



YOUR OFFICE CAN BE HARMFUL TO YOUR HEALTH

*Ergonomics, wellness, occupational stress, repetitive motion disorders, tight building syndrome, psycho-social behavior, second-hand smoke. What do all these terms have in common? These are some of the latest issues of concern surfacing in that broad subject area of occupational health and safety, with an increasing application to office work. Some issues have been around for a number of years and others are relatively new.*¹ — March 1991

In 1991 I wrote a brief article, published in [Policy Options](#), about the increasing number of known occupational hazards associated with office work. In the last two decades, issues surrounding physical and mental health associated with office work environments have become even more important. Indeed, given the increased amount of time that office workers spend in sedentary mode seated behind desks and in front of computers has raised a ever growing number of wellness concerns.

*In 2003-04, researchers from Vanderbilt University strapped plastic devices called Actigraphs to the legs of 6,329 Americans ages six and up to measure how much of their waking hours they spent sitting, reclining or lying down. It turned out participants spent 55% of the time, or 7.7 waking hours off of their feet. Studies relying on self-reported data have come to even more alarming conclusions; a survey conducted by the U.K. branch of Weight Watchers, for example, found that people were sitting an average of 14 hours and 39 minutes a day.*²

Being less physically active at work and at home has led researchers to believe that a significant part of our current health problems in industrialized countries can be largely attributed to the rising sedentary lifestyle. The consequences include the growth in health issues resulting from obesity, heart disease, Type 2 diabetes, repetitive strain injuries, deep vein thrombosis, etc., etc. Individuals who sit a great deal tend to develop weak abdominal, buttock, and front and inner thigh muscles. Their neck, shoulder, and back muscles tend to be tense, and their spinal movements are usually restricted.³ Moreover, it is understood that the human body is designed to be physically active. Furthermore, simply exercising outside of work, although beneficial, may still be insufficient in terms of promoting overall wellness or offsetting the health effects of inactivity at work.

As per the [Canadian Centre for Occupational Health and Safety](#) (CCOHS), offices may be free of heavy equipment and other obvious perils, but office workers still account for a significant portion of workers' compensation claims in Canada. Even sitting at a computer can present hazards including musculoskeletal disorders, eyestrain, and exposure to unhealthy indoor air.⁴ Open office concepts bring with them additional concerns in areas related to lighting, air quality, equipment noise and continuous distractions. Mentally, the ability to concentrate on one task at a time becomes increasingly difficult when individuals are frequently distracted by their colleagues, electronic mail, nearby

¹ *Your office could be harmful to your health:* Brian Curry, Policy Options, March 1991

² *You better stand up for this:* Adam McDowell, Canadian Business, October 10, 2011

³ *Sitting on the Job (A Practical Survival Guide for People Who Earn Their Livings While Sitting.):* Scott W. Donkin, pp. 88-89

⁴ *Health & Safety Report*, CCOHS, Volume 6, Issue 5 - May 2008

equipment such as printers and photocopiers, loud telephone conversations, white noise, etc. As one commentator remarks: *How productive can you be when you can't hear yourself think?*⁵

Employers are continuing to look at wellness concerns in order to deal with office-related illnesses and injuries, including the use of ergonomists examine ways in which to improve daily functions within work environments. For example, by adjusting office design, furniture and equipment, work practices, lighting, etc. Furthermore, since organizations are faced with increasing costs due to high absenteeism and presenteeism, there is a growing interest in measures and concepts surrounding workplace health promotion. Unfortunately, existing traditional programs — generally focused on individual lifestyle risk behaviours such as inactivity, poor nutrition and smoking — have been shown to have little significant impact. This is why more recent interventions have led to a more **comprehensive** approach that addresses both worker and organisational health, and which tends to effect behavioural change combined with improved working conditions and environments.

However, despite a growing awareness of the issues, a [Conference Board of Canada](#) 2010 survey of Canadian organizations found that only about one-quarter of the organizations felt that their organization had developed a comprehensive wellness strategy. Some one in ten organizations had not done so at all. This in spite of the fact that a large majority of the surveyed organizations claimed that they took overall employee health into consideration in the design of their benefit programs.⁶

Wellness and office work

The following are examples of a few noteworthy ongoing or relatively new health issues related to wellness and office work.

