

Physical Activity/Employer Health Benefits Literature Review

The aim of this research is to provide meaningful statistics that can be used to help employers promote active transportation and wellness/fitness programs to their employees.

I. Combined, general findings from employers who encourage physical activity in the workplace

- 1) Reduced health care costs fall between 7 and 15 percent. Benefits show a savings of \$300 to \$403 per worker and year.
- 2) Work performance increases between 4 and 15 percent among physically active employees. Benefits show an estimated savings of \$513 per worker and year.
- 3) Return on investment yields between \$2.45 and \$8.00 per each dollar spent on a fitness/wellness program among employees.
- 4) Turnover rates among employees participating in a fitness/wellness program are between 1.5 and 3.5 percent, compared to a 10 to 15 percent turnover rate for employees not participating in a fitness/wellness program.
- 5) Twenty five percent fewer injuries are reported among employees who are physically fit.
- 6) Physically active employees report between 27 and 33 percent fewer sick days than employees who are not physically active.

II. Return on investment (ROI)

- 1) A Blue Cross/Blue Shield study showed a savings of \$2.45 per dollar allocated to fitness and wellness programs.¹
- 2) Research indicates that for every dollar an employer invests in effective wellness programs, the employer realizes \$3 to \$5 in return through reduced health care costs, health insurance premiums and costs of attrition.²
- 3) In-depth wellness interventions have been shown to return from \$3 to 8 dollars in health, productivity, worker's compensation, absenteeism and disability after approximately 5 years. ROI is expressed annually in terms of savings on projected costs (at the fixed rate of 14 percent) / total wellness costs indicating a \$2.51 ROI in 2005 on health care costs.³
- 4) Physical activity was associated with reduced health care costs of about 7 percent over 2 years (or \$483 annually).⁴
- 5) For each corporate dollar invested in physical activity, Canada Life in Toronto showed a return of \$3.40 in reduced turnover, productivity gains and decreased medical claims.⁵
- 6) Employees who participate in physical activities miss fewer days due to illness, lower turnover rates, lower health care costs and increased productivity which can result in a benefit of \$513 per worker per year.⁶
- 7) Health Canada states that employees' work performance can be improved by 4 to 15 percent through participation in regular physical activity.⁷
- 8) Physically active employees take 27 percent fewer days of sick leave and physical activity programs can reduce the number of injuries in the workplace by 25 percent.⁸

- 9) Workplace physical activity programs can reduce sick leave by up to 32 percent and increase productivity by up to 52 percent.⁹

III. Costs associated with physical inactivity in the workplace

- 1) Obesity-related health problems cost American businesses an estimated \$13 billion in 1994 – \$8 billion in health insurance costs, \$2.4 billion for sick leave, \$1.8 billion for life insurance and nearly \$1 billion for disability insurance.¹⁰
- 2) The cost of physical inactivity to Canada's health-care system was \$2.1 billion in 1999. Reducing inactivity by 10 per cent would save \$150 million in health-care costs a year.¹¹
- 3) A study by researchers at the U.S. Centers for Disease Control and Prevention has estimated that each physically active person saves the American health-care system over \$300 annually relative to an inactive person.¹²
- 4) A major study published last year found medical spending averages \$1,400 more a year for the obese than normal-weight people.¹³
- 5) In 2005, the Conference Board of Canada reported that health expenditures are 50 percent more for workers who report high levels of stress and that stress-related absences cost Canadian employers \$3.5 billion each year.¹⁴

IV. Case studies

- 1) The Jackson Kelly Law Firm wellness program reduced absenteeism by 33 percent in the first year. In 2005, health insurance premiums decreased by 21 percent.¹⁵
- 2) Cianbro implemented the Healthy LifeStyle Program (HLP) in 2001. The total healthcare costs, (which include claims, administration fees, reinsurance, and the cost of all wellness programs) while still trending upward, are increasing at an average annual rate of about 9-10 percent as compared to the national average of 9-13 percent.¹⁶
- 3) The City of Gainesville's health insurance claims revealed that the average claims cost per year for children was \$925; active employees was \$1,800; retired employees was \$2,500 and spouses was \$3,100.¹⁷
- 4) A study of one group of health plan enrollees ages 40 or older suggested that *each active day per week* is associated with 4.7 percent lower median health care charges over 18 months from an assessment of physical activity, or 13 to 15 percent using the average number of active days.¹⁸
- 5) The difference in health care costs related to the same year physical activity was 32.9 percent or \$1,879 in 2004 dollars, whereas a change in health care costs 2 years from the assessment of physical activity was about 29.6 percent or \$1,784. These descriptive estimates included the effects of social and health differences between active and inactive groups.¹⁹
- 6) BC Hydro estimated that physical activity initiatives reduced sick leave costs by \$1.2 million a year.²⁰
- 7) The Canadian Life Assurance Company found that the turnover rate for fitness program participants was 32.4 percent lower than average over seven years.²¹

- 8) BC Hydro employees enrolled in a work-sponsored fitness program had a turnover rate of 3.5 percent, a fraction of the company average of 10.3 percent.²²
- 9) Toronto Life Assurance found that employee turnover for those enrolled in the company's fitness program was 1.5 percent, versus 15 percent for non-participants.²³
- 10) Employees in Toronto's Metro Fit missed 3.35 fewer days in the first six months of the fitness program than employees who were not enrolled.²⁴

¹ *Management Review*. Aug. 1989, p. 37.

² *Wellness Matters*. 11/2/10. <http://www.welcoa.org/freeresources/pdf/wellness_matters_jk.pdf> Original article published in West Virginia Executive. info@wvexecutive.com

³ *Chiambro*. 11/2/10. <http://www.welcoa.org/freeresources/pdf/ciambro_case_study.pdf>

⁴ Andreyeva, Tatiana and Sturm, Ronald. Physical Activity and Changes in Health Care Costs in Late Middle Age. *Journal of Physical Activity and Health* 2006, 3, S6-S19. © 2006 Human Kinetics, Inc.

⁵ *Physical Activity at work*. 11/1/10. Alberta Center For Active Living. <http://www.centre4activeliving.ca/workplace/beforestart/benefits_bottomline.html>

⁶ *Economic Benefits of Physical Activity*, World Health Organization. 2003

⁷ *Physical Activity at work*. 11/1/10. Alberta Center For Active Living. <http://www.centre4activeliving.ca/workplace/beforestart/benefits_bottomline.html>

⁸ *Physical Activity at work*. 11/1/10. Alberta Center For Active Living. <http://www.centre4activeliving.ca/workplace/beforestart/benefits_bottomline.html>

⁹ *World Health Organization. Southern Australian Workplace Physical Activity Resource Kit*. 11/2/10. <http://www.beactive.com.au/WorkplacePAresourcekit.pdf>

¹⁰ *Wellness Matters*. 11/2/10. <http://www.welcoa.org/freeresources/pdf/wellness_matters_jk.pdf> Original article published in West Virginia Executive. info@wvexecutive.com

¹¹ *Physical Activity at work*. 11/1/10. Alberta Center For Active Living. <http://www.centre4activeliving.ca/workplace/beforestart/benefits_bottomline.html>

¹² Public Health Agency of Canada. 11/2/10. <<http://www.phac-aspc.gc.ca/alw-vat/trends-tendances/index-eng.php#a1>>

¹³ *Obesity's yearly costs: \$4,879 for a woman, \$2,646 for a man*. 11/1/10. <http://www.usatoday.com/yourlife/fitness/2010-09-21-obesity-costs_N.htm>

¹⁴ *Physical Activity at work*. 11/1/10. Alberta Center For Active Living. http://www.centre4activeliving.ca/workplace/beforestart/benefits_bottomline.html

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- ¹⁵ *Wellness Matters*. 11/2/10. <http://www.welcoa.org/freeresources/pdf/wellness_matters_jk.pdf> Original article published in West Virginia Executive. info@wvexecutive.com
- ¹⁶ *Chiambro*. 11/2/10. <http://www.welcoa.org/freeresources/pdf/cianbro_case_study.pdf>
- ¹⁷ *City of Gainesville: A Platinum Well Workplace Case Study*. 11/2/10. <http://www.welcoa.org/freeresources/pdf/casestudy_gainesville.pdf>
- ¹⁸ Andreyeva, Tatiana and Sturm, Ronald. Physical Activity and Changes in Health Care Costs in Late Middle Age. *Journal of Physical Activity and Health* 2006, 3, S6-S19. © 2006 Human Kinetics, Inc.
- ¹⁹ Andreyeva, Tatiana and Sturm, Ronald. Physical Activity and Changes in Health Care Costs in Late Middle Age. *Journal of Physical Activity and Health* 2006, 3, S6-S19. © 2006 Human Kinetics, Inc.
- ²⁰ *Physical Activity at work*. 11/1/10. Alberta Center For Active Living. http://www.centre4activeliving.ca/workplace/beforestart/benefits_bottomline.html
- ²¹ *Physical Activity at work*. 11/1/10. Alberta Center For Active Living. http://www.centre4activeliving.ca/workplace/beforestart/benefits_bottomline.html
- ²² *Physical Activity at work*. 11/1/10. Alberta Center For Active Living. http://www.centre4activeliving.ca/workplace/beforestart/benefits_bottomline.html
- ²³ *Physical Activity at work*. 11/1/10. Alberta Center For Active Living. http://www.centre4activeliving.ca/workplace/beforestart/benefits_bottomline.html
- ²⁴ *Physical Activity at work*. 11/1/10. Alberta Center For Active Living. http://www.centre4activeliving.ca/workplace/beforestart/benefits_bottomline.html