with programs which were desired but not currently offered; how programs were offered as well as when, where, and how often they were offered was also included in the survey; participant eligibility, program funding, and possible incentives were considered; program facilitator and perceived benefit of the program were the final topics addressed in the survey.

### **Experimental Method:**

This study utilized an epidemiological written survey format to determine the prevalence of worksite health promotion activities within a particular Metropolitan city. A group of area companies were utilized as the target population. Every company within the surveyed metroplex was sent via the mail (a) cover letter explaining the reason for the correspondence, (b) instruction sheet, and (c) the actual survey. A self-addressed pre-posted return envelope was also provided. Each packet was addressed to the company in care of the Personnel Director. The cover letter requested that the survey be forwarded to the person

who would be most knowledgeable of the company's health promotion programs. A follow-up reminder card was sent, in the same manner as the survey packet, two weeks after the initial mail out date. The initial mail outs to the companies took place before September 30, 1993 with the follow-up reminder card sent out on October 21, 1993 to all the companies who have not completed and returned the survey. The published deadline for survey entries was October 29, 1993. A blank copy of all written correspondence with the companies can be found in Appendix A-D.

### **Analysis of Data:**

The data collected was evaluated and analyzed to compare the prevalence of worksite health promotion activities within (a) size of company, (b) types of programs offered, and (c) potential for new programming. All returned surveys were reviewed and categorized by the company size as reported in question number twelve. Survey responses were recorded on a frequency report for both company size and the overall results. A copy of every company size and the overall survey frequency reports can be seen in Appendixes H-K. The prevalence of each program was then calculated and provided as a percentage for each company size and the overall survey results and can be found in Table 1 (p. 50). A comparison of the '93 Metro survey results to the original data base of the '85 and '92 national studies was performed utilizing the Lawshe-Baker nomograph and the corresponding t-test for testing the significant differences between percentages between populations of nonequal sizes. A .05 level of significance is the standard measure of comparison. Table B (p.57) shows the omega value ( $\omega$ ) and level of significance for this analysis.

## CHAPTER IV

### RESULTS and DISCUSSION

This section reflected the 1993 Metropolitan survey as reported by the prevalence of health promotion programs per company size and for the overall survey results regardless of company size. A comparison of the 1993 Metro survey to the '85 and '92 National surveys utilizing the goals set by Healthy People 2000 as the standard of measure in each programming area was also provided.

The 1993 Metropolitan survey had a response rate of 104 surveys returned out of 284 surveys mailed out, equalling 36.4%. Every survey returned was categorized by company size as indicated by the response to question number 12 on the survey; company sizes are (a) 100-249 employees, (b) 250-749 employees, and (c) 750 plus employees. The raw frequency totals of the responses for each company size and overall survey results can be seen in Appendixes H-K. An overview of program prevalence per company size and overall survey results for '85 and '92 national and the '93 Metro surveys along with the year 2000 goals can be seen in Table 1 (p.50). The profile and prevalence of health promotion programs per company size was reported as follows:

## **100- 249 Employee Company**

The 100-249 employee category had the largest number of responses at 44 which is 42.3% of the total response. Most companies that responded offered one or two programs (31.8%) followed by three to five programs (29.5%) and no programs at (27.2%); 11.3% had six to 10 programs. For this company size, Smoking was the most frequently offered program (34%); followed by Accidents (29.5%) and Back Care Education (25%). The remainder of the programs were represented as follows: Stress Management & Health Screenings (20.4%), Risk Appraisals & High Blood Pressure (18%), Weight Loss & Exercise (11.3%), Nutrition Education (9%); shown in Figure 1.

Smoking Programs were the most frequently offered intervention at 34%.

This program was offered as a ongoing program (53.3%) onsite (73.3%) during work hours with flextime (53.3%) for all employees (80%) both annually and when pertinent or requested (40% each). Programs were provided with full employer support (53.3%) with possible insurance benefits (20%). Programs were facilitated by a motivated employee (46.6%) with a program goal of improved employee health (66.6%) followed by reduced health care cost (46.6%) and improved productivity (40%).

Accident Programming was found to be provided as the second most frequently offered program at 29.5%. This program was delivered as an ongoing program (84.6%) onsite (100%) during work hours with flextime (92.3%) for all employees (100%) on both a weekly and requested or pertinent bases (30.7% each). These programs receive full employer support (92.3%) and offers salary/monetary incentives (23%). An assigned employee facilitates the program (76.9%) with the goal of increased productivity (61.5%) followed by reduced health care cost (53.8%).

# 1993 metro 100-249 Employee Company Size Profile

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## Programs Offered

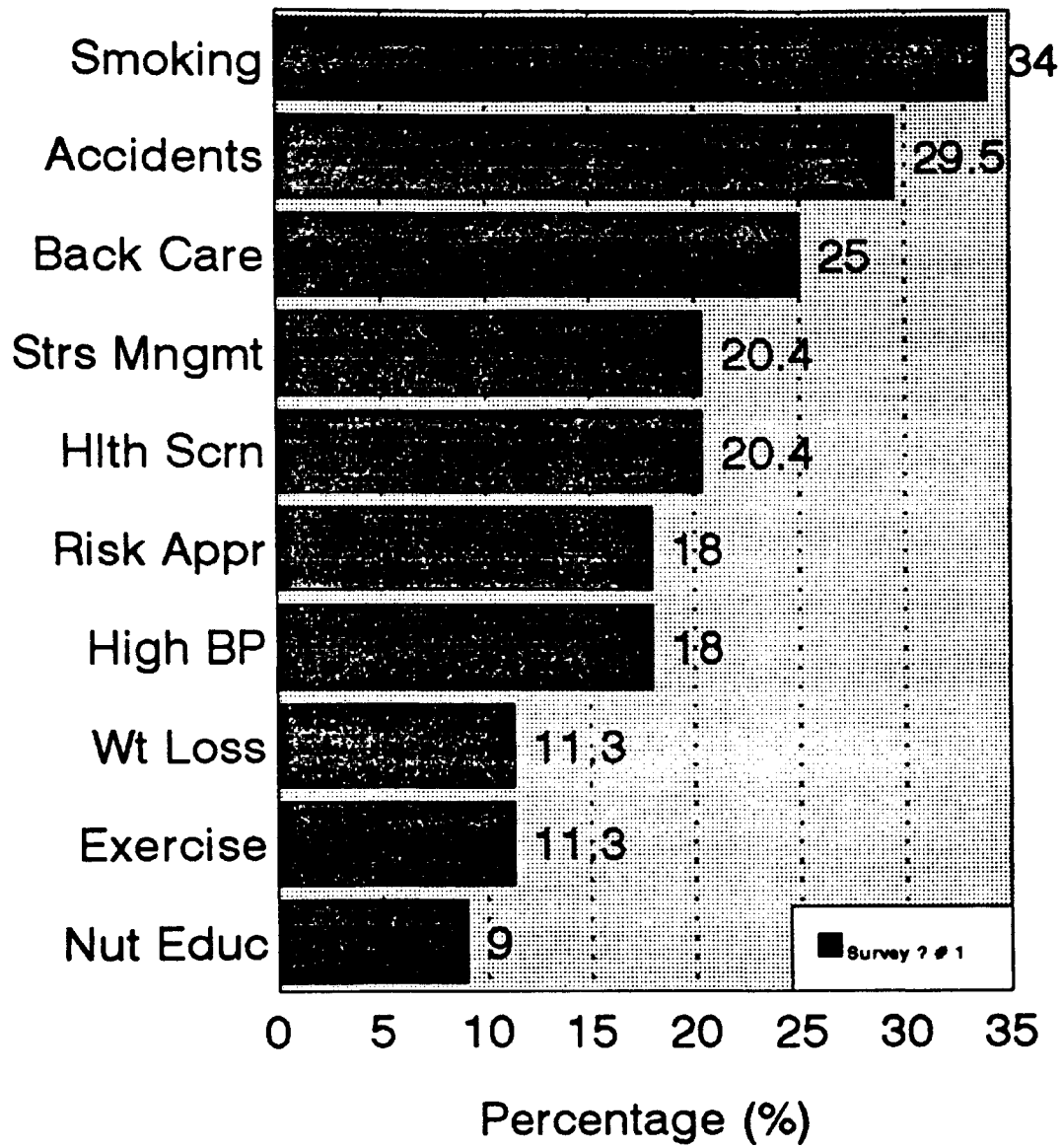


Figure 1

Back Care Education was reported as the third most offered program at 25%. This information was delivered as a workshop or class (63.6%) onsite (90.9%) during work hours (81.8%) for all employees (100%) and offer flextime as the only incentive (9%). Programming was facilitated by an assigned employee (45.4%) with the perception of improved productivity and reduced health care cost, equally (45.4%).

Stress Management was reported in 20.4% of the survey respondents in this company category. This program was offered as a workshop or class (44.4%) onsite (55.5%) with a large number of programs reported offsite as well (44.4%). Programs were offered outside normal working hours (55.5%) to all employees (88.8%) when pertinent or requested (66.6%) and provides some insurance benefits (22.2%). Program was delivered by a motivated employee (55.5%) with the intent of improving employee health (88.8%) along with improving morale and productivity (77.7%). Stress Management was also listed as the most requested program not currently being offered (6.8%).

Health Screenings were reported at 20.4% of worksites. Screenings were presented as an ongoing program (55.5%) onsite (77.7%) during work hours with flextime (77.7%) for all employees (100%) annually (77.7%). Full employer funding is provided (77.7%) with insurance benefits (33.3%). An assigned employee facilitates the program (55.5%) with the goal of improving employee health (66.6%) and reducing health care cost (55.5%).

Risk Appraisals were reported in 18% of the survey respondents. Programming was delivered through individual counseling and an ongoing program, equally (37.5%), onsite (87.5%) during work hours with flextime (87.5%) for all employees (100%) annually (50%). Full employer funding was provided (75%) along with insurance benefits (37.5%). The program was facilitated by an assigned employee (50%) with perceived benefits being improved employee

health and reduced health care cost (50% each).

High Blood Pressure Program was surveyed at 18% for this company size. The program involves individual counseling (62.5%) onsite (87.5%) during work hours with flextime (62.5%) for all employees (75%) when pertinent or requested (37.5%). The program receives full employer funding (87.5%) and insurance benefits (37.5%). A motivated employee facilitates the program (50%) with the purpose of the program to improve employee health(75%).

Weight Loss Programs were noted in 11.3% of the respondents. The program was delivered as an ongoing program (60%) onsite (60%) outside normal working hours (60%) for all employees (80%) both annually and when pertinent or requested (40% each). Funding was provided through both insurance and full employer support (40% each) and insurance benefits are offered as incentives to participate (60%). The program was equally facilitated by motivated and assigned employees (60%) with the perceived benefit of improved employee health (80%).

Exercise Programs were surveyed to be offered by 11.3% of the companies. The program was delivered through both individual counseling and an ongoing program (60%) onsite (100%) outside normal working hours (60%) for all employees (80%). Funding came from both full employer support and partial joint payment (40% each) and provided both reduced program fees and salary/monetary incentives (20% each). Motivated employee initiates/facilitates this program (100%) with a perceived benefit of improved employee morale and health (60% each).

Nutrition Education was found to be the least offered program at 9%. The programs were delivered as an ongoing program (75%) onsite (75%) during working hours with flextime (75%) for all employees (100%) monthly (50%). The program receives full employer funding (100%) and some flextime as an incen-

tive (25%). Motivated employees act as the facilitator (75%) with a goal to improve employee health and reduce health care cost (75%).

### **250-749 Employee Companies**

The 250-749 employee category had 35 companies respond to the survey which was 33.6% of the total response rate. Most of the responding companies offered 3 to 5 programs 31.4% followed by one or two programs (28.5%) and no programs (25.7%). There were 14.2% of the the companies which offered 6 to 10 programs. For this category it was found that three programs were offered the most frequent: Smoking, Exercise, and Accident at (42.8% each ). The remainder of the programs were offered as follows: Stress Management & Back Care (31.4%), Health Screening (25.7%), Weight Loss (17.1%), Risk Appraisal and High Blood Pressure (14.2%), and Nutrition Education (8.5%); refer to Figure 2.

Smoking Programs were reported in 42.8% of the companies within this category who responded. This program was offered as a workshop or class (66.6%) offsite (53.3%) during working hours with flextime (33.3%) for all employees (93.3%) when pertinent or requested (33.3%). Programs are funded with full employer support (40%) with some insurance benefits as an incentive (13.3%). An assigned employee facilitates the program (40%) with a program goal of improving employee health (73.3%) and reducing health care cost (66.6%).

Exercise Programs were noted in 42.8% of the companies surveyed. Programs were delivered as an ongoing program (60%) onsite (46.6%), with a close accounting for offsite (40%), outside normal work hours (66.6%) for all employees (100%) weekly (40%). Programs were financially supported by a



# 1993 metro 250-749 Employee Company Size Profile

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## Programs Offered

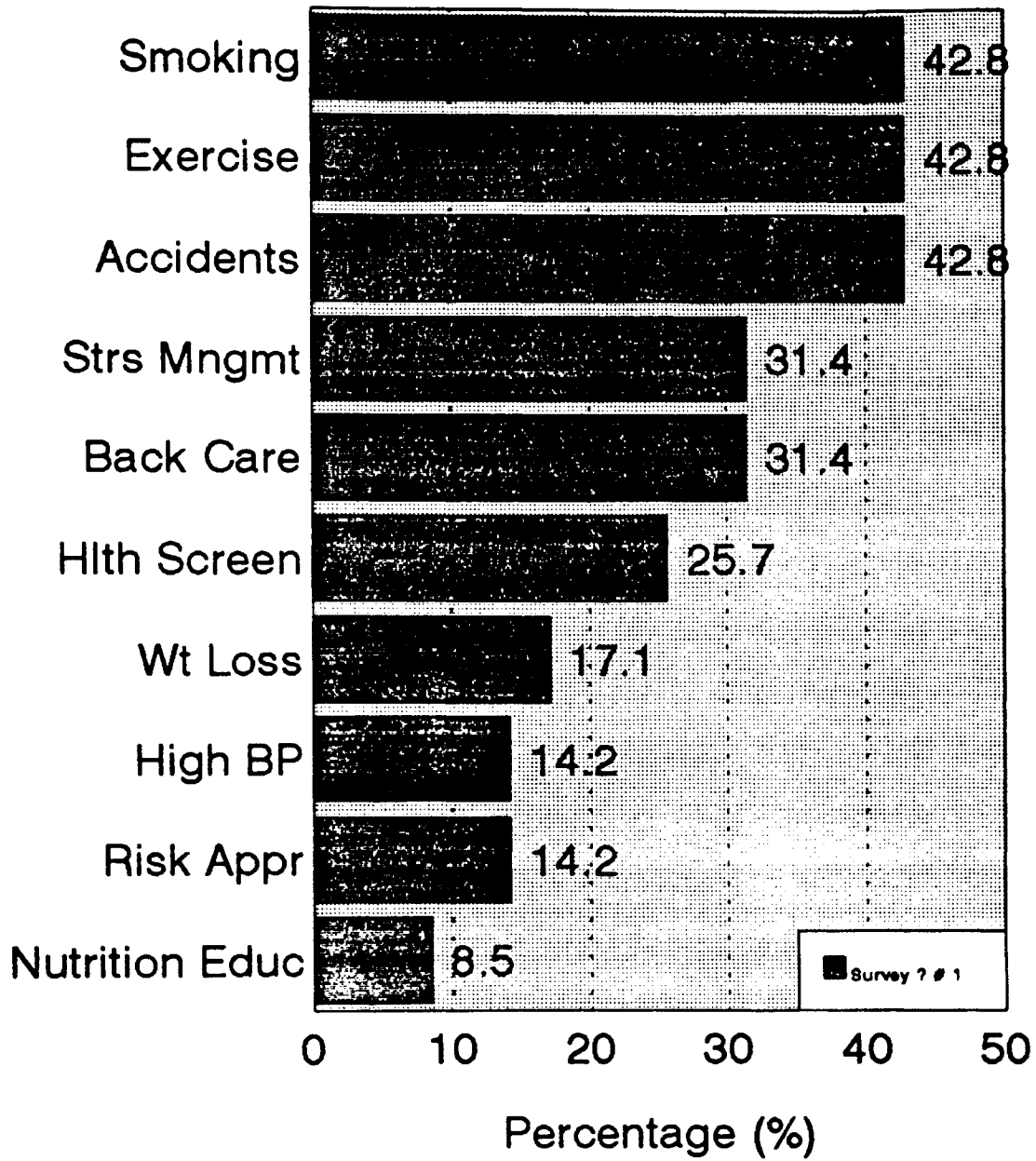


Figure 2

partial joint payment (26.6%) and reduced program fees as an incentive (26.6%). An assigned employee facilitates the program (40%) with the belief of improving employee health (73.3%) and reducing health care cost (66.6%).