*Nobody thought of office work as a life-threatening activity three decades ago. Back in 1981, we had not yet begun seriously fretting about the health effects of sitting at our desks all day, staring at blinking terminals and breathing recycled air. So it was dumb luck that a pile of data from that era existed to help a U.S.-Canadian team of researchers later prove the perilousness of our sedentary time.*⁷

As the growing field of **inactivity studies** is learning, the more you sit, the more your health deteriorates.⁸ Wellness promotion has to go beyond the traditional measures of simply pushing employees to quit smoking, loose weight and exercise more. One is now looking at a more comprehensive approach to altering people's lifestyles both at work and at home.

Concerns over repetitive strain injuries (RSI) continue to emerge within work environments in general, and within office environments and for older workers in particular:

*In a survey published in 2003 by Statistics Canada, it was revealed that RSIs affect around 2.3 million Canadians annually. The study showed that most RSIs were focused on the upper body with 25 per cent affecting the neck or shoulder. Another 23 per cent of RSIs occurred in the wrist or hand and 19 per cent were located in the back. The elbow or lower arm accounted for 16 per cent with the remaining 17 per cent reflecting injuries to the lower extremities.*⁹

Then there's the more recent issue surrounding the use of fragrances, such as perfumes and colognes, by employees in an enclosed office environment:

In 2007 a study on environmental sensitivities found that 3% of Canadians become sick when

⁵ *How productive can you be when you can't hear yourself think*: Michael McCullough, Canadian Business, November 2010

⁶ *Majority of Canadian companies not placing health and wellness programs as a top priority*: Workplace Staff, Workplace e-News, 19 April 2010

⁷ *You better stand up for this*: Adam McDowell, Canadian Business, October 10, 2011

⁸ Ibid

⁹ *Perils of the office*: Bernard Kruchak. Canadian Occupational Safety Magazine, September 2005

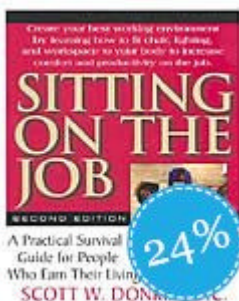
exposed to traces of chemicals, dust, and other environmental triggers. But the irritant du jour is fragrance. Not only are air fresheners and smelly cleaners being swapped for less pungent alternatives, but people increasingly face requests to refrain from wearing perfume or cologne to the office, school or health centres. That's because the chemicals in these products can trigger a reaction dubbed multiple chemical sensitivity (MCS), a chronic condition that causes nausea and headaches when sufferers are exposed to even low levels of certain chemicals.¹⁰

What can organizations do to promote healthy office environments and healthy office workers?

There are a number of initiatives that organizations can implement in order to promote health and wellness within an office environment, including:

- ☞ Ensure that office furniture, equipment, lighting and air quality controls are ergonomically designed to reduce harmful disclosure to common physical hazards.
- ☞ Implement work practices that allow for adequate breaks for employees to become physically active from time to time, especially for stationary computer operators and call centre employees.
- ☞ With expert oversight, institute an internal wellness program, preferably voluntary in nature, to encourage good healthy practices and lifestyle among employees.
- ☞ Improve office air quality and climate controls by regularly assessing and maintaining heating, ventilation and cooling (HVAC) systems and by establishing smoke- and fragrance-free workplaces.
- ☞ Educate the workforce on the special hazards related to sitting for lengthy periods of time.
- ☞ Design workplaces to accommodate any special physical needs of occupants.
- ☞ Integrate comprehensive programs to promote a healthy lifestyle at the workplace as part of the corporate culture.
- ☞ With input by employees, assess the impact of new technologies on the work environment from a health, safety and wellness perspective.
- ☞ Regularly evaluate performance results of any of the above and other implemented initiatives.

Recommended Reading:



“Sitting on the Job”

(A Practical Survival Guide for People Who Earn Their Livings While Sitting.)

by Scott W. Donkin, D.C.

(Basic Health Publications, North Bergen, NJ, 2002)

Recommended Web Sites:

- ◆ The Office Health & Safety Guide – Canadian Centre for Occupational Health and Safety: <http://www.ccohs.ca/products/publications/officeHS.html>
- ◆ Office environment & worker safety & health – National Institute for Occupational Safety and Health (U.S.): <http://www.cdc.gov/niosh/topics/officeenvironment/>
- ◆ Office health and safety – Health and Safety Executive (U.K.): <http://www.hse.gov.uk/office/index.htm>
- ◆ Musculoskeletal Disorders / Ergonomics – Ontario Ministry of Labour (Canada): <http://www.labour.gov.on.ca/english/hs/topics/pains.php>
- ◆ Enterprise for Health (Europe): <http://www.enterprise-for-health.org/home.html>

¹⁰ *When the office makes you sick*: Jacqueline Nelson, Canadian Business, November 2010