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# The Health & Economic Implications of Worksite Wellness Programs

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Founded in 1983, the American Institute for Preventive Medicine is an award winning, internationally recognized authority on the development and implementation of health promotion, wellness, medical self-care, and disease management programs and publications.

We have helped over 12,500 organizations reduce health care costs and absenteeism, while helping over 15 million employees or members improve their health and well being. Our products educate, motivate, and change behavior. To receive our newest catalog please contact us.

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## An American Institute for Preventive Medicine Wellness White Paper

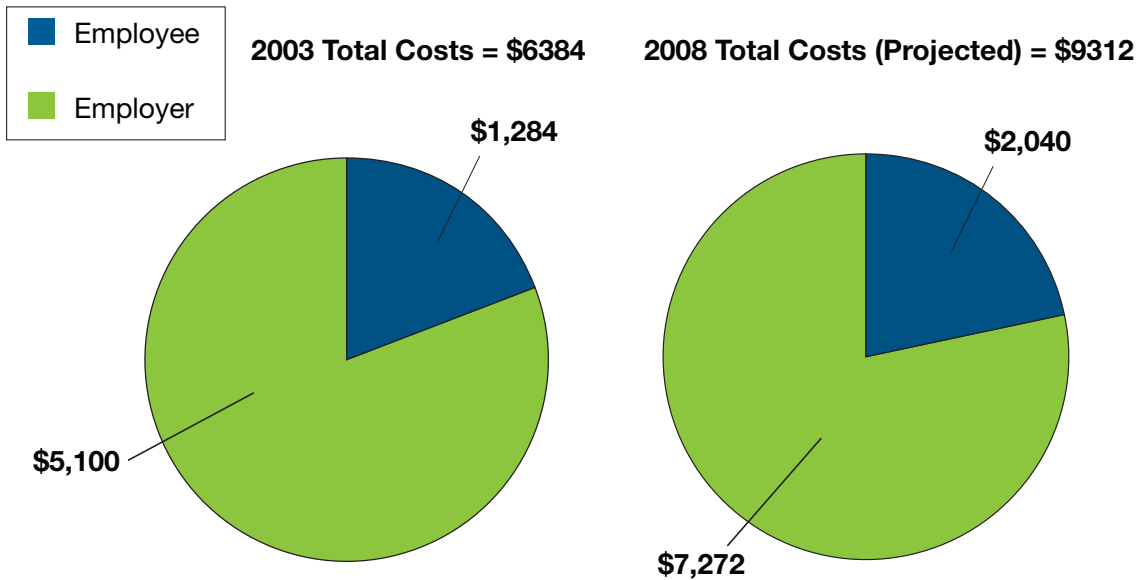
For CFO's, Human Resource Executives, Benefit Managers, Medical Directors, & Wellness Professionals

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## Annual Employee / Member Health Care Costs

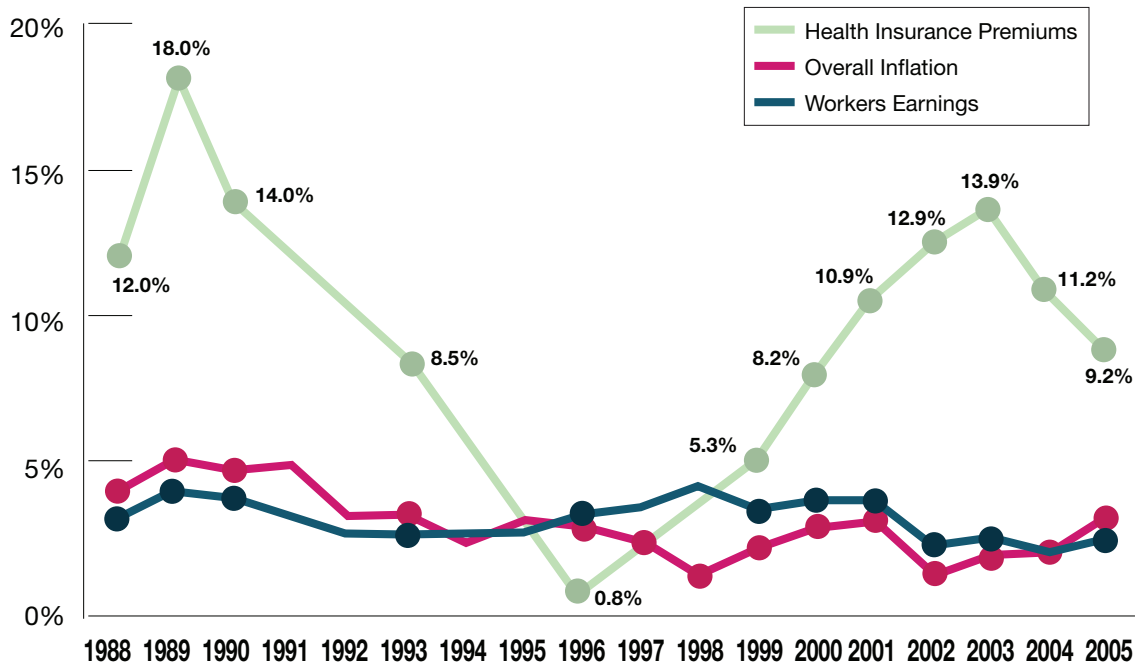
In 2008, U.S. health care costs will total approximately \$2.2 trillion or 16% of the gross domestic product. It is projected that companies will pay an average of \$9,312 per employee for health care. Employees are increasingly being asked to pay a greater share of these costs. This share has increased from \$1,284 in 2003 to \$2,040 in 2008 – a 59% increase in only 5 years.



Source: Towers Perrin 2008 Health Care Cost Survey

## Health Insurance Premiums vs. Other Indicators

The cost of health insurance has far and away outpaced the rate of inflation and workers' earnings over the past 2 decades.

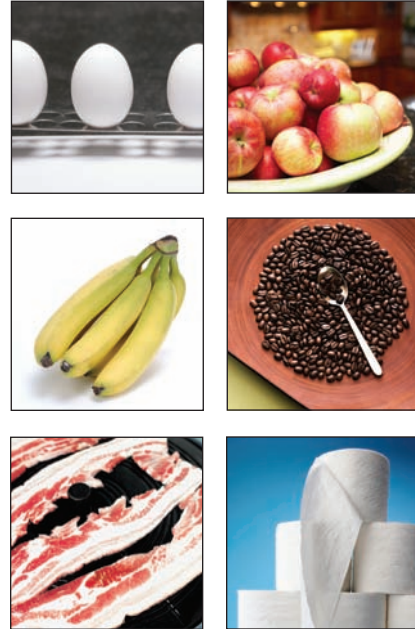


Source: Kaiser Family Foundation, 2005

## If Food Were Health Care

If food prices had risen at the same rates as medical inflation since the 1930's, we would be paying an astronomical amount for common grocery items as evidenced below.

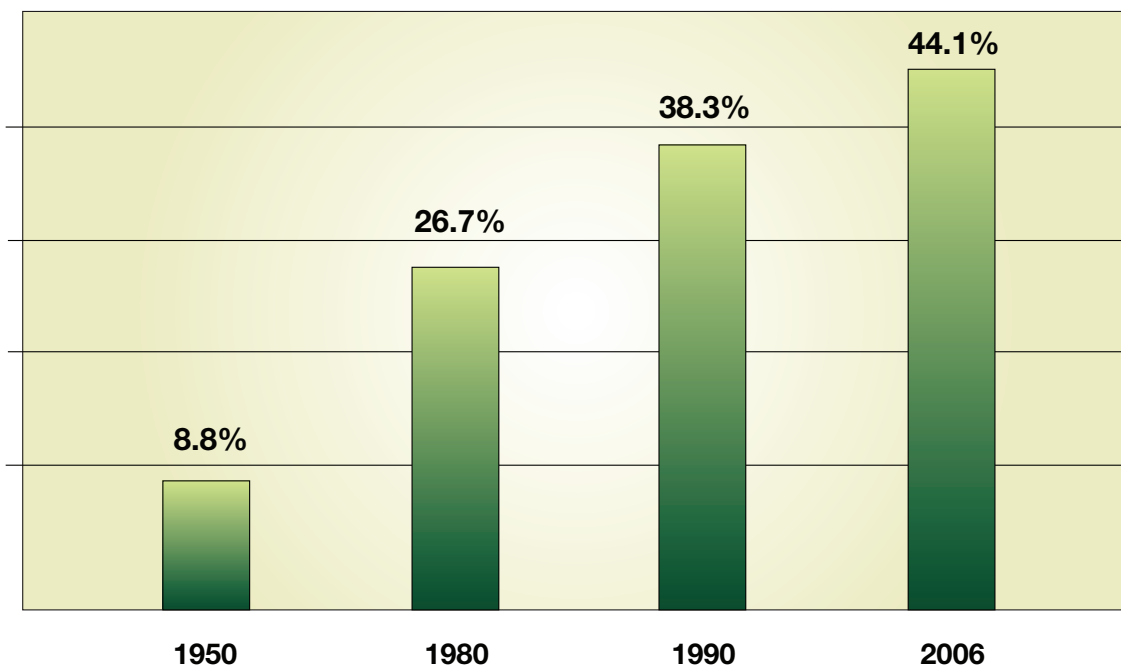
1 dozen eggs	\$ 80.20
1 pound apples	\$ 12.23
1 pound sugar	\$ 13.70
1 roll toilet tissue	\$ 24.20
1 dozen oranges	\$ 107.90
1 pound butter	\$ 102.07
1 pound bananas	\$ 16.04
1 pound bacon	\$ 122.48
1 pound beef shoulder	\$ 43.57
1 pound of coffee	\$ 64.17
<b>10 item total</b>	<b>\$586.56</b>