Accident Programs were offered by 42.8% of the respondents. They were offered as an ongoing program (73.3%) onsite (80%) during working hours with flextime (86.6%) and provides salary/ monetary incentives (13.3%). An assigned employee facilitates (66.6%) a program whose goal was to improve employee health and reduce health care cost (73.3% each).

Stress Management Programs were offered in 31.4% of the companies who responded. This program was delivered as a workshop or class (54.4%) onsite (72.7%) during work hours with flextime (81.8%) for all employees (100%) annually (36.3%). Full employer supported financing (54.5%) with flextime (9%) was provided as an incentive. An assigned employee facilitates the program (63.3%) with the goal to improve employee morale and reduce health care cost (72.7%).

Back Care Programs were reported in 31.4% of the companies who responded. The program was offered as a workshop or class (63.6%) onsite (81.8%) during work hours with flextime (100%) for all employees (90.9%) annually (54.5%). 90.9% of the programs were full employer supported with incentives of reduced program fees and flextime (9% each). An assigned employee acts as facilitator (63.6%) in hopes to improve employee health (90.9%) and reduced health care cost (81.8%). Back care was sited as the program not offered but desired the most in this category (11.4%).

Health Care Screening Programs were provided in 25.7% of the respondents. The programs were delivered as a workshop or class (44.4%) onsite (77.7%) annually (55.5%). Programs are financed with full employer funds (77.7%) with reduced program fees as incentives (22.2%). An assigned employ-

ee acts as facilitator (88.8%) with a program goal of reduced health care cost (77.7%).

Weight Loss Programs were seen in 17.1% of the companies in the study. This intervention was delivered as a workshop or class (66.6%) onsite (100%) during work hours with flextime (83.3%) for all employees (100%) weekly (66.6%). It was full employee financed (66.6%) with flextime as the only incentive offered (16.6%). An assigned employee acts as the facilitator (66.6%) with a program goal of improved employee health and reduced health care cost (83.3%).

Risk Appraisal Programs were found in 14.2% of companies in the study. Programs were provided as workshops or class (40%) onsite (60%) during work hours with flextime (40%) for all employees (40%) annually (60%). Employer supported funds cover cost (40%) and a reduced program fee (20%) are offered as incentive. An assigned employee was the facilitator (60%) with program goals of improved employee health and reduced health care cost (80%).

High Blood Pressure Programs were identified in 14.2% of the companies who responded. The program was implemented through individual counseling and an ongoing program (60%) onsite (100%) during work hours with flextime (100%) for all employees (100%) when pertinent or requested (60%). Financial support provided completely by employer (80%) with flextime (20%) for an incentive. An assigned employee was the facilitator (100%) with the goal to improve employee health and reduce health care cost (100%).

Nutrition Education Programming was reported to be offered in only 8.5% of the survey participants. An ongoing program along with workshops were the modes of delivery (66.6% each) onsite (100%) during work hours with flextime (100%) for all employees (100%) both weekly and when pertinent (33.3%). The programs were full employer supported (66.6%) and flextime was provided

(33.3%) of the time. An assigned employee acts as the facilitator (66.6%) for the perceived outcome of improved employee health and reduced healthcare cost (66.6%).

### **750 + Employee Company**

The 750 + employee category had 25 respondents for 24% of the total survey responses. It was found that a larger number of companies this size offer health promotion activities; 88% had at least one program with 52% with three or more programs and 32% with six or more programs. The largest response came from companies with one or two programs (36%) with 6 to 10 programs in close at (32%). Exercise was seen as the most offered program (52%), followed by Health Screenings (48%) and Accidents (44%). The remainder of the programs were represented as follows: Stress Management and Back Care Education (40%), Smoking (32%), High Blood Pressure, Weight Loss, Nutrition Education (28%each), and Risk Appraisal (20%); see Figure 3.

Exercise Programming proved to be the most frequently offered program (52%). This intervention was delivered as an ongoing program (69.2%) equally on and off-site (38.4%) outside normal work hours (69.2%) for all employees (92.3%) when pertinent or requested (46.1%). Full employer funding was the most common (38.4%) with a close full employee financed (30.7%) and insurance benefits as an added incentive (23%). The program was facilitated by an assigned employee (46.1%) and was believed to improve employee health (76.9%) and improve employee morale (69.2%).

Health Screenings were the second most offered program (48%). This service was provided as an ongoing program (58.3%) onsite (66.6%) during

# 1993 metro 750 + Employee Company Size Profile

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## Programs Offered

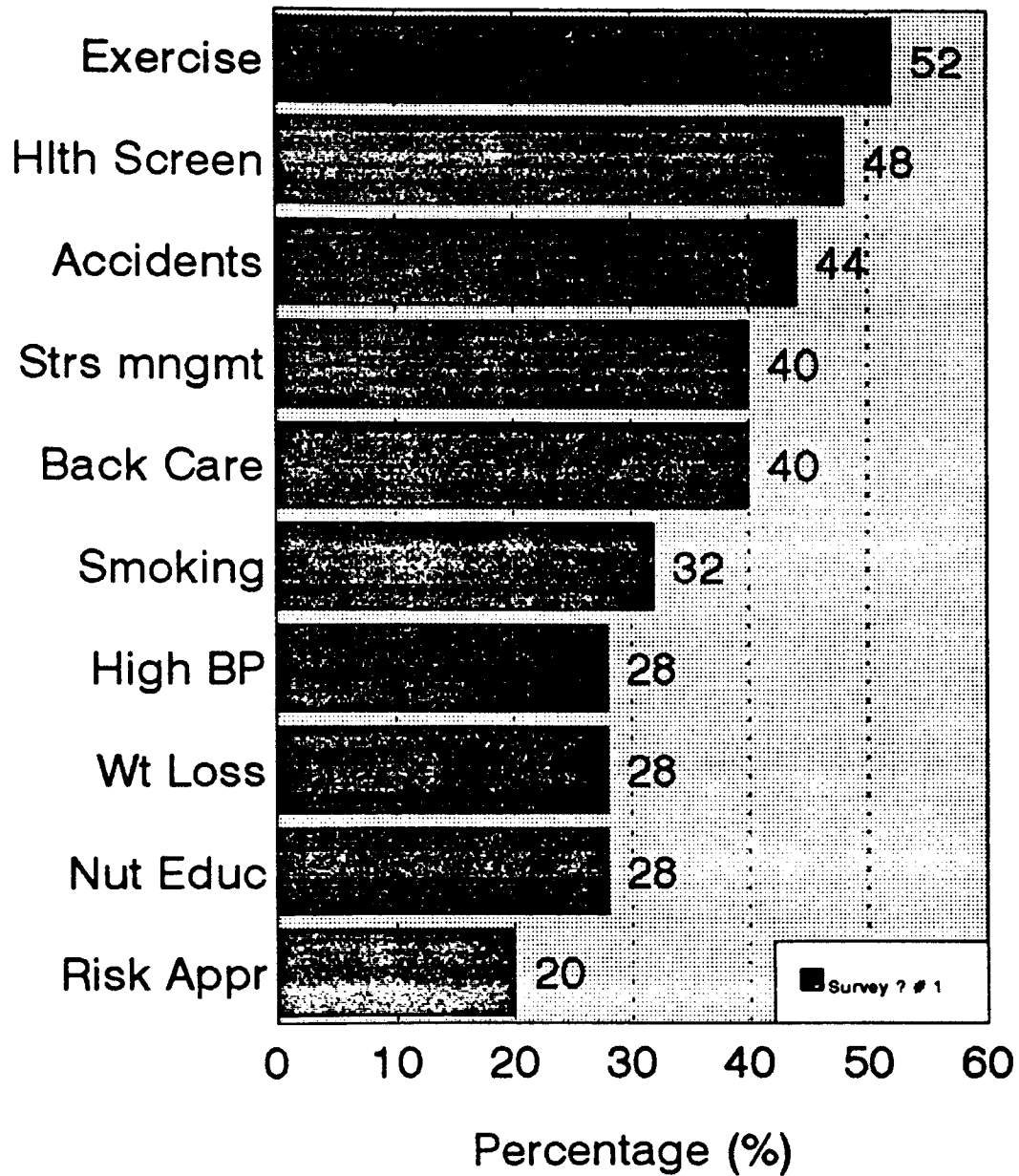


Figure 3

work hours with flextime (50%) closely followed by during work hours on own time (41.6%) for all employees (91.6%) annually (58.3%). The program was funded with full employer support (75%) with only 16.6% of the programs reporting insurance benefits. An assigned employee facilitates the program (41.6%) with the belief of improving employee health (83.3%).

Accident Prevention Programs were reported in 44% of the companies who responded. Programs were offered as workshops (81.8%) onsite (81.8%) during work hours with flextime (63.6%) for all employees (72.7%) when pertinent or requested (45.4%). Full employer funding was provided (81.8%) with a nominal 9% offering flextime and or insurance benefits as incentives. An assigned employee facilitates the program (81.8%) with the believed outcome being improved employee health and reduced health care costs (81.8% each).

Stress Management Programming was noted in 40% of the survey respondents. These programs were offered as a class or workshop (70%) onsite (70%) during work hours with flextime (40%) for all employees (70%) when pertinent or requested (70%). Programming supported with full employer funding (100%) with no other incentives offered. The program was facilitated by an assigned employee (60%) with a program outcome of improving employee morale and health (70% each). This program was the second most requested for companies with 750 plus employees that do not currently offer such a program (12%).

Back Care Education was also noted in 40% of the survey responses. Programming was offered as a workshop or class (80%) onsite (90%) during work hours with flextime (60%) for all employees (70%) when pertinent or requested (50%). Full employer funding supports the program (100%) with no additional incentives. An assigned employee facilitates the program (90%) with an intended goal to improve employee health (100%) followed by reducing

health care cost (90%).

Smoking Programs were reported in 32% of the surveys for companies this size. Programming was offered as a workshop or class, onsite (62.5 % each) outside normal work hours (50%) for all employees (100%) when pertinent or requested (75%). Full employer funding was received (75%) with insurance benefits (25%). An assigned employee initiates the program (50%) with the believed goal of improving employee health (75%). This program was the most reported desired program (16%).

High Blood Pressure Intervention was noted in 28% of the companies surveyed. Programs were offered through individual counseling (57.1%) followed by an ongoing program (42.9%) onsite (85.7%) during work hours with flextime (57.1%) for all employees (42.8%) equally held annually and when pertinent or requested (42.8%). Full employer funding was discovered (85.7%) with 14.2% offering flextime and or insurance benefits (14.2%). Programs were facilitated equally by both motivated and assigned employees (42.8%) with a program goal to improve employee health (85.7%).

Weight Loss Programs were offered in 28% of the companies. Delivery of the program was as a workshop or class, onsite, outside normal work hours (57.1% each) for all employees (85.7%) when pertinent or requested (42.8%). Funding was equally reported as coming from full employer support, insurance, and free of charge from outside firm (28.5%) with added incentives of reduced program fees, flextime, and insurance benefits (14.2%). An assigned employee facilitates the program (57.1%) with program outcomes believed to be improved employee health (85.7%) and reduced health care costs (71.4%). This program was noted as not offered but desired in 16% of respondents for this company size.

Nutrition Education was identified in 28% of the companies surveyed. The

programs were delivered as a workshop or class, onsite (71.4% each) outside normal work hours (42.8%) for all employees (85.7%) when pertinent or requested (71.4%). Funding was provided fully by the employer (57.1%) with only 14.2% offering any salary / monetary incentives. An assigned employee acts as facilitator (57.1%) for a program goal of improving employee health (85.7%).

Risk Appraisals were found to be in 20% of the companies surveyed.

Programs were equally offered as a workshop or class and an ongoing program (40% each) onsite (80%) evenly during work hours with flextime and on own time (40% each) for all employees (100%) both annually and when pertinent or requested (60%). The program was full employer supported financially (80%) with insurance benefits (20%). An assigned employee facilitated the program (80%) with a reported goal of improving employee health (100%).

### **Overall Results**

The overall survey results reflect the data from the '93 metro study as a whole not discerning for company size. The '93 metro survey revealed the following data for the respondents to the study:

There were more responses from companies with 100-249 employees (44) or 42.3% as compared to (35) or 33.6% for 250-749 employees and (25) or 24% for 750 plus employees. The respondents indicated that the number of programs offered overall was 1 or 2 programs equalling 31.7%; 3 to 5 programs equalling 27.8% and none at 23%. It was also identified that 17% of respondents had 6 to 10 programs. Company size did change this outcome since 88% of companies with 750+ employees had at least one or more programs versus 74.2% and 72.7% of companies with 250-749 and 100-249, respectively.



The overall survey results indicated that the most offered program was Accidents at 37.5% followed by Smoking 36.5% and Exercise 31.7%. The remainder of the programs fared as such: Back Care Education 30.7%, Stress Management & Health Screening 28.8%, High Blood Pressure 19.2%, Weight Loss & Risk Appraisal 17.3%, and Nutrition Education 13.4% (Figure 4).

Accidents Programs were offered by (37.5%) of respondents and was the most frequently offered program. This program was offered as an ongoing program (66.6%) onsite (87.1%) during work hours with flextime (82%) for all employees (87.1%) when pertinent or requested (33.3%) and was full employer supported financially (87.1%) with some salary/monetary incentives (12.8%). The program was facilitated by an assigned employee (74.3%) and was believed by management to reduce health care cost (69.2%) followed by improving employee health and productivity (64% each).

Smoking Programs were the second most reported programs at 36.5%. This program was presented as an ongoing program (52.6%) onsite (57.8%) which was often sited as a smoke free policy. Programs offered during work hours with flextime (42.1%) for all employees (92.1%) when pertinent or requested (44.7%) and was financially full employer supported (52.6%) with some insurance benefits for participants (18.4%). Programs facilitated by an assigned employee (39.4%) and was believed by management to improve employee health (71%) as well as reduce health care cost (57.8%). Smoking programs were also noted as having the second most interest as a new program to offer to employees at (6.7%).

Exercise Programming was offered as the third most frequent program at 31.7% of respondents. Exercise was utilized as an ongoing program (63.6%) onsite (51.5%) with a large number of programs offered off-site (39%) as well. Employees participate outside normal work hours (66.6%) and all employees

# 1993 metro OVERALL RESULTS

## OVERALL SURVEY PROFILE

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### Programs Offered

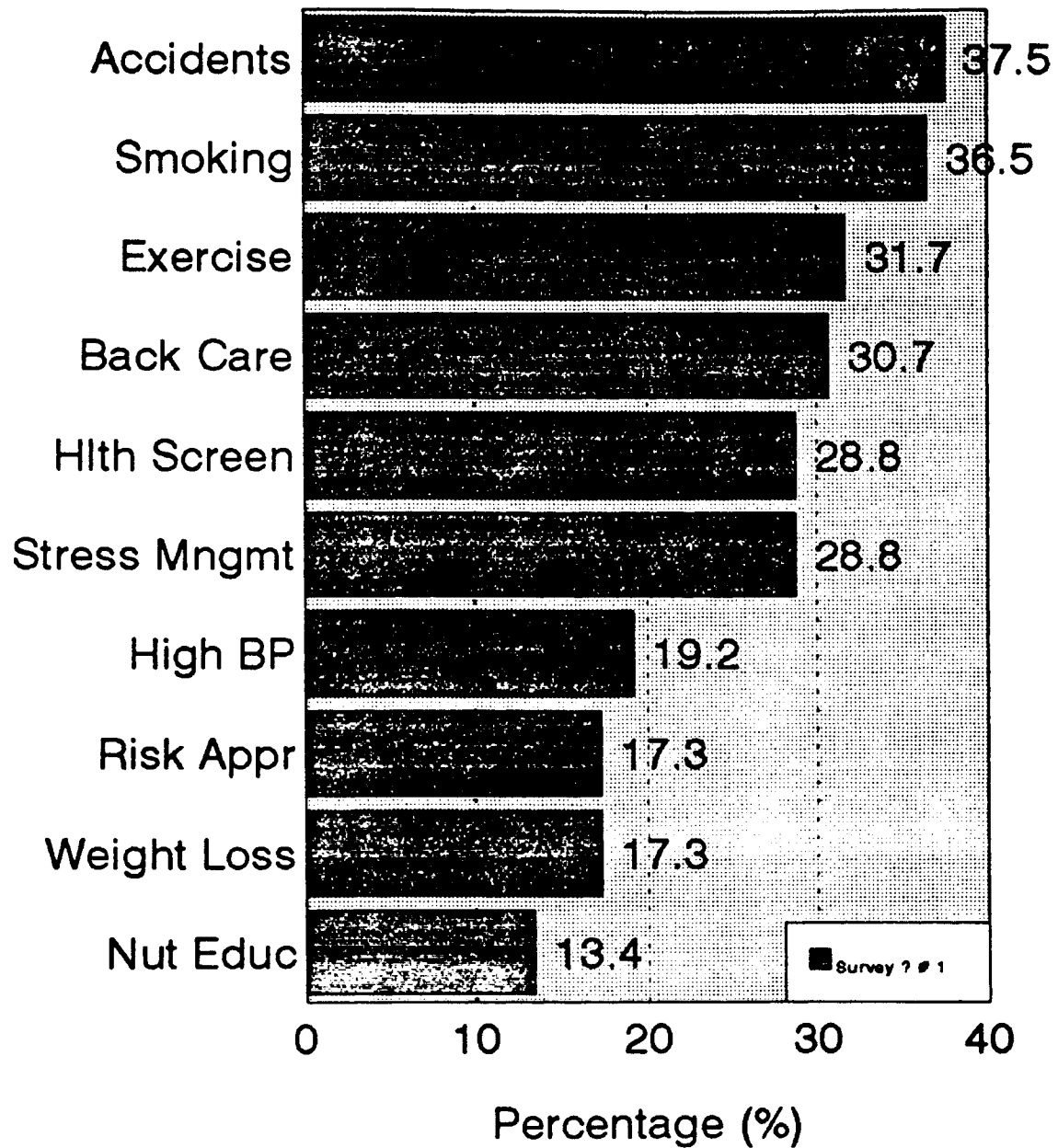


Figure 4

have access to program (93.9%). Program was equally offered weekly and only when pertinent or requested (33.3%). Program is funded with full employer support (30.3%) with a close number of programs being partial joint payment (27.2%). A reduced program fee was reported as financial incentive (18.2%). Program facilitated by motivated employees (39.3%) and is offered with management's belief that exercise improves employee health (72.7%).

Back Care Programs were offered in 30.7% of those who responded. Back care was offered as a workshop or class (68.8%) onsite (87.5%) during work hours with flextime (81.2%) for all employees (87.5%) only when pertinent or requested (34.5%). The program was full employer funded (96.8%) and the only incentive offered is flextime (10%). The program was facilitated by an assigned employee (65.6%) and is offered with the intent of improved employee health (75%) and reduced health care costs (71.8%).

Stress Management Programs are offered in 28.8% of the surveyed companies. This program was offered as a workshop or class (56.6%) onsite (66.6%) during work hours with flextime (53.3%) for all employees (86.6%) only when pertinent or requested (50%). The program was funded with full employer support (73.3%) with insurance benefits for participants (10%). The program was facilitated by an assigned employee (50%) and was offered in hopes of improving employee morale (73.3%), improved employee health (70%) and reduced health care costs (66.6%). Stress management programs were also noted as being the program that companies were most interested in having offered to their employees (8.6%) which is not currently provided.

Health Screening Programs were offered in 28.8% of the respondents. This program was offered as an ongoing service (50%) onsite (73.3%) during working hours with flextime (66.6%) for all employees (90%) annually (63.3%). Health screenings are full employer supported (76.6%) with some insurance

benefits being provided as incentives (16%). Program was facilitated by an assigned employee (60%) with the intent to improve employee health (73.3%).

High Blood Pressure Programming was reported to be offered in 19.2% of the survey respondents. This program was offered as individual counseling (60%), as well as an ongoing program (50%), onsite (90%) during work hours with flextime (70%) for all employee's (70%) only when pertinent (45%). This program was fully employer supported (85%) with some insurance benefits provided (20%). An assigned employee facilitates the program (55%) with the primary goal of improving employee health (85%) and reducing health care cost (75%).

Weight Loss Programs were found in 17.3% of the survey responses. These programs were delivered as as workshop or class (55.5%) onsite (72%) during work hours with flextime (44.4%) for all employees (88.8%) only when pertinent or requested (33.3%). It was found that there was an equal number of programs funded through full employer and employee support (33.3% each) with insurance benefits in 22.2% of the companies. An assigned employee facilitates the program in 61.1% of the companies; with a stated intent of improving employee health (83.3%) and reducing health care costs (72.2%). Weight loss programs were also noted by companies who were interested in offering such services (5.7%) which is the third most interested service to provide.

Risk Appraisal Programming was found in 17.3% of the companies who responded. This program was delivered as a workshop or class and an ongoing program equally (33.3%); onsite (77.7%) during work hours with flextime (61.1%) for all employees (83.35) annually (55.5%). This program was full employer funded (66.6%) with insurance benefits (22.2%). An assigned employee facilitates the program (61.1%) with the goal of reducing health care costs (66.6%) and improving employee health (61.1%).

**Nutrition Education Programs** were found in only 13.4% of those companies who participated in the survey. These programs were offered as a workshop or class (64.2%) onsite (78.5%) during work hours with flextime (50%) for all employees (92.8%) when pertinent or requested (50%). Program was funded with full employer support (71.4%) and flextime as an incentive (14%). Facilitator for this program was an assigned employee (50%) with the program goal to improve employee health (78.5%) and reduced health care costs (64.2%). This program was noted by companies not offering such a program as a possible interest in 4.8% which is tied for fourth on the list.

**Potential New Programming:**

When asked what programs the companies would be interested in providing which were not currently offered, Stress Management fared the highest at 8.6%, Smoking was next at 6.7% followed by Weight Loss and Back Care at 5.7% each, Nutrition Education and Exercise at 4.8%, Health Screening and High Blood Pressure 3.8%, Accidents 2.8%, and Risk Appraisal 0.9% (Figure 5).

# 1993 metro survey

## POTENTIAL NEW PROGRAMS

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### Programs Desired

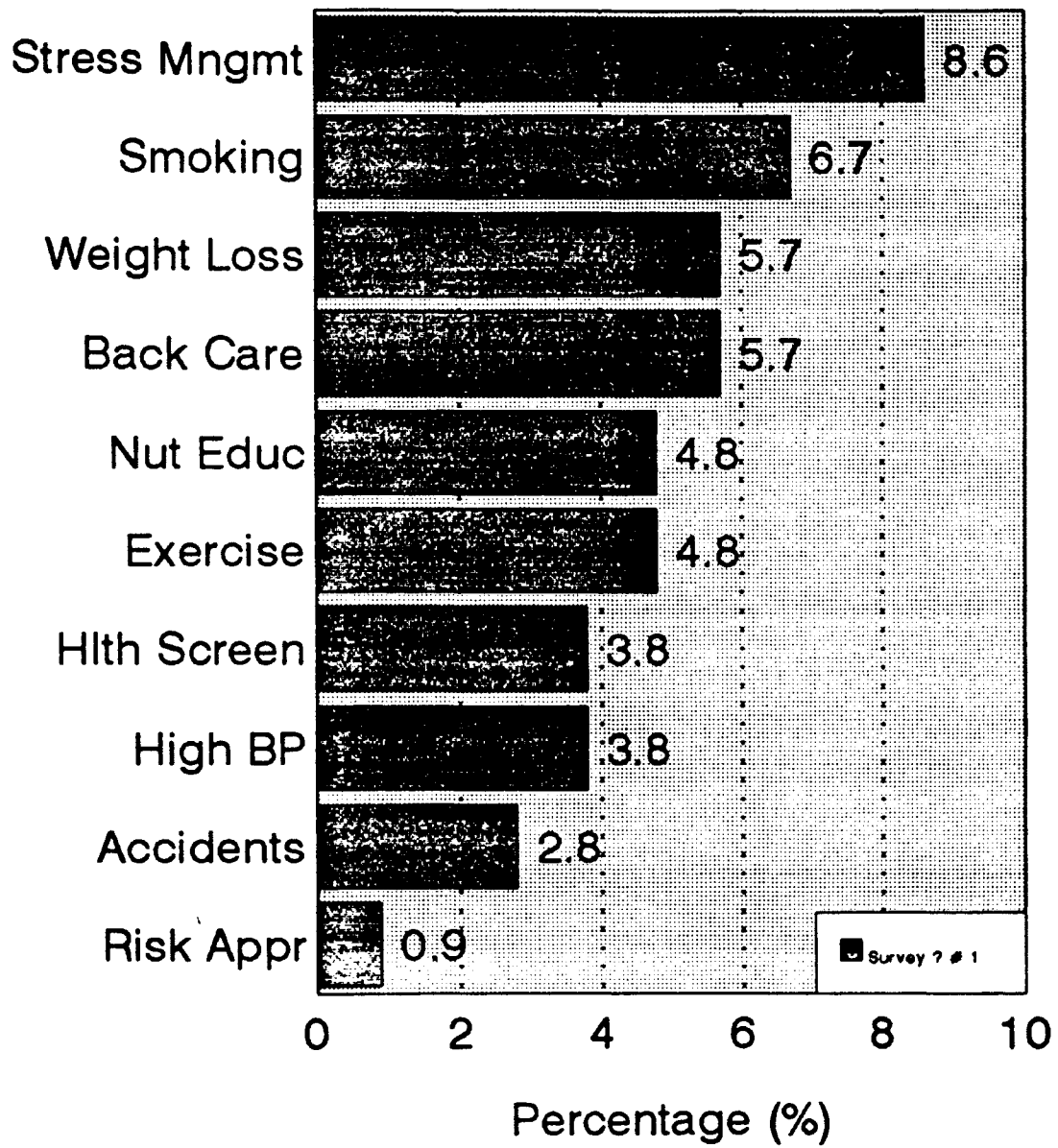


Figure 5

### **Survey Comparison:**

The purpose of this study was to compare the results of the 1993 Metropolitan survey results not only for the proportion and variety of programs offered between the company sizes within this study but also compare the overall results between this survey and the two national surveys (1985 and 1992).

Table 1 shows a comparison of program prevalence for all three surveys (1985 and 1992 national, and 1993 metro surveys) to the goals set forth in the Healthy People 2000 report. It can be noted that within the Metropolitan survey companies with 750 + employees met or exceeded the year 2000 goals already in three categories (Offering one or more health promotion programs, weight control / nutrition education, and stress management). This comparison also shows that the '93 Metro Survey had a larger percentage of companies which offered at least one health promotion program (77%) than the 1985 National Survey (66%). A comparison further shows that Smoking Cessation, High Blood Pressure, Exercise, Stress Management, and Back Care programs overall were offered more frequently in this Metropolitan's businesses than the results report in 1985, nationally. Accident prevention programming among the Metropolitan companies while far short of the goal (75%) were higher than both the '85 and '92 national survey results in all company sizes.

This study found that overall health promotion activities were offered in this Metropolitan area businesses at rate of 77%, which was higher than the figures published for the 1985 National study and slightly lower than the '92 National study (81%) and the year 2000 goals (85%). Figure 6, illustrates these findings. It was observed and demonstrated in Figure 5, that Smoking Programs were the second most requested program not currently being offered among the Metro. businesses. This was seen to be necessary when Figure 7 was examined

**Table 1**  
**Percentages for Survey Comparison to the 2000 Goals**

|  | 1985 nat. | 1992 nat. | 1993 metro | 2000 goal |
|--|-----------|-----------|------------|-----------|
| <b>% of companies offering one or more programs.</b> |           |           |            |           |
| <b>overall</b>                                       | 66        | 81        | 77         | 85        |
| 750 + ee   | NA        | 99        | 88         |           |
| 250 - 749 ee   | NA        | 90        | 74.2       |           |
| 100 - 249 ee   | NA        | 86        | 72.7       |           |
| <b>Prevalence per program overall</b>                |           |           |            |           |
| 750 +  |           |           |            |           |
| 250 - 749 ee   |           |           |            |           |
| 100 - 249 ee   |           |           |            |           |
| <b>Health Screenings</b>                             | NA        | * 52      | 28.8       | 85        |
|  | NA        | NA        | 48         |           |
|  | NA        | NA        | 25.7       |           |
|  | NA        | NA        | 20.4       |           |
| <b>Risk Appraisals</b>                               | 29.5      | * 52      | 17.3       | 85        |
|  | 66.2      | NA        | 20         |           |
|  | 41.8      | NA        | 14         |           |
|  | 34        | NA        | 18         |           |
| <b>Smoking Cessation</b>                             | 35.6      | 59        | 36.5       | 75        |
|  | 57.9      | 74        | 32         |           |
|  | 39.5      | 66        | 42.8       |           |
|  | 37.5      | 61        | 34         |           |
| <b>High Blood Pressure</b>                           | 16.5      | 29        | 19.2       | 50        |
|  | 49.8      | 68        | 28         |           |
|  | 23.8      | 40        | 14         |           |
|  | 17.9      | 32        | 18         |           |
| <b>Weight Control / Nutrition Education</b>          | 37.5      | 37        | 30.7       | 50        |
|  | 96.8      | 85        | 56         |           |
|  | 44.8      | 57        | 25.7       |           |
|  | 33.3      | 44        | 20.4       |           |
| <b>Exercise / Fitness</b>                            | 22.1      | 42        | 31.7       |           |
|  | 53.7      | 83        | 52         | 80        |
|  | 32.4      | 66        | 42.8       | 50        |
|  | 22.7      | 47        | 11.3       | 35        |
| <b>Stress Management</b>                             | 26.6      | 37        | 28.8       | 40        |
|  | 60.8      | 79        | 40         |           |
|  | 37.5      | 51        | 31         |           |
|  | 32.7      | 42        | 20         |           |
| <b>Back Care Program</b>                             | 28.6      | 32        | 30.7       | 50        |
|  | 47.4      | 51        | 40         |           |
|  | 41.8      | 36        | 31         |           |
|  | 34.8      | 39        | 25         |           |
| <b>Accident Prevention</b>                           | 19.8      | 18        | 37.5       | 75        |
|  | 38.3      | 32        | 44         |           |
|  | 33.8      | 22        | 42.8       |           |
|  | 21.6      | 22        | 29.5       |           |

**BOLD** = valued equalled or surpassed 2000 goal  
**NA** = indicates that a direct comparison can not be made due to figures not being measured, being measured differently, or not being reported.  
 \* '92 survey classified health screenings and risk appraisals together.  
 \*\* '85 & '92 survey utilized off-the-job accidents, 93 metro survey did not specify.



