

Comcare

# STAND UP COMCARE—PROMOTING HEALTH BY TACKLING SITTING AS A RISK FACTOR FOR CHRONIC DISEASE

This information sheet provides an overview of Comcare's involvement in a research pilot about the impact of, and strategies to reduce, sedentary practices in the workplace.

## LONG PERIODS OF SITTING AS A RISK FACTOR FOR CHRONIC DISEASE

A high proportion of workers spend the majority of their work day sitting. According to Medibank Australia, a study of workers in office-based, retail and call centre roles revealed that they spent 76 per cent of their work day sitting, and tend to underestimate their overall sitting time<sup>1</sup>. This is a concern as sedentary behaviour (i.e. too much sitting, as distinct from too little exercise) is now understood to be a significant health risk and a major contributor to obesity and chronic diseases such as type II diabetes, cancer and cardiovascular disease. In fact, research from the University of Sydney found that people who sit for 11 hours or more a day are 40 per cent more likely to die within three years than those who sit for less than four hours. Those who sit for between eight hours and 11 hours a day are 15 per cent more likely to die. This was after taking into account the participants' physical activity, weight and health status<sup>ii</sup>. According to the National Heart Foundation Australia long periods of sitting can increase your risk of heart disease by 50 per cent, even if you exercise regularly<sup>iii</sup>. Other research has revealed that even short periods of standing on a regular basis can decrease your risk of cardiovascular disease<sup>iv</sup>.

# STAND UP COMCARE PILOT STUDY

Comcare partnered with Baker IDI Heart and Diabetes Institute and the University of Queensland to champion a pilot study (serving as a prelude to a larger study, Stand Up Victoria). The aims of this research were to:

- > investigate the effectiveness of sit-to-stand workstations, and the promotion of workplace strategies to reduce sitting time
- > investigate if standing more often had a significant impact on individual health.

The *Stand Up Comcare* pilot involved an intervention and control group. The intervention participants received an Ergotron sit-to-stand workstation for a four-week period. They were encouraged via regular telephone coaching and onsite workshop to use their workstation and promote movement. The control group, serving as a baseline for comparison, continued working as usual. The amount of time participants spent sitting was measured using an electronic device that monitored sitting, standing and walking. Before and after the intervention period both groups undertook a health assessment, including a blood test, to monitor any changes in individual health. Participants also responded to surveys, including a measure of self-reported work productivity.

#### RESULTS

The results of Stand Up Comcare revealed that:

- 1. Participants in the intervention group reduced sitting time by 25 per cent. This is equivalent to two hours of a standard eight hour workday.
- 2. Blood glucose levels were reduced in the intervention group at follow-up.
- 3. Self-reported productivity increased significantly in the intervention group.

#### Figure 1—Results of *Stand Up Comcare* pilot: Percentage of time spent sitting, standing and stepping.



#### RECOMMENDATIONS

- > Prolonged sitting is a risk that employers should consider within work health and safety policies and practices.
- > Employers should monitor levels of prolonged sitting among their workers during work hours—for example, by auditing levels of sitting in the workplace to determine their level of risk.
- > Employers should explore opportunities for their workers to reduce sitting in the workplace—for example, through interventions such as standing meetings and by providing height adjustable desks that promote postural transitions.
- > It may be beneficial for employers and rehabilitation providers to consider using interventions within their organisation to reduce prolonged sitting as a preventative measure for individuals at risk of developing type II diabetes, or as a part of a management strategy for at risk workers.

### FURTHER INFORMATION

For an overview of organisational and individual strategies that you can implement to reduce sedentary practices in your workplace, please refer to the fact sheet, *Benefits of movement—Be upstanding!* 

For any other information on how to reduce sitting time in your workplace, please visit Comcare's work health website, www.comcare.gov.au/workhealth or contact Comcare's Work Health team on 1300 366 979.

i Medibank Australia. (2009). Stand Up Australia: Sedentary behaviour in workers. Retrieved from: http://www.medibank.com.au/Client/Documents/Pdfs/ Stand\_Up\_Australia.pdf

ii van der Ploeg, HP et al (2012) Sitting Time and All-Cause Mortality Risk in 222 497 Australian Adults. Arch Intern Med 172(6): p 494-500

iii National Heart Foundation of Australia. (2011). Sitting less for adults. Retrieved from http://www.heartfoundation.org.au/SiteCollectionDocuments/HW-PA-SittingLess-Adults.pdf

iv Healy, GN., Matthews, C. E., Dunstan, D. W., Winkler, E. A. H., & Owen, N. (2011). Sedentary time and cardio-metabolic biomarkers in US adults: NHANES 2003-06. European Heart Journal, 32, p. 590-597.