Source: American Institute for Preventive Medicine, 2007

## Health Care Share of Total Benefit Spending

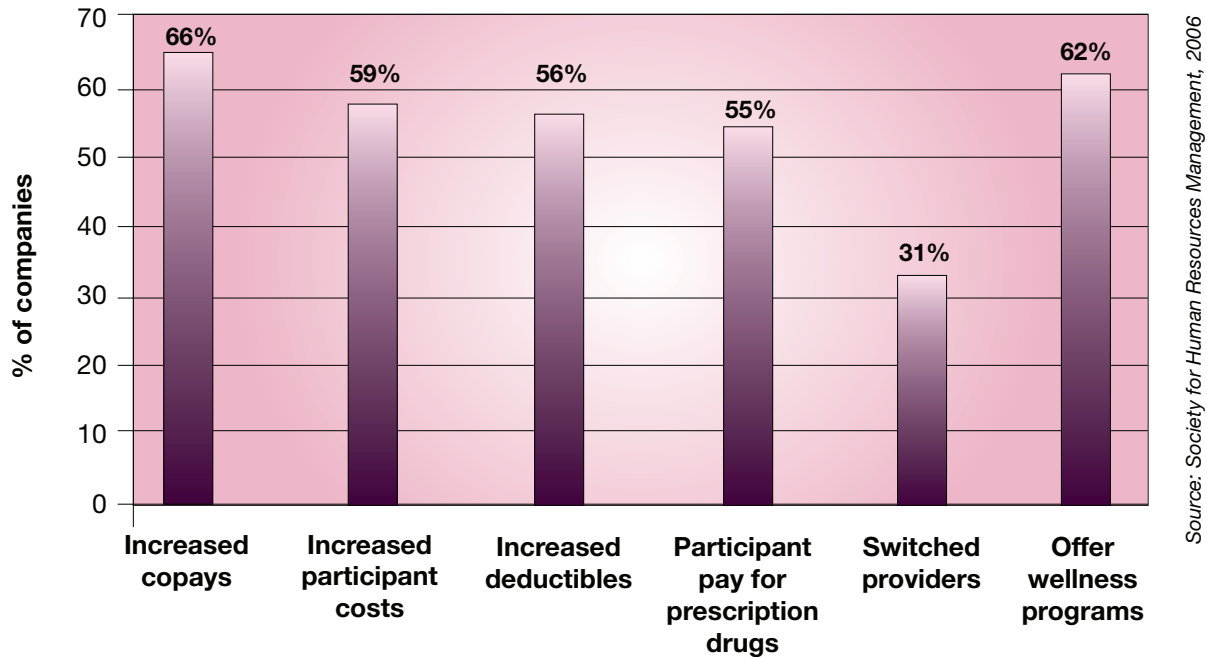
Health care spending has also taken up a greater share of benefits spending accounting for 44% of total benefit costs in 2006.



Source: Bureau of Labor Statistics, 2006, *World at Work*, 2004

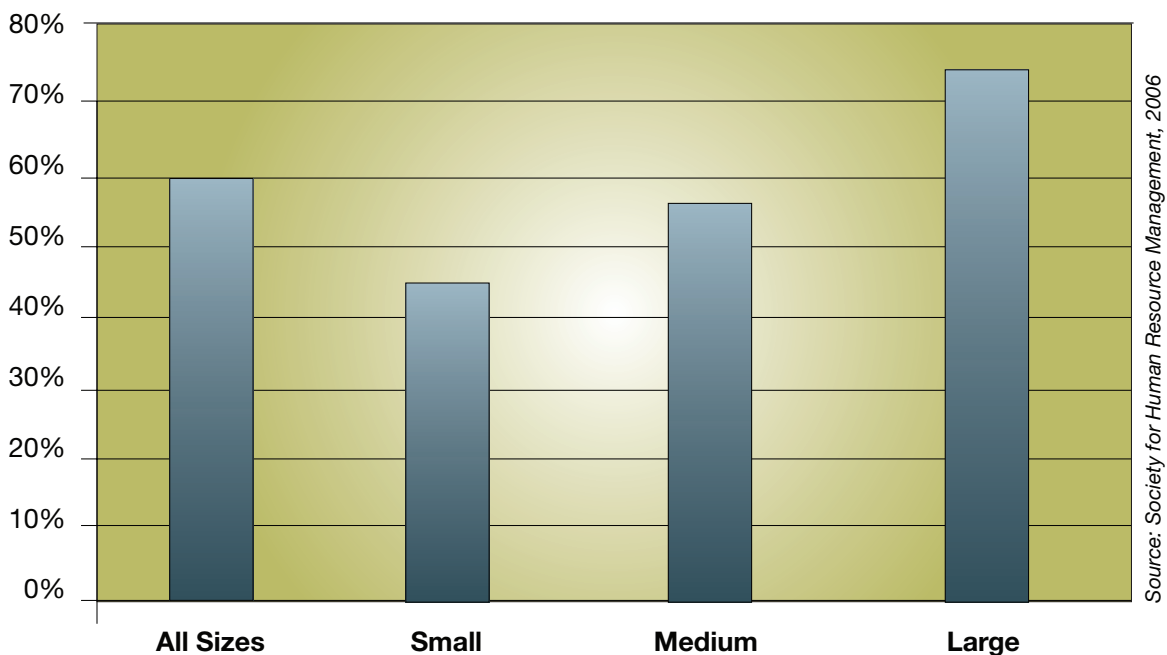
# How Companies are Responding to Increased Health Care Costs

Employers have made a variety of adjustments to deal with increased health care costs, including increased copays, higher deductibles, and switching providers. These changes are a supply management approach. Although initially they had encouraging effects, during the last few years, they have been more limited in reducing the health care costs. An alternative approach is demand management. This focuses on the employee and helps them live a healthier lifestyle and be wiser health care consumers. Wellness programs are the key component of this strategy.



## Percentage of Employers Offering Wellness Programs

Companies of all sizes implement wellness programs with the larger ones showing a slightly higher percentage. On average, 62% of all companies offer a wellness program.



# Risk Factors for Every 100 Employees / Members

Companies want to know what type of risks their employees face. Having employees fill out a Health Risk Assessment (HRA) can accomplish this. Separate from that, however, there are government statistics that show how many risk factors exist for every 100 employees. Unless your work force is very different from national demographics, you can expect to be experiencing similar percents within your employee population. The American Institute for Preventive Medicine developed the Wellness Wizard™ to help companies understand how these statistics apply to their employees. It also provides you with a cost breakdown for the risk factors and what the savings would be based upon a reduction in those risks. The Wellness Wizard™ is available at no charge by simply letting the Institute know how many employees you have.

- 25 have cardiovascular disease
- 12 are asthmatic
- 6 are diabetic
- 26 have high blood pressure
- 30 have high cholesterol
- 38 are overweight
- 21 smoke
- 31 use alcohol excessively
- 20 don't wear seatbelts
- 24 don't exercise
- 44 suffer from stress



Source: Department of Health and Human Services, 2007

## The Cost of an Unhealthy Lifestyle

A major reason for the surge in wellness programs is that employee lifestyle counts for a vast majority of health care claims costs.

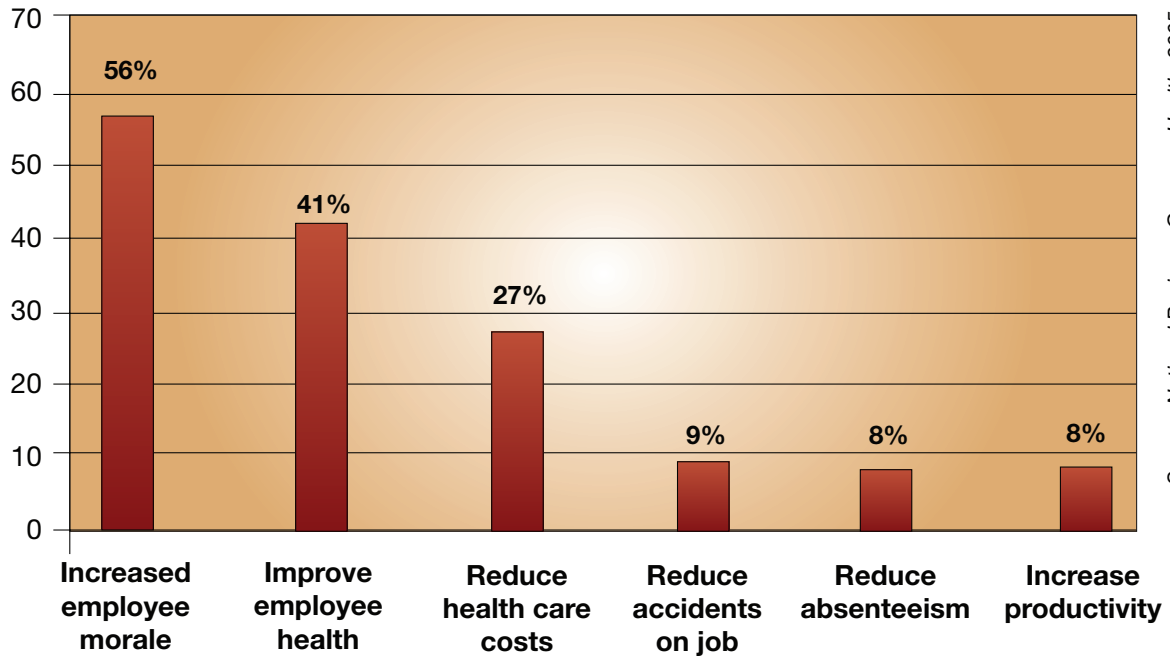
- **87.5% of health care claims costs are due to an individual's lifestyle.**

Source: Indiana University-Purdue University, Fort Wayne (IPFW) Study, 2006



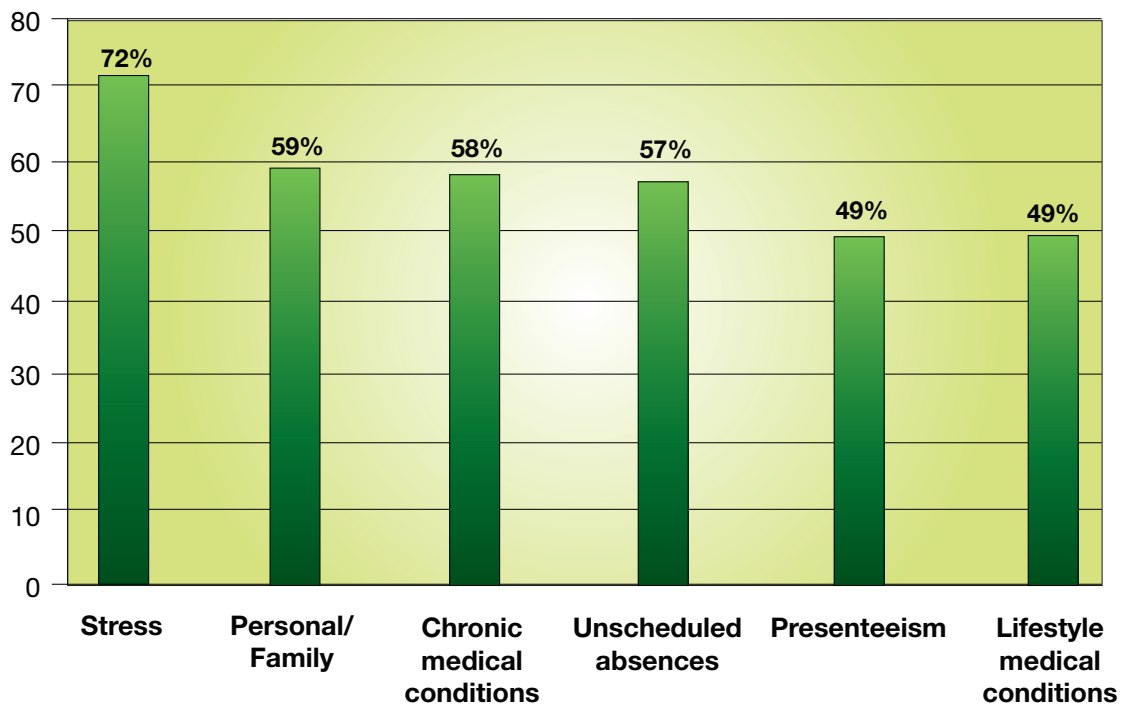
## Benefits of Worksite Wellness Programs

