



taylor'd ERGO TIMES



The Hidden Costs of MSDs

Organisations track musculoskeletal disorders (MSDs) through employee reporting, WSIB claims, or missed days of work. Tracking provides an estimate of how many workers are experiencing discomfort, and how much lost time is incurred. What we don't know is how much productive time is lost **at work** due to musculoskeletal discomfort... in other words, how productive are people when they come to work with an ache or an injury?

A group of researchers in the United States (Maryland, Pennsylvania, and New York) conducted a study to quantify lost productive time and the associated costs due to headache, back pain, arthritis, and other musculoskeletal pain in the US workforce. They surveyed a sample of nearly 29 000 working adults, using a work and health interview. The participants were asked about:

- employment status
- usual work time
- the presence of 22 health conditions in the past two weeks, including headache, pain in the back, feet, hands and wrists, arthritis, and joint pain.

Researchers then asked participants to recall and report:

- missed hours (i.e. partial workdays)
- reduced performance on days at work not feeling well
- attributed health-related causes

Categories for reduced performance included:

- losing concentration
- repeating a job
- working more slowly than usual
- feeling fatigued at work
- doing nothing at work on days when they were at work not feeling well.

Lost labour costs were estimated by translating hours of lost productive time into lost dollars, using self-reported annual salary or wages.

Workers who reported experiencing musculoskeletal pain had an average of 5.5 hours/week of lost productive time. In total, the cost of lost productive time due to common pain

"A total of 52.7% of the workforce reported having headache, back pain, arthritis, or other musculoskeletal pain in the past two weeks. Overall, 12.7% of the workforce lost productive time in a two-week period due to a common pain condition, and 7.2% lost two or more hours per week of productive time."

Our mission:

Inspiring, building, and supporting partnership between your organisation and our innovative team to advance ergonomics excellence.

Our team:

Carrie Taylor Van Velzer

M.Sc., CCPE, CPE
Principal Ergonomist

Karen Hoodless

M.Eng., CCPE, CPE
Operations Manager/Ergonomist

Annie Barnwell

M.Sc., CCPE
Ergonomist, London, ON

Andrea Miklavcic

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Ergonomist, Mississauga, ON

Andrew Strathearn

B.Sc. (Hon.Kin.), AE Candidate
Ergonomist, Ayr, ON

We are recruiting...please pass the word. We're looking for an experienced ergonomist with at least "Associate Ergonomist" status through the Canadian College for the Certification of Professional Ergonomists.

All of our ergonomists are members of:





conditions (headache, back pain, arthritis, and other musculoskeletal pain) in the US workforce was estimated as \$61.3 billion per year. Of this, **lost productive time due to musculoskeletal pain alone accounts for \$11.6 billion.**

This study shows that the claim costs of MSDs are only one component of the total cost of the issue. Musculoskeletal discomfort causes a significant reduction in productivity. This further reinforces the use of ergonomics not only to reduce the risk of musculoskeletal *injury*, but also to improve *comfort*, *quality*, and *productivity*.

Reference: Stewart, W., et al. 2003. Lost productive time and cost due to common pain conditions in the US workforce *Journal of the American Medical Association* 290(18):2443-2454. Summary by Andrea Miklavcic.



PDD tips & tricks

If you are not using a Taylor'd Ergonomist to complete your physical demands descriptions (PDDs), you should consider sending your staff to our September 11-12 workshop to ensure that your company's PDDs are being done using proper methodology. Here are five quick photography tips, to get you on your way to creating user-friendly, concise, PDDs:

1. Only use the flash if you have to. Flash draws attention to the worker, making him/her uncomfortable.
2. Make sure that the worker takes up the majority of the photo. If your photo shows a lot of wall and ceiling, crop it to draw the viewer's attention to the worker.
3. Lighten and increase contrast for photos that will be printed and copied or faxed. Photos inserted into documents with "default" brightness and contrast often photocopy as an almost-black box.
4. Take photos either facing the employee, or immediately beside him/her, if possible, to show postures optimally.
5. Read the manual. You need to understand what settings to use for dark environments, how to focus, how to force the flash in a back-lit setting, etc.

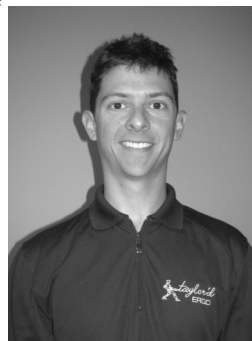
Learn more about photography, force measurement/matching, dimensional measurement, and quantifying "repetitive" and "sustained" demands, in our upcoming workshop! See the back page of this newsletter, or our web page for registration info.



Promoting Ergo

We spend quite a bit of time developing "ergo" awareness materials for our on-site ergo (regular ongoing) clients, including bulletin boards with weekly and monthly updates, quarterly ergo contests, and awareness seminars. We also have produced a variety of promotional items, which clients can distribute to their

employees as part of their ergo awareness initiatives. This issue, we thought we'd feature our jar opener in the newsletter. This rubberized disk with "ergo" instructions for opening jars, is a low-cost product that will help keep your employees thinking about ergonomics at home and at work! Only \$2 each.



Welcome, Andrew!

Andrew Strathearn joined our team in August. Andrew has started his assignments with Taylor'd Ergo with a mining company, a foam manufacturer, and a transit commission. He comes from a recent background in rehabilitation, and is happy to shift from a re-active treatment focus, to a pro-active perspective on MSD prevention.

Andrew went to the University of Waterloo, and so he shares the same educational background as Karen and Andrea, and many of our previous ergonomists. He held co-op placements in a variety of kinesiology roles, including one as an ergonomist for a large Ontario power firm. Andrew has moved to the Ayr area from Midland. He has been enjoying finding new mountain bike trails to explore in the region.

Already we've heard a few comments about the alliterative effect of our staff names, with Carrie & Karen, and Annie, Andrea, & Andrew....how did that happen? We're still hiring, so we're hoping for a new letter....

Good luck to Colin, as he pursues his PhD in biomechanics at the University of Waterloo. Our team and our clients wish him well.

Using the news...

Your address: If your mailing address is incorrect, please let us know by emailing (info@taylordergo.com or faxing (519 632 7469) a correction. We'll enter you into a sweatshirt draw. Congrats to Marie de Boyrie of the City of Waterloo, who earned a sweatshirt this month.

Electronic: We're happy to send you a hard copy if you prefer to read it on paper, but we also distribute the newsletter electronically. You can also download it from our website at www.taylordergo.com. Just let us know your preference!

After you've read it: Please send the newsletter along to a colleague, post it on your safety board, take it home for your family, or leave it in your lunch room. When everyone is done with it, please recycle!



A Photographer's Compliment

Find the words listed below in the word search, and then complete the sentence provided.

- | | | | |
|-----------|----------|-------------|--------|
| Attention | Dark | Lock | Sharp |
| Automatic | Faces | Manual | Shoot |
| Black | Fax | Never | Shot |
| Blurry | Flash | Photography | Show |
| Bright | Focus | Pixel | Solo |
| Colour | Force | Poor | Steady |
| Contrast | Great | Print | Taken |
| Copy | Honest | Screen | Train |
| