



PROeducation



this issue

The Toxicity of Sitting

August PROwebinar: On the Road Again: A look at ergonomics in the transportation sector
Upcoming Events

PROservices

- Physical Demands Analyses
- Cognitive Demands Analyses
- Ergonomic Risk Assessments
- Office Ergonomic Assessments
- Return to Work Job Matching
- Injury Compatibility Assessments
- Manual Handling Assessments
- Fatigue Analyses
- Postural Studies
- Workstation Design
- Engineering Audits
- Job Hazard Analysis
- Safety Audits
- Customized Training
- Health & Safety and Ergonomic Program Development

The Toxicity of Sitting

Nowadays we conference call or email rather than getting up and walking to another person's office and we eat through lunch and breaks. If you are lucky, you may have a photocopier that requires a short jaunt to retrieve documents, but for many of us, we sit at our desk until it is time to go home. That's not even counting the amount of sitting on our commute to and from work, or relaxing on the couch watching TV in the evening. Considering all we do in a day, it is not a stretch to say that many of us sit greater than 12 hours per day!

The question then is, what does this mean for our individual health and well-being?

Mechanics of Sitting

Sitting changes the natural "S" curvature of the spine, causing an imbalance that increases intervertebral disc pressure. Sitting at improper heights can compound these effects. Seated heights that are lower than a user's natural seated stature will decrease the joint angle in the hips and stretch of the lower back muscles and sciatic nerve leading to potential hip, back and potential sciatic irritation. Sitting higher, without proper lower limb support, will create contact stress to the backs of the thighs thus compressing the nervous and vascular system that runs relatively superficial to the skin. This could lead to weakened muscles and ligaments in the lower back and degeneration of the lumbar disc that lead to chronic back discomfort.

Health Risks

Recent research is showing that getting the minimum recommended amount of exercise may no longer be enough to counterbalance the prolonged hours of sitting. The effects of spending too much time in a chair may also impact our digestive and metabolic systems causing increases in body weight and an increased risk of diabetes (Johnson, Moneywatch, 2012). Further, a research study published in the January 2014 issue of Circulation: Heart Failure, stated that those who spent at least five hours per day sitting were 34% more likely to develop heart failure than those who spent less than two hours a day sitting.

If this applies to you or your workforce, it is important to actively seek ways to reduce the sedentary tasks in your day by incorporating **Moderation**, **Mobility** and **Modification**. Awareness of the risks of sitting and knowing how to make changes are the best defense in making smart choices to working healthier and happier.

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MISSION STATEMENT

“To consistently provide our clients with professional, proactive and productive solutions to advance ergonomic strategies within an organization to reduce injury risk and improve workplace design”

Moderation

Take a look at your tasks and see if there are opportunities to break them up by limiting static seated postures to mitigate the negative effects on the body. Here are some ideas:

- ▶ Move the filing cabinet or printer to the other side of the room
- ▶ Try standing to answer your phone
- ▶ If you are having a one-on-one meeting, make it a walking meeting
- ▶ If the boardroom is still a more practical choice, then have an unwritten policy that the subject matter experts stand to deliver their material.

Mobility

The Canadian Standards Association (CZ412) recommends standing for 5 minutes every hour. Studies have found that for every 20 minutes of sitting, getting up and standing/walking for 2 minutes has shown lowered risk levels for cardiovascular disease and diabetes (Canadian Health Magazine, 2013). A fully adjustable chair is a great way to subtly introduce mobility into your day simply by frequently using the adjustments (get familiar with how to adjust your chair!). You can also try stretching or burn a few extra calories by taking the stairs instead of the elevator.

Modification

Sometimes you cannot avoid sitting to do certain tasks. In those instances, it is critical that the chair and other equipment are a proper fit for the individual's size and job or task function. Conducting an ergonomic assessment of the office workstation is a logical step to ensure the workspace and tasks are reviewed as a whole. Companies can save money by getting it right the first time and implementing equipment that will work for current and future employees.

Ergonomists at PROergonomics are certified professionals with experience at assessing workstations using a systems-based approach. [Contact us](#) to schedule an assessment or to request our Office Ergonomics resource card for your office.



PROevents

WE HOPE TO SEE YOU AT:

- ▶ Barrie & District Chapter HRPAC Conference – October 1-2nd
- ▶ Schedule 2 Employer's Group Conference – October 7-8th
- ▶ PIP Regional Conference (York Region) – November 13th
- ▶ PIP Regional Conference (Golden Horseshoe) – November 20th

PROwebinars

AUGUST

**On the Road Again:
Ergonomics for
Transportation**

August 15th
@ 11:00 a.m.

