

Getting People Healthy in New Orleans



Point 7: Employee Health

There are two components to a strong Employee Health Program:

- Health Promotion, which includes wellness promotion and disease management, and
- Occupational Safety.

Investment in health promotion at the worksite provides businesses large and small a valuable opportunity to join with thousands of public and private sector companies in reaping the benefits prevention offers, while also helping their communities meet the objectives of the *Healthy People 2010* agenda for the United States. The promise of prevention stems directly from evidence that many of the leading causes of disability and premature death in the United States are potentially avoidable or controllable, including most injuries, many serious acute and chronic conditions, many forms of heart disease, and some cancers. Behavior changes at any age can return rewards in health and productivity. In other cases, the early detection of illness can simplify treatment and increase chances for a complete recovery. And that's good news for businesses because they rely on people.

Worksites, where most adults typically spend half or more of their waking hours, have a powerful impact on individuals' health. The 1999 National Worksite Health Promotion Survey reveals that employee health promotion programs are becoming more prevalent and more comprehensive. Many employers are also finding it rewarding to take part in larger community-based health promotion coalitions that address priority health issues.

In addition to the positive effects that can be gained with employer-supported health promotion and disease management programs, it must be recognized that the toll of workplace injuries and illnesses is significant. Every five seconds, a worker is injured in the United States.^{1, 2} Every ten seconds, a worker is temporarily or permanently disabled.^{1, 2} Each day, an average of 137 persons die from work-related diseases, and an additional seventeen die from injuries on the job.³ Although youth (adolescents aged 17 years and under) represent only 2% of the total workforce, each year 74,000 require treatment in hospital emergency departments for work-related injuries, and 70 die of those injuries.⁴ In 1996, an estimated 11,000 workers were disabled each day due to work-related injuries.⁵ In 1996, the National Safety Council estimated that on-the-job injuries alone cost society \$121 billion, representing the sum of lost wages, lost productivity, administrative expenses, health care, and other costs. The 1992 combined U.S. economic burden for occupational illnesses and injuries was an estimated \$171 billion.⁶

WELLNESS PROMOTION AND DISEASE MANAGEMENT

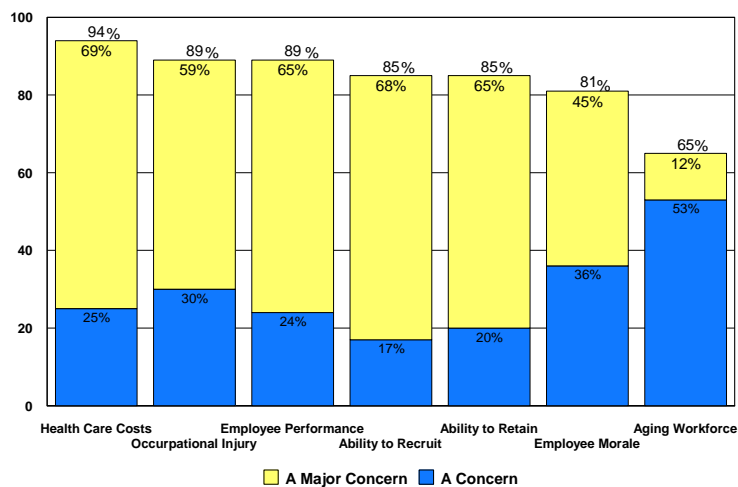
There are four reasons for promoting wellness and managing disease in the workplace.

Reason #1: Improve Productivity

Michael P. O'Donnell, editor of the *American Journal of Health Promotion*, has noted that health promotion activities are likely to yield greater returns from increased employee productivity than from medical care cost-savings. Productivity-related benefits are also more likely to be closely aligned with an organization's short and long-term priorities.⁷ In fact, in addition to simply keeping employees healthy, the top reasons employers give for instituting health promotion programs are to improve employee morale (mentioned by 77% of National Worksite Health Promotion Survey respondents), retain good workers (75%), attract good employees (67%), and improve productivity(64%).⁸ According to data from the 1999 National Worksite Health Promotion Survey (NWHPS), employers are worried about health care costs, but significant majorities are also concerned about employees' on-the-job performance, their recruitment and retention, worksite morale, and the aging of the American workforce, as shown in Figure 10.1.⁸ These concerns are an important part of the motivation for employers to consider worksite health promotion activities. The University of Michigan Health Management Research Center reports that adults with multiple risk factors for disease (e.g., high blood pressure, smoking, and sedentary habits) are more likely to be high-cost employees in terms of healthcare use, absenteeism, disability, and overall productivity.⁹

On the other hand, not surprisingly, individuals with multiple health risks (e.g., obesity, cigarette smoking, and high blood pressure) tend to be less productive than their peers with better health profiles.⁹ A growing body of scientific research makes the case that managing employee health is an essential, but often overlooked, component of productivity management.

Figure 10.1: Employer Concerns Related to Employee Health



Data based on responses from 1,544 public and private worksites with at least 50 employees.
SOURCE: 1999 National Worksite Health Promotion Survey

The two outcomes that have been most extensively documented are the reduction of employee health risks and reduced absenteeism.

Reason #2: Lower healthcare costs.

Medically high-risk employees are medically high-cost employees. They both use more healthcare and generate higher claim costs than their low-risk peers.^{10,11,12} A collaborative study involving Chrysler Corporation and the United Auto Workers Union showed that:

- Smokers generated 31% higher claim costs than non-smokers; and
- Workers with unhealthy weights had 143% higher hospital inpatient utilization than those

with healthy weights.¹²

As the number of risk factors increases, so do costs.⁹

Excess disease risks are associated with excess medical costs. Dozens of mid- to large-size employers have found that lowering risk helps to control the high price of healthcare. A 1998 analysis of eight rigorously evaluated health promotion programs determined an average reduction in healthcare expenses of \$3.35 for every dollar spent on health promotion.¹³ Indeed, many studies demonstrate that health promotion programs can and do reduce medical expenditures, resulting in direct cost-savings.¹³ While some companies have instituted very comprehensive, multi-component health programs, others have achieved savings with just one or a few simple activities to promote healthy behaviors and/or encourage more appropriate use of health services.

- Sunbeam-Oster Co., a producer of small electrical appliances with a largely female workforce, attempted to control health costs by providing mandatory prenatal care classes for pregnant employees. (Classes were held on-site during work hours and women received full pay for attending.) The result? Four premature births occurred during the eight years after the program began, compared to five in the two years preceding the program. Sunbeam-Oster saw its maternal and newborn care costs decline by 86% in just two years (taking into account the cost of the prenatal classes). Overall, costs fell from an average of \$27,243 per employee to \$3,792.⁸
- The Citibank “Health Management Program” provided a health risk appraisal to 40% of Citibank’s 42,000 employees, followed by risk-appropriate interventions to help employees manage chronic conditions and to reduce the demand for unnecessary health services. Over a 38-month period, Citibank spent nearly \$2 million and accrued \$12.6 million in program benefits, most of which came from the difference in medical expenditures between program participants and non-participants.¹⁴
- The Hanford Nuclear Reservation slashed the number of lost workdays by offering employees influenza immunizations at multiple worksites over a four-week period. The total number of lost workdays attributed to influenza-like illness was 63 per 100 in the unvaccinated group and just 35 per 100 in the vaccinated group. Hanford’s savings were estimated at \$83.84 per person vaccinated, including productivity gains and reduced use of medical care and prescription drugs. Duncan Aviation, with 450 employees in Battle Creek, Michigan, began its health awareness program more than 13 years ago solely to keep employees healthy. And it has. Duncan has eliminated 60% of identified employee health risks (high blood pressure, obesity, smoking, etc.). Of equal importance, while the health insurance costs of neighboring companies have been increasing by 18% to 40% over the past several years, Duncan’s costs have increased only 7% to 14% even though its health plans are more comprehensive than those of neighboring firms. The health awareness program has received the prestigious C. Everett Koop National Health Award, and the company was recognized by *Fortune* magazine as one of the top 100 U.S. firms at which to be employed.¹⁵

These and numerous other studies provide evidence that well-designed worksite health promotion programs can promote health and yield a financial return-on-investment.

Reason #3: Become a good corporate citizen by promoting health *beyond* the worksite.

There is no disputing that the health of a community is related to the economic vitality of the businesses found there. If a community’s physical and human infrastructure deteriorates, businesses eventually leave. Even with Internet capabilities and overnight mail, location matters. The Washington Business Group on Health (WBGH), a national health policy organization representing the business community, has queried its corporate members about their basic expectations from “a

healthy community.” Results from a survey of WBGH member companies, though not representative of all businesses, are suggestive. While these employers cited a need for a healthy environment, an attractive place to live, safety, and education, they most commonly wanted communities to provide:

- a pool of healthy, potential new employees,
- productive current employees, and
- basic medical coverage for all local residents.

These employers understand the connection between community health and business success.¹⁶ Health promotion offers communities and businesses an opportunity to move forward together. Business participation makes community-wide health promotion efforts—like health fairs and health-oriented media campaigns—more likely to succeed. On the other hand, public health agencies, hospitals, and other public partners can give businesses access to data and expert advice on pressing community health problems that probably affect their employees.

Businesses also gain by demonstrating social responsibility:

- building public goodwill and a reputation as a good corporate citizen (a neighbor of choice),
- directly and indirectly promoting the health of company employees (since health insurance and worksite health promotion alone do not ensure individual protection from diseases, environmental factors, and risky behaviors that may lead to illness),
- directly and indirectly promoting the health of retirees, employees’ families, potential replacement workers, consumers, and/or service providers—all of whom can have an impact on a business’s long-term success, and
- influencing managed care organizations regarding practical benefits for smaller employers.

Here are two quick examples of business involvement in community health efforts.

- The Eastman Kodak Company is the largest employer in the city of Rochester, New York. As part of the Rochester County Health Commission, Kodak is part of an initiative to make Rochester the healthiest community in America by 2020.
- Proctor and Gamble, based in Cincinnati, Ohio, is a member of the Health Improvement Collaborative of Greater Cincinnati. Its many activities include a regional health status report, a diabetes-focused healthcare study, and a flu shot campaign.

Reason #4: Help the nation achieve its health objectives for the year 2010.

Employers occupy a prominent and influential position in the health environment, with unparalleled access to working Americans. They are in a unique position to contribute to the health of their employees and their communities. Consequently, they are in an essential position to help the nation achieve its health goals for the year 2010. In fact, without business support, the national *Healthy People 2010* initiative, described further below, will fall short.

Even well-meaning employers may unknowingly contribute to a cultural environment that does not promote health. For example, employers who do not restrict worksite smoking, by default, put non-smokers at increased risk for respiratory problems related to secondhand smoke exposure. Often, the choice is not between doing nothing and doing something, but between doing something health-promoting or continuing practices that may unintentionally support poor health habits. Health experts agree that lifestyle changes can be encouraged by increasing awareness of health risks, helping people change problem behaviors, and creating environments that support good health practices. However, of the three, “supportive environments will probably have the greatest impact.” Since most adults spend the majority of their daytime hours at work, the impact of work environment on health can be significant.

Employers are also the primary source of health insurance for working Americans and their families. It matters whether or not employers choose or develop health plans that cover preventive services like cancer screening tests, immunizations, and smoking cessation counseling. Lack of insurance coverage is a major barrier to receipt of these important clinical services, as those without coverage are only half as likely to have received a variety of recommended preventive health services as their insured peers.¹⁷ Employers can also play an important role in holding health plans accountable for the delivery of covered services.

Finally, as mentioned above, businesses can make meaningful contributions to community health programs. All of these efforts advance the national agenda to achieve a healthier population by the year 2010.

OCCUPATIONAL HEALTH

OVERVIEW

Work-related injuries and illnesses include any injuries or illnesses incurred by persons engaged in work-related activities while on or off the worksite. This includes injuries and illnesses that occur during apprenticeships and vocational training, while working in family businesses, and even while volunteering as firefighters or emergency medical services (EMS) providers.

ISSUES

The nation is poised to make significant improvements in the quality of life for all working people in the United States. The National Occupational Research Agenda (NORA), developed by the National Institute for Occupational Safety and Health (NIOSH) in partnership with more than 500 outside organizations and individuals, was released in April 1996 as a framework to guide occupational safety and health research into the 21st Century. NORA partners include representatives from labor, industry, academia, state governments, and national professional organizations. The NORA process resulted in a consensus on the top 21 research priorities for occupational safety and health (see Table 10.1 below).¹⁸

Table 10.1 Top NORA Research Priorities, 1996

Category	NORA Priority Research Areas
Disease and Injury	Allergic and Irritant Dermatitis Asthma and Chronic Obstructive Pulmonary Disease Fertility and Pregnancy Abnormalities Hearing Loss Infectious Diseases Low Back Disorders Musculoskeletal Disorders of the Upper Extremities Traumatic Injuries
Work Environment and Workforce	Emerging Technologies Indoor Environment Mixed Exposures Organization of Work Special Populations at Risk
Research Tools and Approaches	Cancer Research Methods Control Technology and Personal Protective Equipment Exposure Assessment Methods Health Services Research Intervention Effectiveness Research Risk Assessment Methods Social and Economic Consequences of Workplace Illness and Injury Surveillance Research Methods

Source: NIOSH. *National Occupational Research Agenda*. Pub. No. 96-115. Cincinnati, OH: NIOSH, 1996.

One of the 21 specific priority areas identified by the NORA process is intervention effectiveness research, a type of research aimed at finding out which prevention strategies effectively protect workers' safety and health. This research will evaluate the impact of occupational prevention interventions, programs, and policies on safety and health outcomes across a broad spectrum of industries. Although measurable improvements in worker safety and health have been achieved, only a few interventions have been evaluated systematically.

Managers of public and private sector occupational safety and health programs face increasing demands to document program cost-effectiveness and impact on worker health. The lack of evidence about intervention effectiveness stymies the introduction of new programs and threatens the continuation of ongoing programs. Corporate safety and health programs, regulatory requirements and voluntary consensus standards, workers' compensation policies and loss-control programs, engineering controls, and educational campaigns are among the types of interventions that need to be developed, implemented, and evaluated. In addition to promoting worker safety and health, intervention programs can lead to increased productivity and save on long-term operating costs.

Because national data systems will not be available in the first half of the decade for tracking progress, five subjects of interest are not addressed in this focus area's objectives. These topics represent a research and data collection agenda for the coming decade and are related to a variety of activities.

The first topic covers **improvement in national workplace injury and illness surveillance** by increasing the number of states that code work-relatedness of injuries and illnesses in a variety of data systems, including cancer registries, trauma registries, risk factor surveys, and health facility data (for example, hospital emergency department visits, clinic visits, hospital discharge records).

The second addresses the reduction of exposures that result in workers having **blood lead concentrations** of 10 µg/dL or greater of whole blood.

The third involves increasing the proportion of health care facilities that appropriately protect workers by instituting **effective prevention practices** to reduce latex allergy (for example, low-protein, powder-free gloves; non-latex gloves).

The fourth is related to increasing the proportion of health care settings, correctional facilities, and homeless shelters that appropriately protect workers by implementing **effective tuberculosis control programs** (for example, administrative controls, work practice and engineering controls, employee training and skin testing, and where necessary personal respiratory protection).

The fifth relates to increasing the proportion of agricultural **tractors fitted with rollover protective structures**.

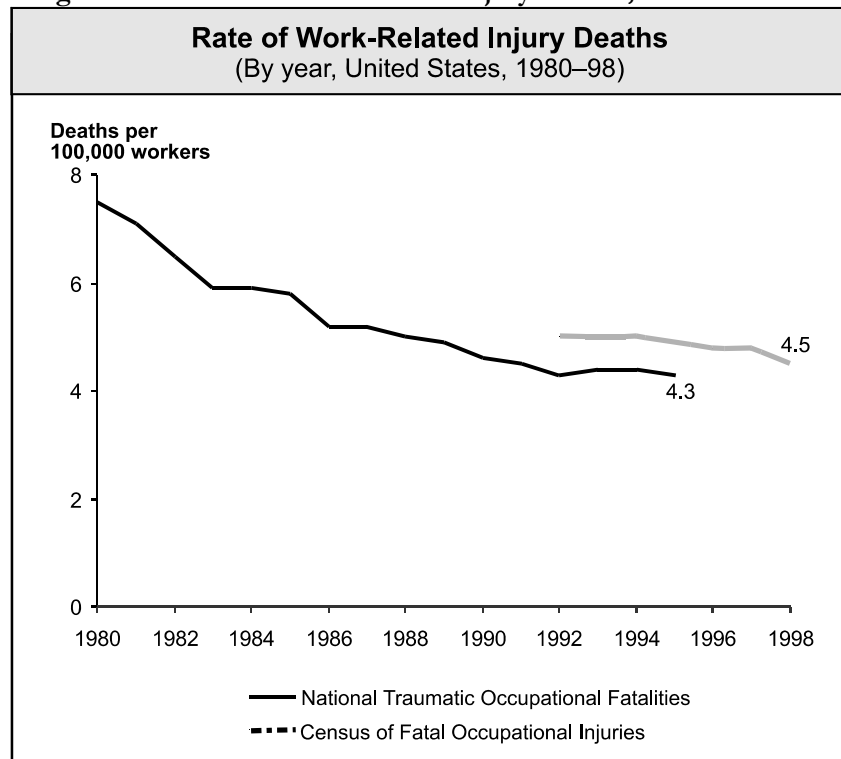
TRENDS

A number of data systems and estimates exist to describe the nature and magnitude of occupational injuries and illnesses. These data systems have advantages as well as limitations. However, no national occupational chronic disease or death reporting system currently exists. Therefore, scientists, public health professionals, and policymakers must rely on estimates of the magnitude of occupational disease generated from a number of data sources and published epidemiologic (or population-based) studies. Although these compiled estimates generally are thought to underestimate the true extent of occupational disease, they are considered to provide the best available data. Such compilations indicate that an estimated 50,000 to 70,000 workers die each year from work-related diseases. Data from the National Traumatic Occupational Fatalities Surveillance System (NTOF), based on death certificates from across the United States, demonstrate a general decrease in occupational death

over the 16-year period from 1980 through 1995. The numbers and rates of fatal injuries from 1990 through 1995 remained relatively stable—at over 5,000 deaths per year and about 4.3 deaths per 100,000 workers. Motor vehicle-related fatalities at work, the leading cause of death for U.S. workers since 1980, accounted for 23% of deaths during the 16-year period. Workplace homicides became the second leading cause of death in 1990, surpassing machine-related deaths. Although the rankings of individual industry divisions have varied across the years, the largest number of traumatic occupational deaths consistently are found in construction, transportation and public utilities, and manufacturing. Industries with the highest traumatic occupational fatality rates per 100,000 workers are mining, agriculture, forestry and fishing, and construction.¹⁹

Rates of nonfatal injuries and illnesses have declined from a rate of 8.7 per 100 full-time workers in 1980 to 7.1 per 100 full-time workers in 1997.²⁰

Figure 10.2 Rate of Work-Related Injury Deaths, U.S. 1980 - 1998



Sources: DOL, BLS. Census of Fatal Occupational Injuries (CFOI), 1992–98. CDC, NIOSH. National Traumatic Occupational Fatalities Surveillance System (NTOF), 1980–95.

DISPARITIES

Data systems that can routinely monitor disparities among population groups related to occupational injury and illness are not in place. NIOSH is working with partners and stakeholders in the occupational safety and health community to identify and address surveillance needs, including the need to track disparities.

Little is known about factors such as gender, genetic susceptibility, culture, and literacy that may increase the risk for occupational disease and injury. Occupational safety and health experts who worked to develop NORA agreed by consensus that many high-risk populations have been underserved by the occupational safety and health research community, resulting in important unanswered questions about the profile of hazards these workers face, the number of cases of work-related injuries and illnesses, the mechanisms of these injuries and illnesses, and the optimal approach

to preventing them. As a result, special populations at risk is one of the 21 NORA priority research areas that will examine the challenges faced by different groups in the increasingly diverse workforce.

OPPORTUNITIES

The growing U.S. workforce, projected to be 147 million by the year 2005, also is changing. The population is increasingly diverse and more rapidly exposed to innovative work restructuring and new technologies. Evidence suggests that the way work is organized may directly affect worker health. Work organization broadly addresses the health effects of conditions of employment. It also encompasses special characteristics related to the overall economy, including the demands for productivity; the increasing presence in the workforce of adolescents aged 16 to 17 years (2.1% increase projected each year from 1992 to 2005), women (47% of the workforce in 1997), racially and ethnically diverse workers, and older workers (the aging of baby boomers); and the ongoing evolution from an industrial to a service economy.

The NORA strategic plan will ensure that research addresses the new, emerging work environment of the 21st Century. Research translation, education, and outreach will ensure that labor, industry, academia, and national professional organizations have current information on how best to design prevention programs to protect worker safety and health.

INTERIM PROGRESS TOWARD YEAR 2000 OBJECTIVES

For work-related injury deaths and nonfatal injuries, progress has been made toward meeting *Healthy People 2000* objectives, including meeting several sub-objectives (for construction and mining). The objective for reducing cases of hepatitis B infection among occupationally exposed workers has been exceeded, but the related goal for immunizing workers for hepatitis B fell short of the 2000 target. For several objectives, the nation appears to be moving in the wrong direction—a situation that can be attributed, in part, to several confounding factors, including improved surveillance, reporting changes, and improved diagnosis. Finally, a few *Healthy People 2000* objectives cannot be tracked reliably for progress, and some objectives have low relative value for monitoring improved outcomes in worker safety and health (for instance, safety belt policies at work do not equate automatically with safety belt use). These objectives have been revised, replaced, or dropped from *Healthy People 2010* objectives.

Note: Unless otherwise noted, data are from the Centers for Disease Control and Prevention, National Center for Health Statistics, *Healthy People 2000 Review, 1998–99*.

HEALTHY PEOPLE 2010 EMPLOYEE HEALTH OBJECTIVES:

Eleven objectives have been established related to employee health, all of which are being considered by the New Orleans Health Department as it re-invents itself. These are listed on the following page and **more detailed information can be found in Appendix J.**

HEALTHY PEOPLE 2010—SUMMARY OF OBJECTIVES

Goal: Promote the health and safety of people at work through prevention and early intervention.

<u>Number</u>	<u>Objective Short Title</u>
20-1	Work-related injury deaths
20-2	Work-related injuries
20-3	Overexertion or repetitive motion
20-4	Pneumoconiosis deaths
20-5	Work-related homicides
20-6	Work-related assaults
20-7	Elevated blood lead levels from work exposure
20-8	Occupational skin diseases or disorders
20-9	Worksite stress reduction programs
20-10	Needle-stick injuries
20-11	Work-related, noise-induced hearing loss



The City of New Orleans is in the unique position as an employer to also be the steward of the health and safety of the citizens of New Orleans, of whom it employs 8,000 men and women. With inclusion of families and retirees this group grows to 16,000 lives covered in the City's health plan. Some of those who are not insured by the City are a part of the group of working poor, who are required to make difficult decisions everyday due to their financial situation. They are, in fact, the focus of this document. (INSERT: number of people) live in the very neighborhoods which the City has targeted for intervention due to problems of inadequate housing, disease, violence, poor education and teenage pregnancy. The employees and retirees, therefore, are a microcosm of the city, a subpopulation which clearly has many of the statistical characteristics of the larger citizenry.

The corporate citizenship that the City of New Orleans exemplifies in the commitment to an Employee Health Promotion Program represents simply another version of what the NOHD does on a daily basis for patients who receive care in the City of New Orleans clinics. The investment in human capital of the employer in this case is the investment of the human capital of the City of New Orleans.

Application of the expertise of the NOHD in employee health is a natural fit. And employees can directly benefit from the opportunities that the NOHD makes available to the citizens of New Orleans. Likewise the interventions designed to target employee areas of concern can find application in the citizenry. Employees can also become messengers of the good health messages they learn at the City of New Orleans back in to the communities in which they live.

Healthy People 2010 includes two major worksite-specific objectives on which the NOHD is building to achieve its goals by the end of 2006. They are to:

- **offer a comprehensive employee health promotion program, and**
- **have most employees (75%) participating in employer-sponsored health promotion activities.**



GETTING PEOPLE HEALTHY IN NEW ORLEANS: STRATEGIES AND ACTIVITIES

Projects under development that address all of the points in this document include:

- Develop a comprehensive strategy regarding employee health coordinating benefits assessment and selection with health interventions.
- Conduct a patient confidential health risk assessment survey to provide a platform for education and intervention development.
- Provide quarterly Health Fairs focusing on education on insurance coverage, use of tools provided by insurer, prevention, and disease management.
- Provide regular communication regarding formulary changes.
- Provide Disease Management interventions focusing on diabetes, cardiovascular disease, cancer and prenatal care.
- Provide regular health screenings, made convenient for the employee.
- Provide on-site blood draws for routine care ordered by employees' private physicians.
- Develop and implement a plan to reduce barriers to access by offering services for employees at the City Clinics at a lower or no co-pay.
- Employ a secure database to track and trend the effects of interventions.
- Make available opportunities for increased physical activity by distributing information on low cost alternatives like the City's own Department of Recreation.
- Develop effective outreach to extend the activities of the Employee Health program to families and retirees.
- Work with the Louisiana Business Group on Health and its member employers to share ideas on best practices in the area of employee health.
- Develop a database of occupational risks by department and occupation and assess the current intervention with the goal of strengthening prevention and intervention.

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- ¹ Bureau of Labor Statistics (BLS). Work injuries and illnesses by selected characteristics, 1993. *BLS News Publication* 95-142, April 26, 1995.
- ² BLS. Workplace injuries and illnesses in 1994. *BLS News Publication* 95-508, December 15, 1995.
- ³ BLS. *National Census of Fatal Occupational Injuries, 1998*. USDL 99-208, August 4, 1999.
- ⁴ National Institute for Occupational Safety and Health (NIOSH). Unpublished data from National Electronic Injury Surveillance System, 1999.
- ⁵ National Safety Council. *Accident Facts, 1998*. Itasca, IL: the Council, 1999.
- ⁶ Leigh, J.P.; Markowitz, S.B.; Fahs, M.; et al. Occupational injury and illness in the United States: Estimates of costs, morbidity, and mortality. *Archives of Internal Medicine* 157(14):1557-1568, 1997.
- ⁷ O'Donnell, M. *Health Promotion in the Workplace*. 3rd Edition, 2001.
- ⁸ 1999 National Worksite Health Promotion Survey: Conducted by the Association for Worksite Health Promotion; William M. Mercer, Incorporated; and the U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion, 1999.
- ⁹ Health Management Research Center. *The Ultimate 20th Century Cost Benefit Analysis and Report: The University of Michigan*, 2000, p. 1-39.
- ¹⁰ Gemignani, J. Best practices that boost productivity, *Business Health*, 1998; 16(3): 37-42.
- ¹¹ Milliman and Robertson, Inc. and Control Data Corporation. *Health Risks and Behavior: The Impact on Medical Costs*. Brookfield, WI. Report by Control Data Corporation, 1987.
- ¹² Milliman and Robertson, Inc. and Chrysler Corporation. *Health Risks and Their Impact on Medical Costs*. Brookfield WI. Report by Chrysler Corporation, 1995.
- ¹³ Aldana SG. Financial Impact of Health Promotion and Methodological Quality of the Evidence, *The Art of Health Promotion*, 1998. 2(1).
- ¹⁴ Murnane J., Ozminkowski R, Gootzel R.A., Cost-Benefit Analysis of the Citibank, N.A. Health Management Program. Paper presented at: Art and Science of Health Promotion Conference of the American Journal of Health Promotion; March 27, 1998; Phoenix, Arizona.
- ¹⁵ Richard Skouge, VP, Human Resources and Support Services, Duncan Aviation. Personal communication with Ken Holtyn, Holtyn & Associates Health Promotion Consultants. Kalamazoo Michigan; March 3, 2001.
- ¹⁶ Britt M, Sharda C. The Business Interest in a Community's Health: *Washington Business Group on Health*; 2000. p. 30.
- ¹⁷ Centers for Disease Control and Prevention. Health insurance coverage and receipt of preventive services – United States 1993. *MMWR* 1995; 44: 219-25.
- ¹⁸ NIOSH. *National Occupational Research Agenda*. Pub. No. 96-115. Cincinnati, OH: NIOSH, 1996.
- ¹⁹ NIOSH. National Traumatic Occupational Fatalities Surveillance System. Morgantown, WV: NIOSH, 1999.
- ²⁰ BLS. Workplace Injuries and Illnesses in 1997. <http://www.bls.gov/osh_nwrl.htm>April 20, 2000.