# Percentage of Companies Offering

1 > Health promotion Prgm

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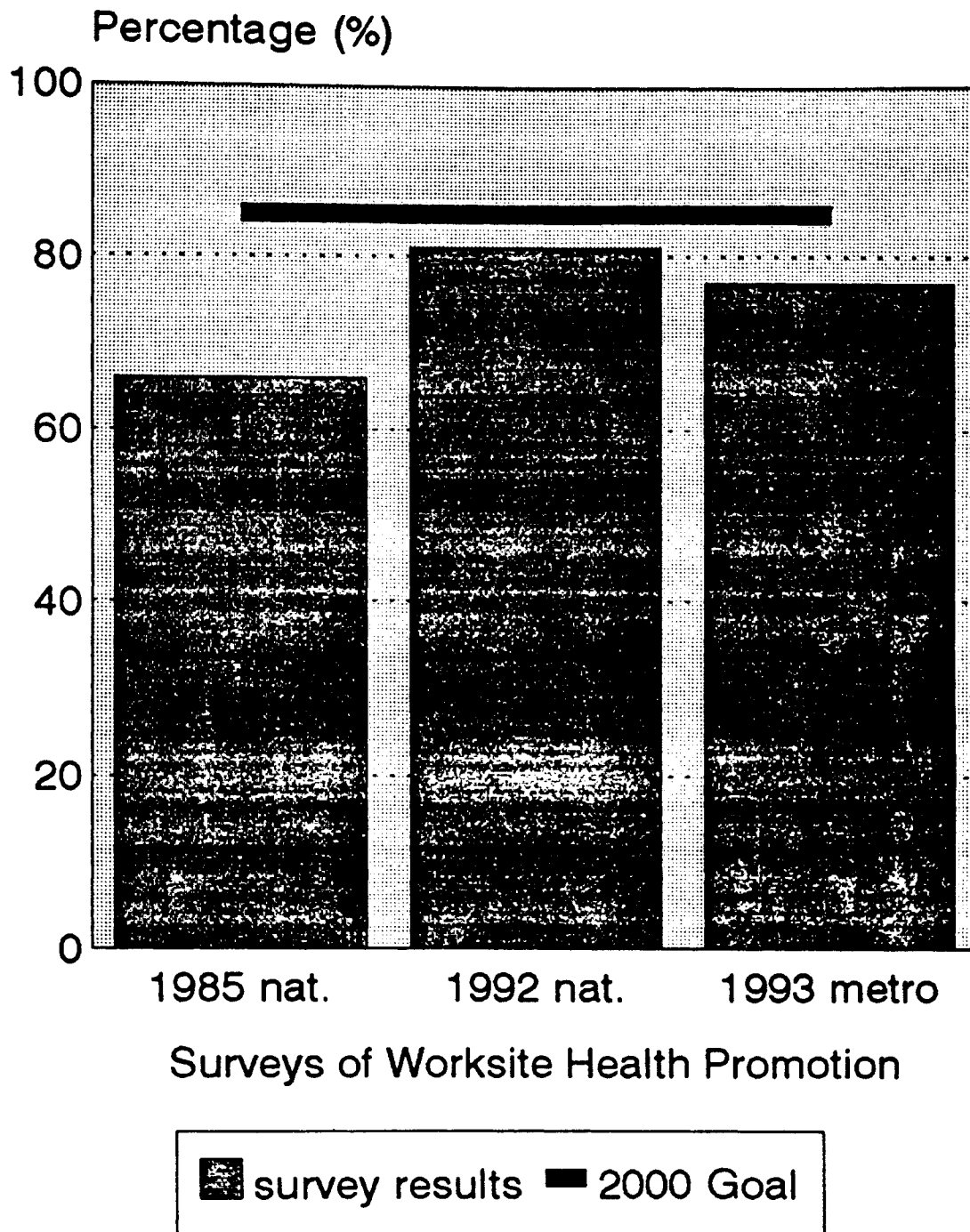


Figure 6

# Smoking Cessation

## Percentage of Companies Offering

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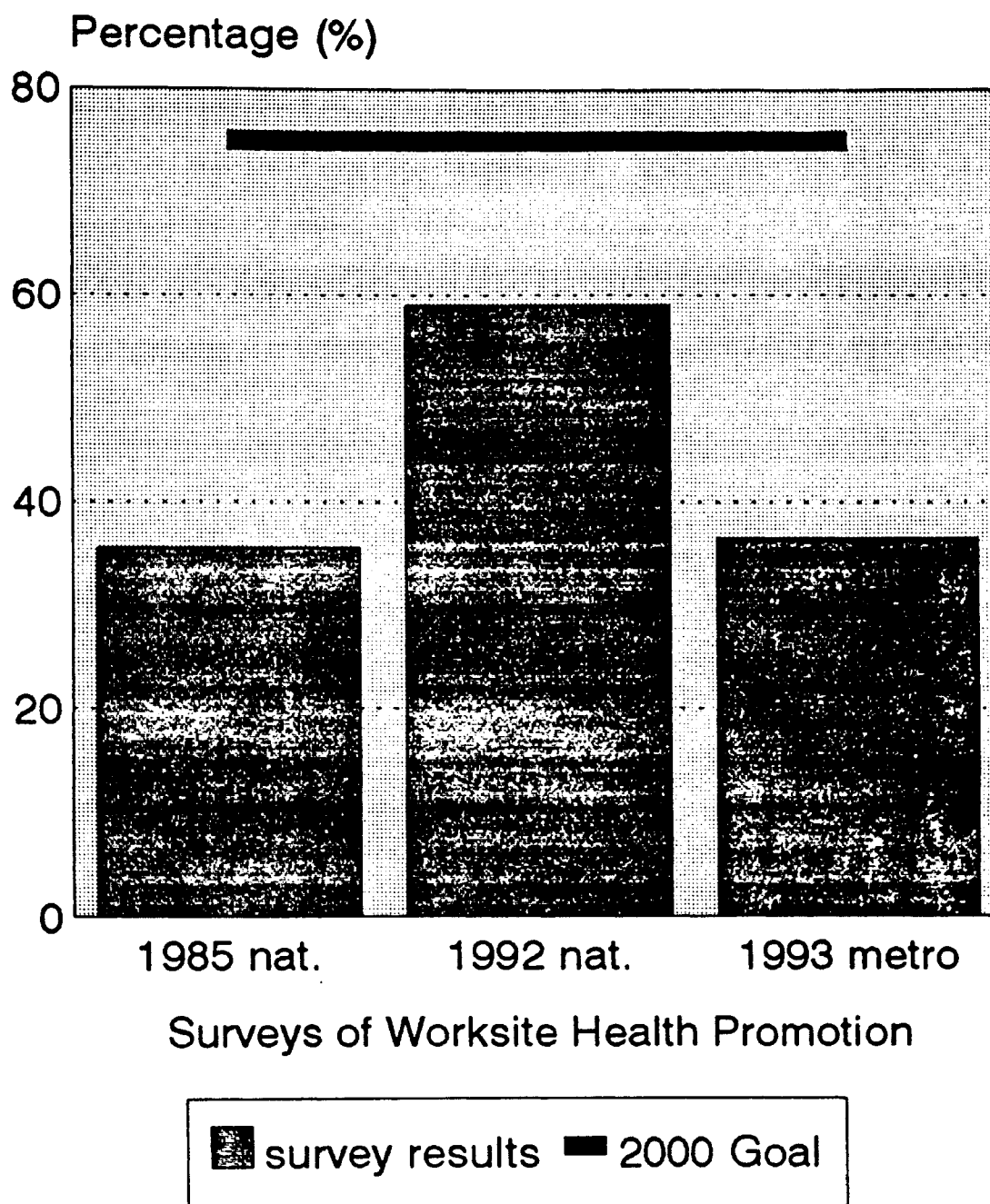


Figure 7

and the disparity between these survey results and the year 2000 goals are compared.

Weight Control / Nutrition Education proved to be a solid program among companies with 750 + employees in the Metro. survey. This category size exceeded the year 2000 goals even though the overall results fell short as evident in Figure 8. While no individual category size was reported enough to meet the year 2000 goals for Exercise programming, it was seen that exercise among the metro. companies was offered more often than the stats reported from the 1985 national survey (Figure 9). An optimistic future exists for Stress Management among metro. companies. This category was reported as the most sought after new program as illustrated in figure 5, and has already meet the projected goal for the year 2000 among companies with 750 + employees (Figure 10).

#### **Statistical Significance:**

After plotting the comparison percentages on the Lowshe-Baker nomograph and determining an omega value =  $\omega$ , a t-test for significance between nonequal populations was used to establish significance at the five percent level for each comparison and can be seen in Table 2 (Downie, 1974).

# 1993 metro Wt. Control as compared to the 2000 goal

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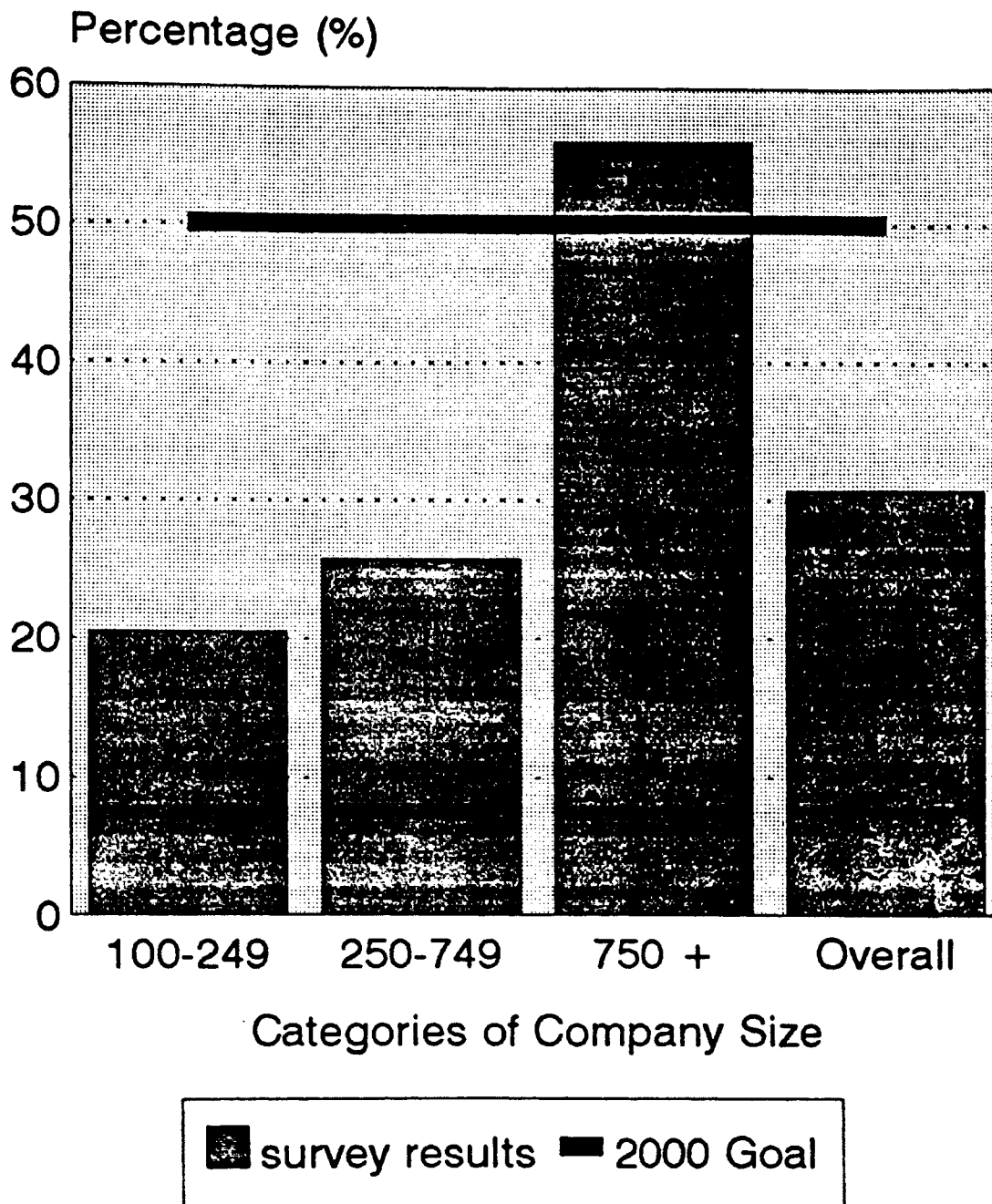


Figure 8

# Exercise Programming

## % of Companies Offering

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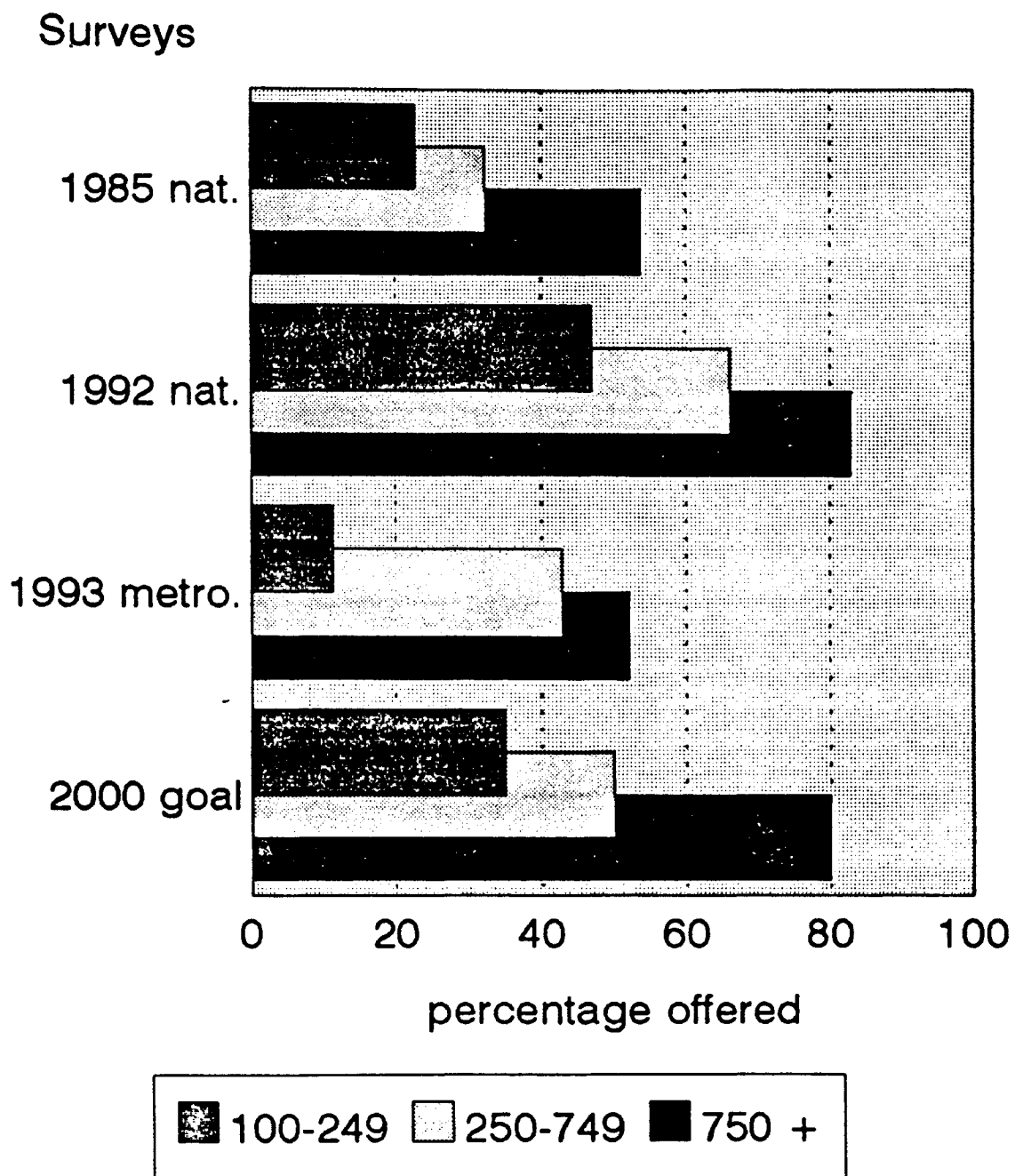


Figure 9

# 1993 metro Stress Mngmt

as compared to the 2000 goal

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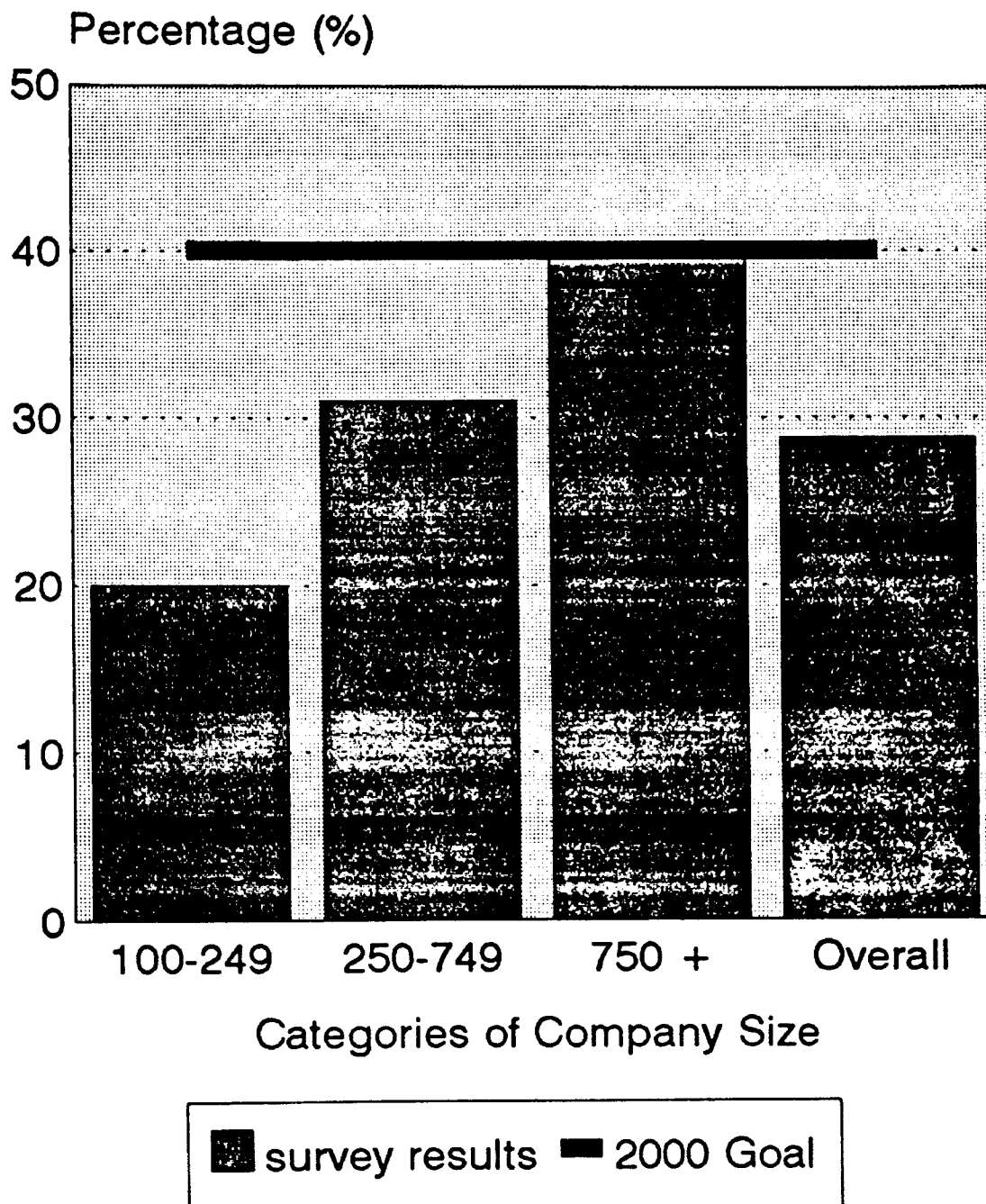


Figure 10

Table 2

Omega Values of Survey Comparisons

| Programs                     | 93 metro VS<br>85 nat.<br>5% = 0.14 | 93 metro. VS<br>92 nat.<br>5% = 0.14 | metro 750 +<br>VS 250-749<br>5% = 0.3 | metro 750 +<br>VS 100-249<br>5% = 0.35 | metro 250-749<br>VS 100-249<br>5% = 0.44 |
|------------------------------|-------------------------------------|--------------------------------------|---------------------------------------|--|--|
| Overall Program              | 0.15                                | 0.1                                  | 0.25                                  | 0.3                                    | 0  |
| Hlth Scmg                    | **NA                                | *0.1                                 | 0.35                                  | 0.4                                    | 0.1                                      |
| Risk App.                    | 0.2                                 | *0.1                                 | 0.1                                   | 0.1                                    | 0.1                                      |
| Smoking                      | 0                                   | 0.3                                  | 0.15                                  | 0.05                                   | 0.12                                     |
| High Bp                      | 0.1                                 | 0.2                                  | 0.25                                  | 0.15                                   | 0.1                                      |
| Weight Control/<br>Nutrition | 0.1                                 | 0.1                                  | 0.45                                  | 0.52                                   | 0.09                                     |
| Exercise                     | 0.15                                | 0.15                                 | 0.12                                  | 0.65                                   | 0.5                                      |
| Stress Mngmt                 | 0.05                                | 0.12                                 | 0.12                                  | 0.3                                    | 0.19                                     |
| Back Care                    | 0                                   | 0                                    | 0.1                                   | 0.22                                   | 0.1                                      |
| Accident Prev.               | 0.3                                 | 0.3                                  | 0.02                                  | 0.2                                    | 0.2                                      |

|              |   |
|--------------|---|
| <b>Bold=</b> | Indicates that the value is equal to or greater than 0.05 level of sig. (5%)  |
| <b>*=</b>    | To compare '93 metro survey to '92 nat., Hlth Scmg and Risk App were combined |
| <b>**=</b>   | No proportions for Hlth Scmg were taken in the '85 nat. survey.               |

In comparing the overall results between each of the three surveys ('85 & '92 national, and '93 metro.) the following statistically significant differences in the proportion of programs were noted:

1. At least one or more health promotion programs were offered in more companies in the '93 Metro survey (77%) than the '85 national survey (66%) where  $\chi^2 = .15$  [5% sig = .14].
2. The '85 national survey found more Risk Appraisals being offered (29.5%) than found in the '93 Metro survey (17.3%) where  $\chi^2 = .2$  [5% sig = .14].
3. Smoking Cessation programs were more prevalent in the '92 national survey (59%) as compared with the '93 Metro survey (36.5%) with  $\chi^2 = .3$  [5% sig=.14].
4. '92 national survey noted more High Blood Pressure programs (29%) than the '93 Metro survey (19.2%) where  $\chi^2 = .2$  [5% sig = .14].
5. Exercise programming was found in the '92 national study at a more frequent rate of 42% compared to '93 Metro findings of 31.7% where  $\chi^2 = .15$  [5% sig = .14] and yet when '93 Metro findings were compared with the '85 national survey (22%),  $\chi^2 = .15$  [5% sig = .14] the propensity favored the '93 Metro survey.
6. The '93 Metro survey found Accident Prevention Programs (37.5%) at a much higher rate than either the '85 or '92 national surveys (19.8% & 18% respectfully) with  $\chi^2 = .3$  [5% sig = .14] for both.

While statistically analyzing the data regarding the prevalence of programs by company size within the 1993 Metropolitan Survey the following significant differences were noted:

1. That Health Screenings were offered more in companies with 750 +



employees (48%) than both company sizes 250-749 (25.7%) and 100-249 (20.4%) where  $\kappa = .35$  when compared to 250-749 companies [5%sig = .3] and  $\kappa = .4$  when comparing with 100-249 company [5% sig = .35].

2. Weight Control / Nutrition Education was found in greater proportion in 750 + companies (56%) than both 250-749 companies (25.7%,  $\kappa = .45$ ) [5%sig = .3] and 100-249 companies (20.4%,  $\kappa = .52$ ) [5% sig = .35].
3. Companies with 100-249 employees fell short in regards to Exercise / Fitness programs (11.3%) when compared with both 750 + companies (52%,  $\kappa = .65$ ) [5% sig = .35] and 250-749 companies (42.8%,  $\kappa = .5$ ) [5% sig = .44].

## **CHAPTER V**

### **SUMMARY / FINDINGS / CONCLUSIONS / RECOMMENDATIONS**

#### **Summary:**

The worksite health promotion profile discovered through the '93 Metro survey consists of programs which were offered as a workshop or class in conjunction with an ongoing program which was held onsite during work hours with flextime, finding an exception for exercise programs. Programs were held whenever requested or it is felt to be pertinent. Programming received full employer supported funds within most companies with access open to all employees. Program incentives were usually some form of insurance benefits followed by reduced program fees if there were any external incentives provided. The programs were believed by management to improve employee health and reduce health care cost. The programs which were sited as desirable but not currently offered were stress management followed by smoking cessation.

The '93 Metro survey found that there was no significant differences between company size in the overall percentage of programs offered. However, a trend was discovered at significant levels for the propensity of certain activities to be offered more readily in the larger companies when compared to their smaller counterparts, such as Health Screenings, Weight Control / Nutrition

Education, and Exercise / Fitness. The majority of the surveyed program areas in the '93 Metro survey did not meet the year 2000 goals. It was noted that three goals were met or surpassed by companies with 750 + employees; a) the percentage of companies offering at least one or more health promotion programs, b) weight control / nutrition education, and c) stress management all accomplished the set goals for those areas.

The '93 Metro survey reported the same proportion of programs offered overall as the '92 National survey, statistically, and a greater proportion of programs than the '85 National survey. There were notable significant differences in a further analysis between specific types of programming between all three surveys with the '93 Metro survey finding a higher propensity of Exercise programs than the '85 National survey and more Accident Prevention programs than both the '85 and '92 National surveys.

The '93 metro survey was performed with three objectives. The first was to establish a database for the metropolitan city on the availability of employer-sponsored health promotion programs. The results of this study were the first large step in the formation of such a database. Future endeavors could add to this information by follow up studies on the companies which responded to this study and discover the propensity of programs that are in place within companies not represented in this study. The second objective was to create a surveillance tool which can be used on both local and state levels to track the progress of the Healthy People 2000 goals. The '93 metro survey could be applied to any local or state application to investigate the prevalence of health promotion within the corporate community. The third objective involved establishing the potential for new programming in this particular metropolitan city which was meet and discussed within the results section of this report.

While this study noted that companies with 750 + employees met or exceeded three of the goals set for the year 2000, most programs and companies fell considerably short of the national goals. This is not necessarily a negative outcome; it does indicate that the need for health promotion programming among area businesses is high if the community expects to meet or surpass the goals set by the federal government regarding health care. This metropolitan corporate community does appear to be mirroring the national trend of larger companies taking the lead in implementing worksite health promotion activities. There is an example within the larger companies of how to deliver health programming to company employees; an avenue needs to be established to accomplish the same within the community's smaller sized businesses.

### **Findings:**

Following the review of all available literature on the subject matter two hypotheses were established. The first hypothesis was that the Metropolitan survey would indicate that these businesses would offer health promotion programs at the same rate as found within the national surveys. An overall analysis of the survey results for the '93 Metro and '92 National surveys supports this hypothesis. A second hypothesis was confirmed by the '93 Metro survey results in that more of certain types of health promotion programs are offered by larger employers than their smaller business counterparts.

In performing a statistical analysis on the hypotheses at the .05 level of significance it was noted:

**Hypothesis 1:** There will be no significant difference in the number and variety of health promotion programs offered in companies with 100-249 employees (medium) as compared to those employers with 250-749 (large) and 750 + employees (very large) from within the 1993 Metropolitan survey.

1. There was no significant difference noted in a comparison of any company size for the percentage of companies offering one or more health promotion programs accepting the hypothesis for the propensity of programming.
2. A significant difference was found favoring 750 + companies (48%) over both other size companies, 250-749 (25.7%;  $\chi^2 = .35$ ; 5%=.3) and 100-249 (20.4%;  $\chi^2 = .4$ ; 5%=.35) for offering Health Screenings to employees, rejecting the hypothesis for a difference in the variety of programs.
3. Weight Control / Nutrition Education compared across all company sizes found that 750 + companies (56%) offered more of these programs over both other company sizes with a significant difference of 250-749 (25.7%;  $\chi^2 = .45$ ; 5%=.3) and 100-249 (20.4%;  $\chi^2 = .52$ ; 5%=.35), also rejecting the hypothesis in variety of programs offered.
4. Companies with 100-249 employees offered Exercise / Fitness programming (11%) at a significantly lower rate than both 750 + companies (52%;  $\chi^2 = .65$ ; 5%=.35) and 250-749 companies (42.8%;  $\chi^2 = .5$ ; 5%=.44), once again rejecting the hypothesis.

**Hypothesis 2:** There will be no significant difference in the proportion and variety of the companies offering health promotion programs within the Metropolitan survey as compared with the proportion found in the "National Survey of Worksite Health Promotion Activities", 1985 and 1992.

1. There was no significant difference ( $\chi^2 = .09; 5\% = .14$ ) in the overall number of companies which offered at least one health promotion program between the '92 national survey (81%) and the '93 metro survey (77%) accepting the hypothesis in regards to the propensity of programs. However, there were significant differences among the proportions of various types of programs offered as found in the studies, rejecting the hypothesis for the variety of programming.
2. A significant difference ( $\chi^2 = .15; 5\% = .14$ ) was noted in the overall number of companies which offered at least one health promotion program favoring the '93 metro survey (77%) over the '85 national survey (66%). with additional significant differences noted in the proportions of various types of programs offered within the studies rejecting the hypothesis.

### **Conclusions:**

The results from the 1993 metro survey leads this investigator to the following conclusions: a) that the data collected is comparable to worksite health promotion throughout the country, b) that worksite health promotion programs differ among the propensity and variety of programming dependant upon the size of the company, c) most health promotion programs are offered onsite with a current company employee trying to facilitate the programs in addition to their main duties, d) there are few external incentives for company employees to participate in the programs, e) the potential for new programming within this corporate community exists if the proper program format and incentives are provided, and f) if this particular corporate community expects to meet the federal goals for the year 2000 then worksite health promotion professionals will need to find avenues

to implement these programs in the medium and large size companies to parallel the progress made in the very large companies.

**Recommendations:**

Continued studies are needed of this particular metropolitan city, as well as other cities within a close geographic region, to track the progress being made within worksite health promotion. The surveillance tool created for the 1993 Metropolitan study can be used to perform similar research throughout the country to help track the progress towards the Healthy People 2000 goals. Health promotion professionals need to find effective inroads to establishing programs within smaller size companies to provide them with the same benefits discovered by the very large companies.

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# **APPENDIXES**

## **APPENDIX A-- INITIAL COVER LETTER**



Dear Personnel Director;

You will find enclosed with this letter a short survey on worksite health promotion. This survey is being used to determine the status of worksite health promotion in [REDACTED]; and how [REDACTED] compares to the goals and objectives set by the federal government in their report, Healthy People 2000.

Let me assure you that all identifying information obtained will remain confidential. This study is in conjunction with the requirements for the completion of my Master's Degree from Oklahoma State University.

Please forward this letter and survey to whomever is most knowledgeable about health promotions within your organization. If absolutely no health promotions services are offered simply note so on the survey. Once the survey is completed place it in the provided self addressed stamped envelope and drop in the mail. Deadline for entries is October 29, 1993.

Your time and participation are greatly appreciated. Feel free to call me if you have any questions regarding this survey, at: [REDACTED].

Sincerely;

Ken Grant

**APPENDIX B- - Survey  
Instruction Sheet**

## Worksite Health Promotion Survey

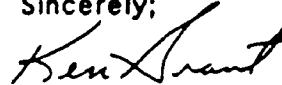
**Directions:** Attached is a short survey. There are twelve questions which are found in the rows of the chart; and ten possible programs located in the columns. If a particular question's response applies to one of the given programs then simply place a check mark in the space that intersects the two. An example is provided:

| Worksite Health Promotion  |            |           |         |         |             |              |          |              |    |
|--|------------|-----------|---------|---------|-------------|--------------|----------|--------------|----|
|  | Hth Screen | Risk Appr | Smoking | High BP | Weight Loss | Nutrition Ed | Exercise | Stress Mngmt | Ba |
| 1. Check all programs which are currently being offered to company employees |            |           | ✓       |         |             | ✓            |          | ✓            |    |
| 2. How are the programs which are offered delivered to the employees?        |            |           |         |         |             |              |          |              |    |
| *a workshop or class series  |            |           | ✓       |         |             |              |          |              |    |
| *individual counseling   |            |           |         |         |             |              |          | ✓            |    |
| *an ongoing program or policy  |            |           | ✓       |         |             | ✓            |          |              |    |

Once you have completed the survey place it in the self addressed stamped envelope provided. If you would like to make any comments or expand upon the programs offered by your company feel free to include those remarks on this page.

Thank you for your time and participation.

Sincerely;



Ken Grant

## **APPENDIX C- - Actual Survey**

**Worksite Health Promotion**

|  | Hiith Screen | Risk Appr | Smoking | High BP | Weight Loss | Nutrition Ed | Exercise | Stress Mngmt | Back Care Ed | Accident |
|--|--------------|-----------|---------|---------|-------------|--------------|----------|--------------|--------------|----------|
| 1. Check all programs which are currently being offered to company employees |              |           |         |         |             |              |          |              |              |          |
| 2. How are the programs which are offered delivered to the employees?        |              |           |         |         |             |              |          |              |              |          |
| *a workshop or class   |              |           |         |         |             |              |          |              |              |          |
| *individual counseling   |              |           |         |         |             |              |          |              |              |          |
| *an ongoing program  |              |           |         |         |             |              |          |              |              |          |
| 3. Where are these programs offered?   |              |           |         |         |             |              |          |              |              |          |
| *on-site   |              |           |         |         |             |              |          |              |              |          |
| *central corporate office  |              |           |         |         |             |              |          |              |              |          |
| *off-site  |              |           |         |         |             |              |          |              |              |          |
| 4. When are these programs offered?  |              |           |         |         |             |              |          |              |              |          |
| *during work hours with flextime   |              |           |         |         |             |              |          |              |              |          |
| *during work hours on own time   |              |           |         |         |             |              |          |              |              |          |
| *outside normal work hours   |              |           |         |         |             |              |          |              |              |          |
| 5. How are these programs funded?  |              |           |         |         |             |              |          |              |              |          |
| *full employer supported   |              |           |         |         |             |              |          |              |              |          |
| *full employee financed  |              |           |         |         |             |              |          |              |              |          |
| *partial joint payment   |              |           |         |         |             |              |          |              |              |          |
| *insurance   |              |           |         |         |             |              |          |              |              |          |
| *free of charge/outside firm   |              |           |         |         |             |              |          |              |              |          |
| 6. Who is elegeible to participate in these programs?                        |              |           |         |         |             |              |          |              |              |          |
| *Management  |              |           |         |         |             |              |          |              |              |          |
| *all employees   |              |           |         |         |             |              |          |              |              |          |
| *Family members  |              |           |         |         |             |              |          |              |              |          |
| *only refered employees  |              |           |         |         |             |              |          |              |              |          |

WORKSITE HEALTH PROMOTION

|   | HiH Screen | Risk Appr | Smoking | High BP | Weight Loss | Nutrition Ed | Exercise | Stress Mngmt | Back Care Ed | Accident |
|---|------------|-----------|---------|---------|-------------|--------------|----------|--------------|--------------|----------|
| 7. Do program participants receive any form of incentives/benefits such as:                                 |            |           |         |         |             |              |          |              |              |          |
| *reduced program fees   |            |           |         |         |             |              |          |              |              |          |
| *flextime   |            |           |         |         |             |              |          |              |              |          |
| *insurance benefits   |            |           |         |         |             |              |          |              |              |          |
| *salary/monetary incentives   |            |           |         |         |             |              |          |              |              |          |
| 8. Approximately how often are these programs offered?  |            |           |         |         |             |              |          |              |              |          |
| *weekly   |            |           |         |         |             |              |          |              |              |          |
| *monthly  |            |           |         |         |             |              |          |              |              |          |
| *annually   |            |           |         |         |             |              |          |              |              |          |
| *only when pertinent or requested   |            |           |         |         |             |              |          |              |              |          |
| 9. Who initiates / facilitates these programs?  |            |           |         |         |             |              |          |              |              |          |
| *motivated employee   |            |           |         |         |             |              |          |              |              |          |
| *assigned employee  |            |           |         |         |             |              |          |              |              |          |
| *local organizations  |            |           |         |         |             |              |          |              |              |          |
| 10. Program is offered because management perceives the benefits to be:                                     |            |           |         |         |             |              |          |              |              |          |
| *improved employee morale   |            |           |         |         |             |              |          |              |              |          |
| *improved employee health   |            |           |         |         |             |              |          |              |              |          |
| *improved productivity  |            |           |         |         |             |              |          |              |              |          |
| *reduced health care cost   |            |           |         |         |             |              |          |              |              |          |
| 11. Check any program you would be interested in having but is not currently offered.                       |            |           |         |         |             |              |          |              |              |          |
| 12. How many people are employed by your company?<br>A. 50 - 99<br>B. 100 - 249<br>C. 250 - 749<br>D. 750 + |            |           |         |         |             |              |          |              |              |          |

Worksite Health Promotion Survey

Dear Personnel Director;

Several weeks ago I sent your company a short survey regarding worksite health promotion within your organization. This card is simply a reminder that all identifying information provided will remain confidential.

Please pass this card as you did with the survey to whomever is most knowledgeable about health promotions within your organization. If your survey is no longer accessible to you, please call to receive another copy. Deadline for entries is October 29, 1993. If you have any questions regarding the survey, its results, or health promotions in general please feel free to contact me by mail or phone:

Ken Grant  
1127 S. Newport  
Tulsa, Ok. 74120  
592 - 0272

Thanks again;

*Ken Grant*  
Ken Grant

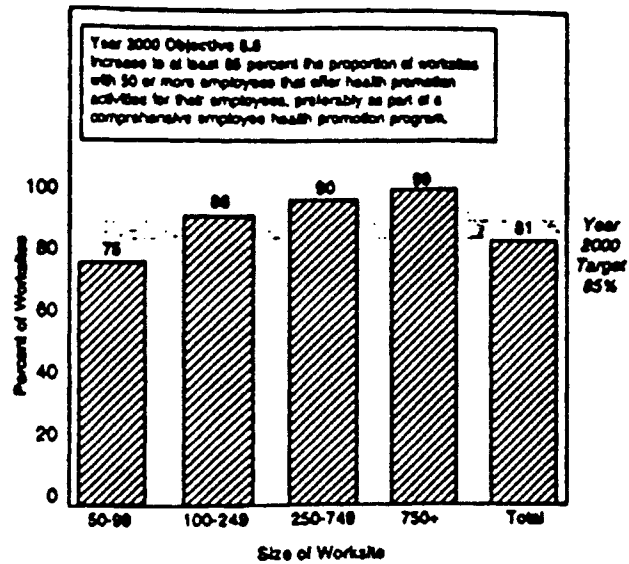
**APPENDIX E<sub>1</sub>- - Percent of  
Worksites with Health  
Promotion Activities,  
National Surveys**

**APPENDIX E<sub>2</sub>- - Exercise  
Program by Company Size,  
National Surveys**



## APPENDIX E<sub>1</sub>

Percent of Worksites with 50 or More Employees with at Least One Health Promotion Activity, 1992

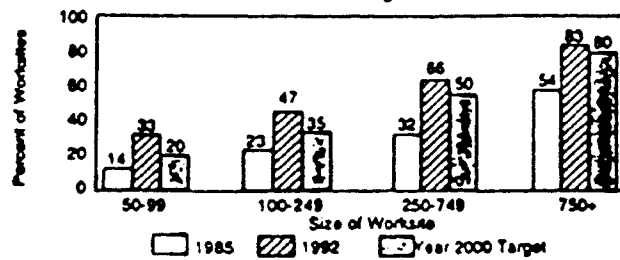


\*Includes a health risk questionnaire; physical exams; indoor/outdoor exercise facilities; blood pressure, cholesterol, or cancer screenings; information or activities concerning blood pressure, smoking, exercise/fitness, nutrition, weight control, stress management, back care, or off-the-job accidents.

Source: OODHP National Survey of Worksite Health Promotion Activities, 1992

## APPENDIX E<sub>2</sub>

Percent of Private Worksites with 50 or More Employees Offering Exercise or Fitness Program, by Size, 1985, 1992, Year 2000 Target



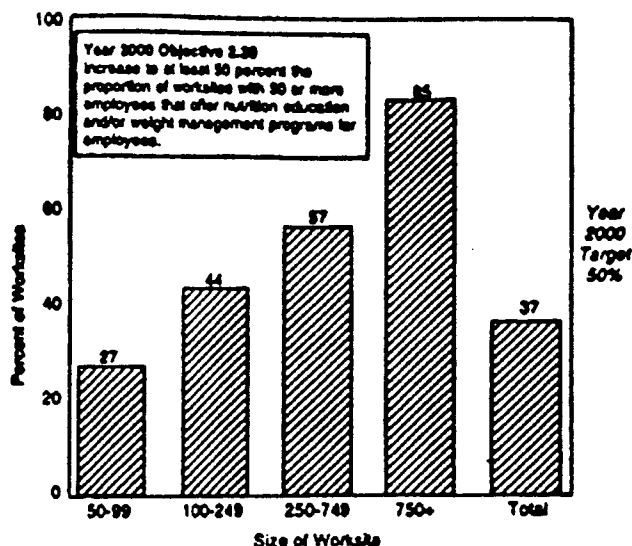
Source: OODHP National Survey of Worksite Health Promotion Activities, 1992

**APPENDIX F<sub>1</sub>- -Worksites offering  
Weight Management/  
Nutrition Education,  
National Surveys**

**APPENDIX F<sub>2</sub>- - Worksites offering  
Smoking Cessation  
Program or Policies,  
National Surveys**

APPENDIX F<sub>1</sub>

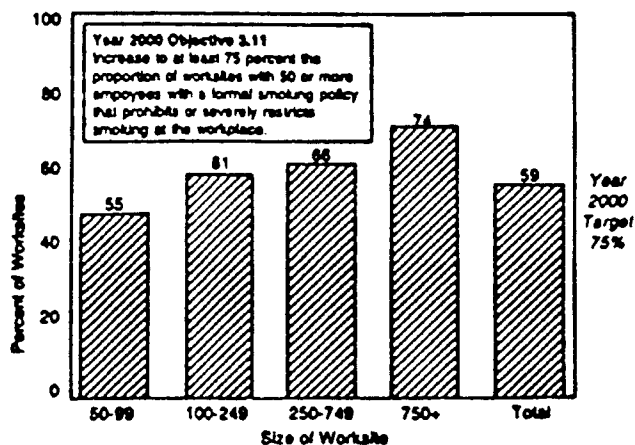
Percent of Worksites with 50 or More Employees Offering Nutrition Education and/or Weight Management Programs, by Size, 1992



Source: ODPHP National Survey of Worksite Health Promotion Activities, 1992

APPENDIX F<sub>2</sub>

Percent of Worksites with 50 or More Employees with a Formal Smoking Policy that Prohibits or Severely Restricts\* Smoking at the Workplace, by Size, 1992



\*Defined by the Office of Smoking and Health, Centers for Disease Control, as a policy that does not allow smoking anywhere inside the workplace or that does not allow smoking anywhere inside except in separately ventilated smoking areas.