Companies receive many benefits after implementing a worksite wellness program in addition to reducing costs. They include increases in employee morale, improved employee health, reduction in workers compensation claims, reductions in absenteeism, and increases in productivity.



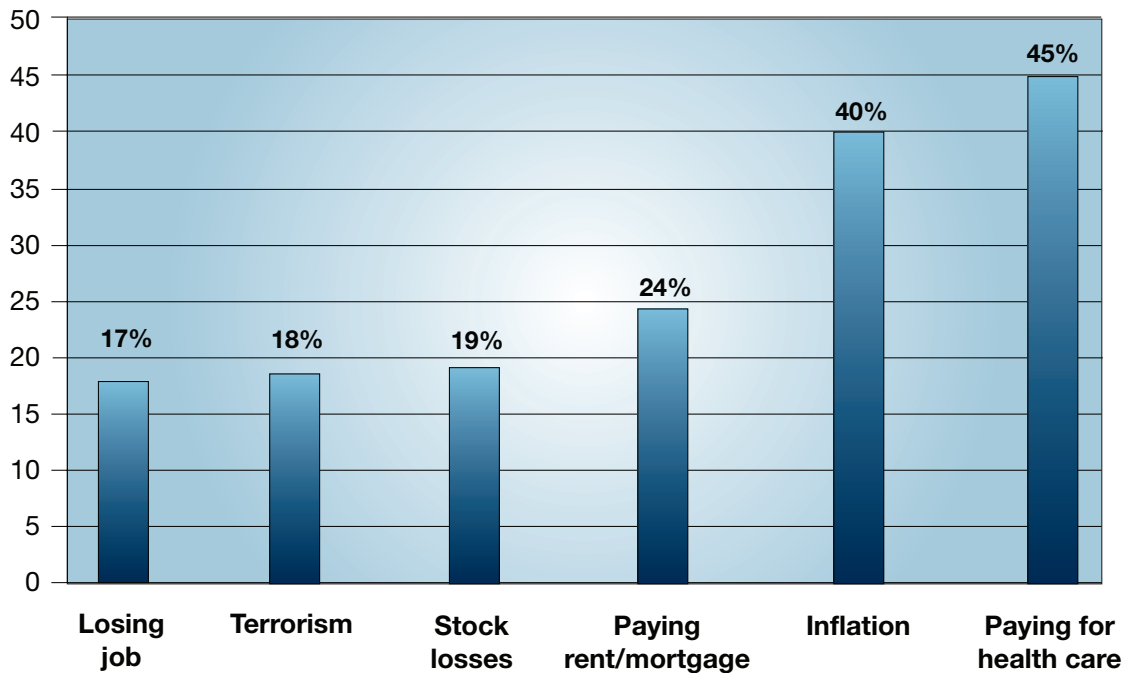
## Issues Most Affecting Employee / Member Productivity

Research is being conducted on productivity and its relationship to health. This is due to the fact that employee productivity is influenced by a number of factors, the most important of which is stress, followed closely by chronic medical conditions, and lifestyle medical conditions.



# Rising Health Care Costs Worry Employees / Members

Rising health care costs are a major concern for your employees. In fact, many employees are more worried about paying for health care than they are about losing their job, terrorism, or stock market losses.



Source: Kaiser Family Foundation, 2005

## Cost of Presenteeism

Another concern among employers is the issue of presenteeism. This refers to the fact that employees may be at work, but due to health concerns, they are not working optimally. Many HR executives consider it a problem in their companies.

- Annual cost to companies of over \$180 billion / year
- The per employee cost is between \$22 and \$157 annually
- Persistent problem at over 50% of workplaces
- In 2006, 56% of HR executives viewed it as a problem vs. 39% in 2004

Sources: *The Center for Work and Health, 2003*  
*Journal of Occupational and Environmental Medicine, April, 2004*  
*CCH, Riverwoods, IL, 2006*



## The Cost of Unhealthy Behavior

A great deal of research has been conducted on the excessive costs experienced by an employer when their employees live an unhealthy lifestyle. Studies conducted at Steelcase and Dupont exemplify this.

Although the costs for various lifestyle behaviors, such as smoking and obesity vary from company to company, the data clearly show risk factors are associated with extra costs.

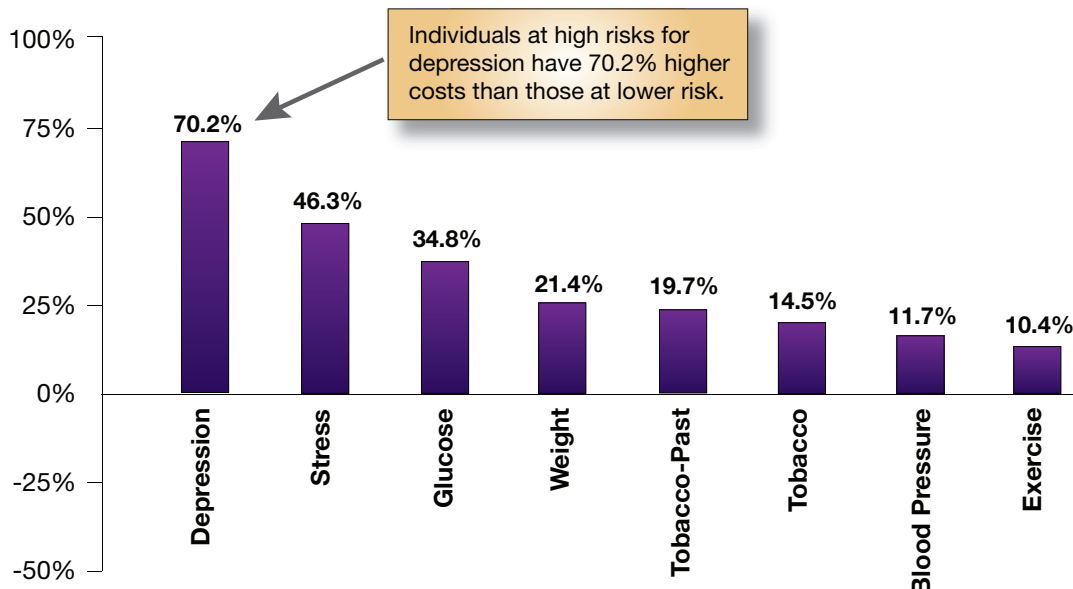
Risk Factor	Steelcase <sup>1</sup>	Dupont <sup>2</sup>
Smoking	\$285	\$960
Weight	\$222	\$401
Exercise	\$488	N/A
Alcohol	\$597	\$389
Seatbelts	\$196	\$272
Hypertension	\$327	\$343
Cholesterol	\$189	\$370

<sup>1</sup> American Journal of Health Promotion, 1991  
<sup>2</sup> American Journal of Health Promotion, 1993

## High Risk Employees Cost More

The Health Enhancement Research Organization (HERO) study involving over 46,000 employees from 6 large companies reinforced the fact that unhealthy lifestyle is responsible for increased costs. It also showed that 2 psychological problems – depression and stress – are the highest cost drivers.

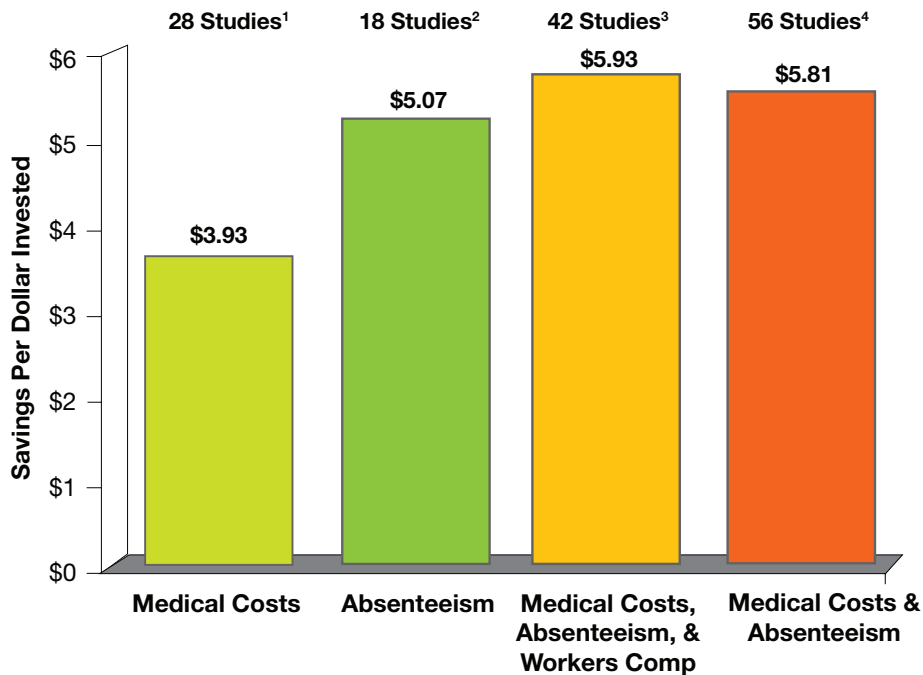
Impact on Individual Health Care Costs:  
High versus Lower-Risk Employees





# Return on Investment In Worksite Health Promotion

A review of scores of published studies on worksite wellness found that the Return on Investment is \$3.48:1 due to reduced medical costs and \$5.82:1 due to reduced absenteeism.



1. Source: Aldana, SG, *Financial impact of health promotion programs: a comprehensive review of the literature*, American Journal of Health Promotion, 2001, volume 15:5: pages 296-320.
2. Source: Aldana, SG, *Financial impact of health promotion programs: a comprehensive review of the literature*, American Journal of Health Promotion, 2001, volume 15:5: pages 296-320.
3. Source: Chapman, LS, *Meta-evaluation of worksite health promotion economic return studies*, Art of Health Promotion, 2003, 6:6, pages 1-16.
4. Source: Chapman, LS, *Meta-evaluation of worksite health promotion economic return studies: 2005 Update* Art of Health Promotion, 2005, p. 1-16.

## Association of Risk Levels with Several Corporate Cost Measures

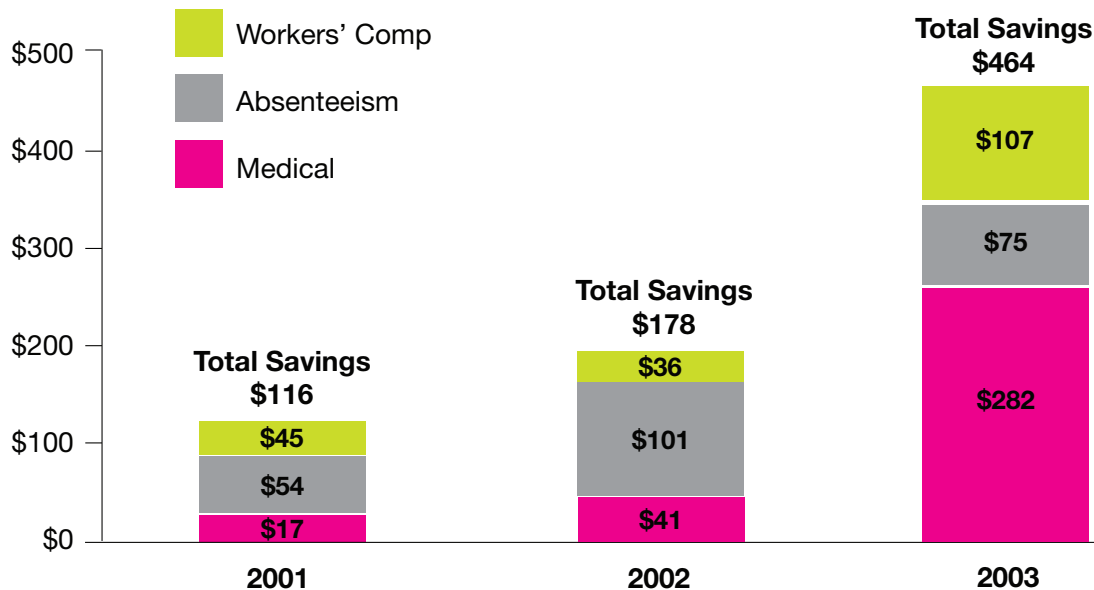
Research conducted at the University of Michigan has shown that low risk employees (1 – 2 risk factors) have lower costs for short term disability, workers' compensation, absence, and health care costs whereas high risk employees (5 or more risk factors) have higher costs.

Outcome Measure	Low Risk (N=671)	Medium Risk (N=504)	High Risk (N=396)
Short term disability	\$120	\$216	\$333
Worker's compensation	\$228	\$244	\$496
Absence	\$245	\$341	\$527
Medical & pharmacy	\$1,158	\$1,487	\$3,696
<b>Total</b>	<b>\$1,751</b>	<b>\$2,288</b>	<b>\$5,052</b>

Source: Wright, Beard, Edington, JOEM 44(12): 1126-1134, 2002

## Wellness Program Savings

A three year study conducted at a health system in Minneapolis found that health risks decreased after the implementation of a comprehensive worksite wellness program. This led to increased savings due to reduced health care costs, absenteeism, and workers' compensation claims each year of the program.



Source: Fairview Alive Program Evaluation (StayWell, 2004)

## Physician Office Visits Annually



The most successful wellness programs include a medical self-care program to reduce unnecessary use of health care services. According to research, approximately 25% of all doctor visits are deemed to be unnecessary. With the average doctor visit cost of \$101 per visit, employers are spending a great deal of money needlessly.

### Total visits to non-federally employed, office based physicians

- 964 million
- Approximately 3.3 visits/person

Source: National Ambulatory Medical Care Survey-2006

### Unnecessary Visits

- 25% or 241 million

Source: Dunnell, K. and Cartwright, C. *Medicine Takers, Prescribers and Hoarders*

### Average cost - \$121/visit

Source: U.S. Department of Health and Human Services, 2006

# Emergency Room Visits Annually



The data regarding emergency room visits is even more compelling. Approximately 55% of all E.R. visits are unnecessary. At an average cost of \$560 per visit, the unnecessary costs are quite high. The American Institute for Preventive Medicine can provide your company with a free Medical Self-Care Return on Investment Analysis to show what your company's savings would be after implementing a medical self-care savings.

## Total Annual E.R. Visits

- 115 million
- 37.8 visits / 100 persons

Source: National Ambulatory Medical Care Survey-2006

## Unnecessary Visits

- 55% or 63 million

Source: National Ambulatory Medical Care Survey-2006

## Average cost - \$560/visit

Source: U.S. Department of Health and Human Services, 2006



# Self-Care Studies

In 18 independent studies, the American Institute for Preventive Medicine's self-care guides have demonstrated an average savings of \$71.41 per person due to reduced doctor and emergency room visits in 9 months.

Organization	Year	# of People	# of Months	Documented Cost Savings Research			R.O.I.*
				Dr. Visits	E.R. Visits	Total	
United Way	2005	4,819	6	\$49.47	\$125.96	\$175.43	29:1
United Way	2005	1,360	6	46.57	33.59	80.16	13:1
Whatcom County	2005	95	6	3.47	8.06	11.53	3:1
United Teachers New Orleans	2004	130	12	17.35	72.00	89.35	17:1
Teamsters Local 436-Actives	2003	91	12	28.41	90.99	119.40	20:1
Teamsters Local 436-Retirees	2003	47	12	17.55	61.28	78.83	13:1
Bloomington Hospital	2001	839	12	28.65	69.01	97.66	16:1
Bloomington Hospital	2000	627	12	25.53	42.49	68.02	11:1
Bloomington Hospital	1999	625	12	27.19	63.36	90.55	15:1
Dean Health Plan	1999	366	6	44.07	15.50	59.57	13:1
Lewis-Gale Clinic	1997	327	12	57.79	14.44	72.23	14:1
Health Net	1996	165	6	17.88	16.97	34.85	14:1
Western Southern Life	1996	197	6	17.00	40.61	57.61	26:1
Lewis-Gale Clinic	1996	79	5	25.97	12.19	38.16	15:1
Capital Blue Cross	1995	371	12	26.01	13.05	39.06	5:1
Capital Blue Cross	1995	938	12	16.45	5.22	21.67	7:1
Indian Industries	1995	197	6	8.88	66.45	75.33	30:1
Florida Hospital	1994	801	5	18.26	57.81	76.07	38:1
<b>Average Totals</b>		<b>670</b>	<b>8.88</b>	<b>26.47</b>	<b>44.94</b>	<b>71.41</b>	<b>16:1</b>

\*Return-On-Investment - The number of dollars saved for every dollar spent on the publication.

# The Return on Investment (ROI) for Worksite Wellness Programs at Various Companies

**Northeast Utilities** – The company's Well Aware Program demonstrated a \$1.4 million decrease in behavioral claims, 31% decrease in smoking, 29% decrease in inactivity, 16% decrease in mental health risk, and 11% decrease in cholesterol risk. The Return on Investment was 6:1.

Source: U.S. Dept. of Health and Human Services, *Prevention Makes Common Cents*, 2003.

**Motorola** – Program participants experienced an increase of only 2.4% in health care costs whereas non-participants experienced an 18% increase in health care costs. The Return on Investment was \$3.93:1.

Source: U.S. Dept. of Health and Human Services, *Prevention Makes Common Cents*, 2003.

**Union Pacific Railroad** – The company's wellness program produced a \$53 million reduction in health care costs in one year.

Source: U.S. Dept. of Health and Human Services, *Prevention Makes Common Cents*, 2003.

**Wisconsin Educational Insurance Group** – A medical self-care program and health education materials produced a Return on Investment of \$4.75:1.

**Caterpillar** – Participants in the Healthy Balance Program who completed the Health Risk Assessment reduced their doctor visits by 17% and hospital days by 28%.

Source: *Wellness Councils of America, The Cost Benefit of Worksite Wellness*, 2002.

**Dupont** – A study involving 45,000 blue collar workers found that absences from non-job related illness decreased 41% at locations where a worksite wellness program was offered compared with a 5.8% decline at 19 sites where it was not. The Return on Investment was \$1.42:1 due to reductions in absenteeism.

Source: *Wellness Councils of America, The Cost Benefit of Worksite Wellness*, 2002.

**Johnson & Johnson** – The results of a 4 year worksite wellness program involving 18,331 employees demonstrated an overall savings of \$8.5 million annually due to reduced health care costs. This amounted to a savings of \$225 per employee per year.

Source: *Journal of Occupational and Environmental Medicine*, January 2002, 44(1):21-29.

**Florida Power & Light** – After an employee wellness program, total health care costs were reduced by 35%, workers compensation costs were reduced by 38% per claim, and 82% of employees reported personal health improvements.

Source: *Wellness Councils of America, The Cost Benefit of Worksite Wellness*, 2002.

**Xerox Corporation** – A worksite wellness program revealed a drop in the frequency of workers' compensation claims and the average cost per injury. 5.6% of wellness participants filed claims with an average cost of \$6,506 per injury. 8.9% of non-wellness participants filed claims with an average cost of \$9,482 per injury.

Source: *University of Michigan Health Management Research Center*, 2001.

**Citibank** – A comprehensive health management program showed a \$4.56:1 Return on Investment in reduced total health care costs.

Source: *Journal of Occupational and Environmental Medicine*, 1999, 14(1):5131-43.

**Washoe County School District** – Wellness program participants averaged 3 fewer missed workdays than those who did not participate in the program. The decrease in absenteeism produced a Return on Investment of \$15.60:1.

Source: *Preventive Medicine*, 2000; 40:131-7.

**Manufacturing Company** – A 6 year wellness program including 2,596 participants saved \$623,040 due to reductions in disability absence days. This resulted in a Return on Investment of \$2.30:1.

Source: *Journal of Occupational and Environmental Medicine*, 2002; 44:776-80.

**Large Company** – A worksite wellness program compared 13,048 participants who filled out a Health Risk Appraisal with 13,363 non-participants. Overall, the HRA participants cost an average of \$212 less on medical costs than non-participants.

Source: *Journal of Occupational and Environmental Medicine*, 2003; 45:1196-200.

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