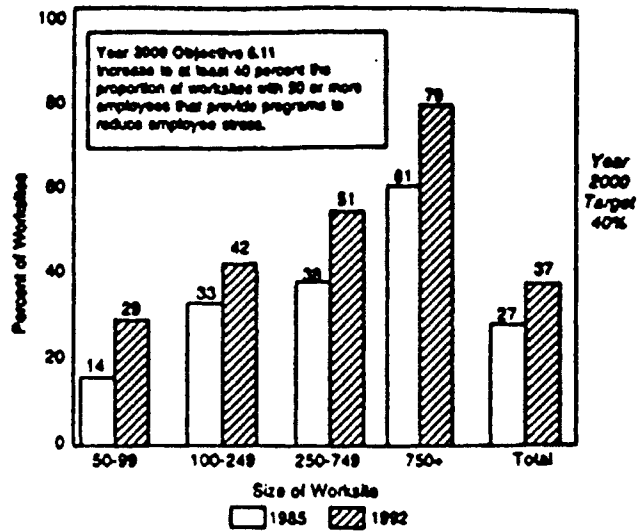
Source: ODPHP National Survey of Worksite Health Promotion Activities, 1992

**APPENDIX G<sub>1</sub> - - Worksites Offering  
Stress Management,  
National Survey**

**APPENDIX G<sub>2</sub> - - Health Promotion  
Payment Arrangement,  
National Surveys**

## APPENDIX G<sub>1</sub>

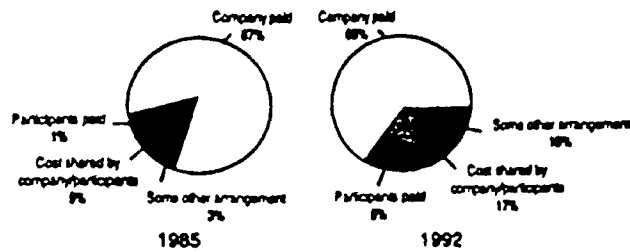
Percent of Private Worksites with 50 or More Employees Offering Information or Activities Concerning Stress Management Activities, by Size, 1985 and 1992



Source: ODPHP National Survey of Worksite Health Promotion Activities, 1992

## APPENDIX G<sub>2</sub>

Percent of Private Worksites with 50 or More Employees by Payment Arrangement of Screenings or Exams, 1985 and 1992



Source: ODPHP National Survey of Worksite Health Promotion Activities, 1992

**APPENDIX H - - Metropolitan Survey  
Overall Results  
Frequency Report**

**Worksite Health Promotion**

|   | Hlth Screen | Risk Appr | Smoking | High BP | Weight Loss | Nutrition Ed | Exercise | Stress Mngmt | Back Care Ed | Accident |
|---|-------------|-----------|---------|---------|-------------|--------------|----------|--------------|--------------|----------|
| <b>1. Check all programs which are currently being offered to company employees</b> | 30          | 18        | 38      | 20      | 18          | 14           | 33       | 30           | 32           | 39       |
| <b>2. How are the programs which are offered delivered to the employees?</b>        |             |           |         |         |             |              |          |              |              |          |
| *a workshop or class  | 9           | 6         | 20      | 3       | 10          | 9            | 6        | 17           | 22           | 21       |
| *individual counseling  | 6           | 5         | 4       | 12      | 6           | 3            | 6        | 9            | 5            | 9        |
| *an ongoing program   | 15          | 6         | 14      | 10      | 7           | 5            | 21       | 6            | 16           | 26       |
| <b>3. Where are these programs offered?</b>   |             |           |         |         |             |              |          |              |              |          |
| *on-site  | 22          | 14        | 22      | 18      | 13          | 11           | 17       | 20           | 28           | 34       |
| *central corporate office   | 1           | 2         | 1       | 1       | 1           | 0            | 2        | 2            | 0            | 2        |
| *off-site   | 9           | 2         | 17      | 2       | 5           | 2            | 13       | 10           | 3            | 4        |
| <b>4. When are these programs offered?</b>  |             |           |         |         |             |              |          |              |              |          |
| *during work hours with flextime  | 20          | 11        | 16      | 14      | 8           | 7            | 6        | 16           | 26           | 32       |
| *during work hours on own time  | 7           | 2         | 8       | 3       | 5           | 3            | 7        | 5            | 3            | 5        |
| *outside normal work hours  | 5           | 4         | 13      | 3       | 7           | 5            | 22       | 10           | 2            | 2        |
| <b>5. How are these programs funded?</b>  |             |           |         |         |             |              |          |              |              |          |
| *full employer supported  | 23          | 12        | 20      | 17      | 6           | 10           | 10       | 22           | 31           | 34       |
| *full employee financed   | 0           | 1         | 1       | 1       | 6           | 1            | 7        | 3            | 1            | 0        |
| *partial joint payment  | 2           | 0         | 10      | 0       | 2           | 0            | 9        | 0            | 0            | 0        |
| *insurance  | 4           | 2         | 4       | 2       | 4           | 1            | 1        | 3            | 0            | 2        |
| *free of charge/outside firm  | 2           | 2         | 3       | 2       | 3           | 4            | 5        | 4            | 1            | 2        |
| <b>6. Who is eligible to participate in these programs?</b>                         |             |           |         |         |             |              |          |              |              |          |
| *Management   | 2           | 1         | 0       | 0       | 0           | 0            | 1        | 1            | 3            | 3        |
| *all employees  | 27          | 15        | 35      | 14      | 16          | 13           | 31       | 26           | 28           | 34       |
| *Family members   | 5           | 6         | 6       | 2       | 3           | 2            | 7        | 6            | 1            | 1        |
| *only referred employees  | 0           | 0         | 1       | 1       | 2           | 0            | 1        | 2            | 2            | 3        |

Overall Results

APPENDIX H

**Worksite Health Promotion**

|  | Hlth Screen  | Risk Appr | Smoking | High BP | Weight Loss | Nutrition Ed | Exercise | Stress Mngmt | Back Care Ed | Accident |    |
|--|--|-----------|---------|---------|-------------|--------------|----------|--------------|--------------|----------|----|
| <b>Overall Results</b>   | <b>7. Do program participants receive any form of incentives/benefits such as:</b> |           |         |         |             |              |          |              |              |          |    |
|  | *reduced program fees  | 2         | 1       | 3       | 0           | 2            | 0        | 6            | 0            | 1        | 1  |
|  | *flextime  | 0         | 0       | 2       | 3           | 2            | 2        | 3            | 2            | 3        | 2  |
|  | *insurance benefits  | 5         | 4       | 7       | 4           | 4            | 0        | 4            | 3            | 1        | 2  |
|  | *salary/monitary incentives  | 0         | 0       | 2       | 0           | 0            | 1        | 1            | 0            | 0        | 5  |
|  | <b>8. Approximately how often are these programs offered?</b>                      |           |         |         |             |              |          |              |              |          |    |
|  | *weekly  | 1         | 0       | 4       | 4           | 5            | 1        | 11           | 2            | 5        | 10 |
|  | *monthly   | 0         | 0       | 1       | 0           | 2            | 2        | 1            | 3            | 4        | 9  |
|  | *annually  | 19        | 10      | 8       | 5           | 4            | 2        | 8            | 7            | 9        | 8  |
|  | *only when pertinent or requested  | 7         | 5       | 17      | 9           | 6            | 7        | 11           | 15           | 11       | 13 |
|  | <b>9. Who initiates / facilitates these programs?</b>                              |           |         |         |             |              |          |              |              |          |    |
|  | *motivated employee  | 3         | 1       | 10      | 8           | 6            | 5        | 13           | 9            | 4        | 3  |
| *assigned employee   | 18   | 11        | 15      | 11      | 11          | 7            | 12       | 15           | 21           | 29       |    |
| *local organizations   | 3  | 2         | 6       | 1       | 3           | 1            | 3        | 4            | 1            | 1        |    |
| <b>10. Program is offered because management perceives the benefits to be:</b>               |  |           |         |         |             |              |          |              |              |          |    |
| *improved employee morale  | 12   | 6         | 11      | 7       | 9           | 4            | 19       | 22           | 9            | 16       |    |
| *improved employee health  | 22   | 11        | 27      | 17      | 15          | 11           | 24       | 21           | 24           | 25       |    |
| *improved productivity   | 7  | 3         | 15      | 8       | 10          | 4            | 14       | 18           | 20           | 25       |    |
| *reduced health care cost  | 18   | 12        | 22      | 15      | 13          | 9            | 20       | 20           | 23           | 27       |    |
| <b>11. Check any program you would be interested in having but is not currently offered.</b> |  |           |         |         |             |              |          |              |              |          |    |
|  | 4  | 1         | 7       | 4       | 6           | 5            | 5        | 9            | 6            | 3        |    |
| <b>12. How many programs are offered within each company?</b>                                |  |           |         |         |             |              |          |              |              |          |    |
| A. NONE  | 24   |           |         |         |             |              |          |              |              |          |    |
| B. 1 or 2  | 33   |           |         |         |             |              |          |              |              |          |    |
| C. 3 to 5  | 29   |           |         |         |             |              |          |              |              |          |    |
| D. 6 to 10   | 18   |           |         |         |             |              |          |              |              |          |    |

104 total



**APPENDIX I - - 750 + Employee  
Company Frequency Report,  
Metropolitan Survey**

Worksite Health Promotion

|  | Hlth Screen | Risk Appr | Smoking | High BP | Weight Loss | Nutrition Ed | Exercise | Stress Mngmt | Back Care Ed | Accident |
|--|-------------|-----------|---------|---------|-------------|--------------|----------|--------------|--------------|----------|
| 1. Check all programs which are currently being offered to company employees | 12          | 5         | 8       | 7       | 7           | 7            | 13       | 10           | 10           | 11       |
| 2. How are the programs which are offered delivered to the employees?        |             |           |         |         |             |              |          |              |              |          |
| *a workshop or class   | 4           | 2         | 5       | 1       | 4           | 5            | 2        | 7            | 8            | 9        |
| *individual counseling   | 1           | 1         | 1       | 4       | 2           | 0            | 1        | 2            | 0            | 2        |
| *an ongoing program  | 7           | 2         | 1       | 3       | 1           | 0            | 9        | 1            | 5            | 4        |
| 3. Where are these programs offered?   |             |           |         |         |             |              |          |              |              |          |
| *on-site   | 8           | 4         | 4       | 6       | 4           | 5            | 5        | 7            | 9            | 9        |
| *central corporate office  | 1           | 1         | 0       | 1       | 1           | 0            | 2        | 1            | 0            | 1        |
| *off-site  | 5           | 2         | 5       | 1       | 3           | 2            | 5        | 4            | 2            | 3        |
| 4. When are these programs offered?  |             |           |         |         |             |              |          |              |              |          |
| *during work hours with flextime   | 6           | 2         | 3       | 4       | 1           | 1            | 2        | 4            | 6            | 7        |
| *during work hours on own time   | 5           | 2         | 1       | 2       | 2           | 2            | 4        | 3            | 2            | 2        |
| *outside normal work hours   | 2           | 2         | 4       | 1       | 4           | 3            | 9        | 3            | 1            | 2        |
| 5. How are these programs funded?  |             |           |         |         |             |              |          |              |              |          |
| *full employer supported   | 9           | 4         | 6       | 6       | 2           | 4            | 5        | 10           | 10           | 9        |
| *full employee financed  | 0           | 0         | 0       | 1       | 1           | 0            | 4        | 0            | 0            | 0        |
| *partial joint payment   | 0           | 0         | 2       | 0       | 1           | 0            | 3        | 0            | 0            | 0        |
| *insurance   | 2           | 1         | 1       | 1       | 2           | 1            | 1        | 1            | 0            | 0        |
| *free of charge/outside firm   | 2           | 2         | 1       | 1       | 2           | 3            | 2        | 1            | 1            | 2        |
| 6. Who is eligible to participate in these programs?                         |             |           |         |         |             |              |          |              |              |          |
| *Management  | 1           | 1         | 0       | 0       | 0           | 0            | 0        | 1            | 1            | 1        |
| *all employees   | 11          | 5         | 9       | 3       | 6           | 6            | 12       | 7            | 7            | 8        |
| *Family members  | 2           | 2         | 2       | 1       | 2           | 2            | 3        | 2            | 1            | 0        |
| *only referred employees   | 0           | 0         | 0       | 0       | 1           | 0            | 1        | 1            | 1            | 1        |

**Worksite Health Promotion**

|  | Hlth Screen | Risk Appr | Smoking | High BP | Weight Loss | Nutrition Ed | Exercise | Stress Mngmt | Back Care Ed | Accident |
|--|-------------|-----------|---------|---------|-------------|--------------|----------|--------------|--------------|----------|
| <b>7. Do program participants receive any form of incentives/benefits such as:</b>           |             |           |         |         |             |              |          |              |              |          |
| *reduced program fees  | 0           | 0         | 1       | 0       | 1           | 0            | 1        | 0            | 0            | 9        |
| *flextime  | 0           | 0         | 1       | 1       | 1           | 0            | 1        | 1            | 1            | 1        |
| *insurance benefits  | 2           | 1         | 2       | 1       | 1           | 0            | 3        | 1            | 1            | 1        |
| *salary/monitary incentives  | 0           | 0         | 0       | 0       | 0           | 1            | 0        | 0            | 0            | 0        |
| <b>8. Approximately how often are these programs offered?</b>                                |             |           |         |         |             |              |          |              |              |          |
| *weekly  | 0           | 0         | 0       | 1       | 1           | 0            | 4        | 1            | 1            | 2        |
| *monthly   | 0           | 0         | 1       | 0       | 2           | 0            | 0        | 2            | 3            | 2        |
| *annually  | 7           | 3         | 1       | 3       | 2           | 2            | 4        | 1            | 2            | 3        |
| *only when pertinent or request  | 5           | 3         | 6       | 3       | 3           | 5            | 6        | 7            | 5            | 5        |
| <b>9. Who initiates / facilitates these programs?</b>  |             |           |         |         |             |              |          |              |              |          |
| *motivated employee  | 1           | 0         | 1       | 3       | 2           | 2            | 4        | 2            | 1            | 0        |
| *assigned employee   | 5           | 4         | 4       | 3       | 4           | 4            | 6        | 6            | 9            | 9        |
| *local organizations   | 3           | 2         | 2       | 1       | 2           | 1            | 1        | 1            | 0            | 0        |
| <b>10. Program is offered because management perceives the benefits to be:</b>               |             |           |         |         |             |              |          |              |              |          |
| *improved employee morale  | 6           | 3         | 3       | 3       | 4           | 3            | 9        | 7            | 3            | 4        |
| *improved employee health  | 10          | 5         | 6       | 6       | 6           | 6            | 10       | 7            | 10           | 9        |
| *improved productivity   | 1           | 1         | 3       | 3       | 4           | 2            | 5        | 5            | 7            | 8        |
| *reduced health care cost  | 6           | 4         | 5       | 5       | 5           | 4            | 8        | 6            | 9            | 9        |
| <b>11. Check any program you would be interested in having but is not currently offered.</b> | 1           | 0         | 4       | 2       | 4           | 2            | 2        | 3            | 2            | 0        |
| <b>12. How many programs are offered within each company?</b>                                |             |           |         |         |             |              |          |              |              |          |
| A. NONE  | 3           |           |         |         |             |              |          |              |              |          |
| B. 1 or 2  | 9           |           |         |         |             |              |          |              |              |          |
| C. 3 to 5  | 5           |           |         |         |             |              |          |              |              |          |
| D. 6 to 10   | 8           |           |         |         |             |              |          |              |              |          |

25 total

750 + Frequency Report

APPENDIX I

**APPENDIX J - - 250-749 Employee  
Company Frequency Report,  
Metropolitan Survey**

Worksite Health Promotion

|  | Hlth Screen | Risk Appr | Smoking | High BP | Weight Loss | Nutrition Ed | Exercise | Stress Mngmt | Back Care Ed | Accident |
|--|-------------|-----------|---------|---------|-------------|--------------|----------|--------------|--------------|----------|
| 1. Check all programs which are currently being offered to company employees | 9           | 5         | 15      | 5       | 6           | 3            | 15       | 11           | 11           | 15       |
| 2. How are the programs which are offered delivered to the employees?        |             |           |         |         |             |              |          |              |              |          |
| *a workshop or class   | 4           | 2         | 10      | 1       | 4           | 2            | 3        | 6            | 7            | 7        |
| *individual counseling   | 2           | 1         | 1       | 3       | 2           | 1            | 2        | 4            | 2            | 4        |
| *an ongoing program  | 3           | 1         | 5       | 3       | 3           | 2            | 9        | 2            | 6            | 11       |
| 3. Where are these programs offered?   |             |           |         |         |             |              |          |              |              |          |
| *on-site   | 7           | 3         | 7       | 5       | 6           | 3            | 7        | 8            | 9            | 12       |
| *central corporate office  | 0           | 1         | 0       | 0       | 0           | 0            | 0        | 1            | 0            | 1        |
| *off-site  | 2           | 0         | 8       | 0       | 1           | 0            | 8        | 2            | 1            | 0        |
| 4. When are these programs offered?  |             |           |         |         |             |              |          |              |              |          |
| *during work hours with flextime   | 7           | 2         | 5       | 5       | 5           | 3            | 3        | 9            | 11           | 13       |
| *during work hours on own time   | 2           | 0         | 3       | 0       | 2           | 1            | 2        | 0            | 0            | 1        |
| *outside normal work hours   | 0           | 0         | 4       | 0       | 0           | 0            | 10       | 2            | 0            | 0        |
| 5. How are these programs funded?  |             |           |         |         |             |              |          |              |              |          |
| *full employer supported   | 7           | 2         | 3       | 4       | 2           | 2            | 3        | 6            | 10           | 13       |
| *full employee financed  | 0           | 0         | 0       | 0       | 4           | 0            | 2        | 2            | 0            | 0        |
| *partial joint payment   | 2           | 0         | 4       | 0       | 0           | 0            | 4        | 0            | 0            | 0        |
| *insurance   | 0           | 0         | 1       | 0       | 0           | 0            | 0        | 0            | 0            | 0        |
| *free of charge/outside firm   | 0           | 0         | 2       | 1       | 1           | 1            | 3        | 2            | 0            | 0        |
| 6. Who is eligible to participate in these programs?                         |             |           |         |         |             |              |          |              |              |          |
| *Management  | 1           | 0         | 0       | 0       | 0           | 0            | 1        | 0            | 2            | 2        |
| *all employees   | 7           | 2         | 14      | 5       | 6           | 3            | 15       | 11           | 10           | 12       |
| *Family members  | 1           | 1         | 2       | 0       | 0           | 0            | 2        | 0            | 0            | 0        |
| *only referred employees   | 0           | 0         | 0       | 0       | 0           | 0            | 0        | 0            | 1            | 2        |

Worksite Health Promotion

|  | Hlth Screen | Risk Appr | Smoking | High BP | Weight Loss | Nutrition Ed | Exercise | Stress Mngmt | Back Care Ed | Accident |
|--|-------------|-----------|---------|---------|-------------|--------------|----------|--------------|--------------|----------|
| <b>7. Do program participants receive any form of incentives/benefits such as:</b>           |             |           |         |         |             |              |          |              |              |          |
| *reduced program fees  | 2           | 1         | 1       | 0       | 0           | 0            | 4        | 0            | 1            | 1        |
| *flextime  | 0           | 0         | 1       | 1       | 1           | 1            | 2        | 1            | 1            | 1        |
| *insurance benefits  | 0           | 0         | 2       | 0       | 0           | 0            | 1        | 0            | 0            | 0        |
| *salary/monitary incentives  | 0           | 0         | 1       | 0       | 0           | 0            | 0        | 0            | 0            | 2        |
| <b>8. Approximately how often are these programs offered?</b>                                |             |           |         |         |             |              |          |              |              |          |
| *weekly  | 0           | 0         | 4       | 2       | 4           | 1            | 6        | 1            | 1            | 4        |
| *monthly   | 0           | 0         | 0       | 0       | 0           | 0            | 1        | 0            | 1            | 5        |
| *annually  | 5           | 3         | 1       | 0       | 0           | 0            | 3        | 4            | 6            | 4        |
| *only when pertinent or request  | 2           | 1         | 5       | 3       | 1           | 1            | 4        | 2            | 1            | 4        |
| <b>9. Who initiates / facilitates these programs?</b>  |             |           |         |         |             |              |          |              |              |          |
| *motivated employee  | 0           | 0         | 2       | 1       | 1           | 0            | 4        | 2            | 0            | 0        |
| *assigned employee   | 8           | 3         | 6       | 5       | 4           | 2            | 6        | 7            | 7            | 10       |
| *local organizations   | 0           | 0         | 2       | 0       | 1           | 0            | 2        | 0            | 1            | 1        |
| <b>10. Program is offered because management perceives the benefits to be:</b>               |             |           |         |         |             |              |          |              |              |          |
| *improved employee morale  | 4           | 2         | 4       | 2       | 4           | 1            | 7        | 8            | 4            | 9        |
| *improved employee health  | 6           | 4         | 11      | 5       | 5           | 2            | 11       | 6            | 10           | 11       |
| *improved productivity   | 4           | 3         | 6       | 3       | 3           | 1            | 7        | 6            | 8            | 9        |
| *reduced health care cost  | 7           | 4         | 10      | 5       | 5           | 2            | 10       | 8            | 9            | 11       |
| <b>11. Check any program you would be interested in having but is not currently offered.</b> | 2           | 1         | 3       | 1       | 2           | 2            | 2        | 3            | 4            | 3        |
| <b>12. How many programs are offered within each company?</b>                                |             |           |         |         |             |              |          |              |              |          |
| A. NONE  | 9           |           |         |         |             |              |          |              |              |          |
| B. 1 or 2  | 10          |           |         |         |             |              |          |              |              |          |
| C. 3 to 5  | 11          |           |         |         |             |              |          |              |              |          |
| D. 6 to 10   | 5           |           |         |         |             |              |          |              |              |          |

35 TOTAL

**APPENDIX K - - 100-249 Employee  
Company Frequency Report,  
Metropolitan Survey**

Worksite Health Promotion

|  | Hlth Screen | Risk Appr | Smoking | High BP | Weight Loss | Nutrition Ed | Exercise | Stress Mngmt | Back Care Ed | Accident |
|--|-------------|-----------|---------|---------|-------------|--------------|----------|--------------|--------------|----------|
| 1. Check all programs which are currently being offered to company employees | 9           | 8         | 15      | 8       | 5           | 4            | 5        | 9            | 11           | 13       |
| 2. How are the programs which are offered delivered to the employees?        |             |           |         |         |             |              |          |              |              |          |
| *a workshop or class   | 1           | 2         | 5       | 1       | 2           | 2            | 1        | 4            | 7            | 5        |
| *individual counseling   | 3           | 3         | 2       | 5       | 2           | 2            | 3        | 3            | 3            | 3        |
| *an ongoing program  | 5           | 3         | 8       | 4       | 3           | 3            | 3        | 3            | 5            | 11       |
| 3. Where are these programs offered?   |             |           |         |         |             |              |          |              |              |          |
| *on-site   | 7           | 7         | 11      | 7       | 3           | 3            | 5        | 5            | 10           | 13       |
| *central corporate office  | 0           | 0         | 1       | 0       | 0           | 0            | 0        | 0            | 0            | 0        |
| *off-site  | 2           | 1         | 4       | 1       | 2           | 0            | 2        | 4            | 0            | 1        |
| 4. When are these programs offered?  |             |           |         |         |             |              |          |              |              |          |
| *during work hours with flextime   | 7           | 7         | 8       | 5       | 2           | 3            | 1        | 3            | 9            | 12       |
| *during work hours on own time   | 0           | 0         | 4       | 1       | 1           | 0            | 1        | 2            | 1            | 2        |
| *outside normal work hours   | 3           | 2         | 5       | 2       | 3           | 2            | 3        | 5            | 1            | 0        |
| 5. How are these programs funded?  |             |           |         |         |             |              |          |              |              |          |
| *full employer supported   | 7           | 6         | 8       | 7       | 2           | 4            | 2        | 6            | 11           | 12       |
| *full employee financed  | 0           | 1         | 1       | 0       | 1           | 1            | 1        | 1            | 1            | 0        |
| *partial joint payment   | 0           | 0         | 4       | 0       | 1           | 0            | 2        | 0            | 0            | 0        |
| *insurance   | 2           | 1         | 2       | 1       | 2           | 0            | 0        | 2            | 0            | 2        |
| *free of charge/outside firm   | 0           | 0         | 0       | 0       | 0           | 0            | 0        | 1            | 0            | 0        |
| 6. Who is eligible to participate in these programs?                         |             |           |         |         |             |              |          |              |              |          |
| *Management  | 0           | 0         | 0       | 0       | 0           | 0            | 0        | 0            | 0            | 0        |
| *all employees   | 9           | 8         | 12      | 8       | 4           | 4            | 4        | 8            | 11           | 13       |
| *Family members  | 2           | 3         | 2       | 1       | 1           | 0            | 1        | 4            | 0            | 1        |
| *only referred employees   | 0           | 0         | 1       | 1       | 1           | 0            | 0        | 1            | 0            | 0        |



**Worksite Health Promotion**

|  | Hlth Screen | Risk Appr | Smoking | High BP | Weight Loss | Nutrition Ed | Exercise | Stress Mngmt | Back Care Ed | Accident |
|--|-------------|-----------|---------|---------|-------------|--------------|----------|--------------|--------------|----------|
| <b>7. Do program participants receive any form of incentives/benefits such as:</b>           |             |           |         |         |             |              |          |              |              |          |
| *reduced program fees  | 0           | 0         | 1       | 0       | 1           | 0            | 1        | 0            | 0            | 0        |
| *flextime  | 0           | 0         | 0       | 1       | 0           | 1            | 0        | 0            | 1            | 0        |
| *insurance benefits  | 3           | 3         | 3       | 3       | 3           | 0            | 0        | 2            | 0            | 1        |
| *salary/monitary incentives  | 0           | 0         | 1       | 0       | 0           | 0            | 1        | 0            | 0            | 3        |
| <b>8. Approximately how often are these programs offered?</b>                                |             |           |         |         |             |              |          |              |              |          |
| *weekly  | 0           | 0         | 0       | 1       | 0           | 0            | 1        | 0            | 3            | 4        |
| *monthly   | 0           | 0         | 0       | 0       | 0           | 2            | 0        | 1            | 0            | 2        |
| *annually  | 7           | 4         | 6       | 2       | 2           | 0            | 1        | 2            | 1            | 1        |
| *only when pertinent or request  | 0           | 1         | 6       | 3       | 2           | 1            | 1        | 6            | 5            | 4        |
| <b>9. Who initiates / facilitates these programs?</b>  |             |           |         |         |             |              |          |              |              |          |
| *motivated employee  | 2           | 1         | 7       | 4       | 3           | 3            | 5        | 5            | 3            | 3        |
| *assigned employee   | 5           | 4         | 5       | 3       | 3           | 1            | 0        | 2            | 5            | 10       |
| *local organizations   | 0           | 0         | 1       | 0       | 0           | 0            | 0        | 2            | 0            | 0        |
| <b>10. Program is offered because management perceives the benefits to be:</b>               |             |           |         |         |             |              |          |              |              |          |
| *improved employee morale  | 2           | 1         | 4       | 2       | 1           | 0            | 3        | 7            | 2            | 3        |
| *improved employee health  | 6           | 4         | 10      | 6       | 4           | 3            | 3        | 8            | 4            | 5        |
| *improved productivity   | 2           | 0         | 6       | 2       | 3           | 1            | 2        | 7            | 5            | 8        |
| *reduced health care cost  | 5           | 4         | 7       | 5       | 3           | 3            | 2        | 6            | 5            | 7        |
| <b>11. Check any program you would be interested in having but is not currently offered.</b> | 1           | 0         | 0       | 1       | 0           | 1            | 1        | 3            | 0            | 0        |

|   |    |
|---|----|
| <b>12. How many programs are offered within each company?</b> |    |
| A. NONE   | 12 |
| B. 1 or 2   | 14 |
| C. 3 to 5   | 13 |
| D. 6 to 10  | 5  |

44 TOAL

100-249 Frequency Report  
APPENDIX K

VITA<sup>2</sup>

**Kenneth D. Grant**

**Candidate for the Degree of**

**Master of Science**

**Thesis: A COMPARISON OF A METROPOLITAN SURVEY OF WORKSITE HEALTH PROMOTION ACTIVITIES WITH THE NATIONAL WORKSITE SURVEYS.**

**Major Field: Health, Physical Education & Leisure;  
emphasis in Health Promotion**

**Biographical:**

**Personal Data: Born in Alvin, Texas, On June 25, 1967, the son of Don and Betty Grant, brother of David Grant.**

**Education: Graduated from North Mesquite High School, Mesquite, Texas in May 1985; attended Southern Methodist University, Dallas, Texas until spring 1987. Received Bachelor of Science degree in Health Education from Oklahoma State University, Stillwater, Oklahoma in May 1990. Completed the requirements for the Master of Science degree with a major in Health Promotion at Oklahoma State University in December 1994.**

**Experience: Texas Blue-Chipper 1985 (football); Collegiate Football at both Southern Methodist and Oklahoma State, four year letterman. Employed by Oklahoma State University, Department of Health, Physical Education, and Leisure as a graduate assistant 1990; employed at St. John Medical Center, Tulsa, Oklahoma as an Exercise Physiologist / Program Manager, 1990 to present; founder and president of CORPWELL, 1994 to present.**

**Professional Membership: Central States Chapter and National member of the American College of Sports Medicine; Association for Worksite Health Promotion.**

OKLAHOMA STATE UNIVERSITY  
INSTITUTIONAL REVIEW BOARD  
HUMAN SUBJECTS REVIEW

Date: 10-18-94

IRB#: ED-95-018

**Proposal Title:** A COMPARISON OF A METROPOLITAN SURVEY OF WORKSITE HEALTH PROMOTION ACTIVITIES WITH THE NATIONAL WORKSITE SURVEYS

**Principal Investigator(s):** Betty Edgley, Ken Grant

**Reviewed and Processed as:** Exempt

**Approval Status Recommended by Reviewer(s):** Approved

APPROVAL STATUS SUBJECT TO REVIEW BY FULL INSTITUTIONAL REVIEW BOARD AT NEXT MEETING.

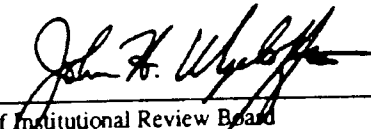
APPROVAL STATUS PERIOD VALID FOR ONE CALENDAR YEAR AFTER WHICH A CONTINUATION OR RENEWAL REQUEST IS REQUIRED TO BE SUBMITTED FOR BOARD APPROVAL.

ANY MODIFICATIONS TO APPROVED PROJECT MUST ALSO BE SUBMITTED FOR APPROVAL.

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Comments, Modifications/Conditions for Approval or Reasons for Deferral or Disapproval are as follows:

Signature:

  
\_\_\_\_\_  
Chair of Institutional Review Board

Date: October 26, 1994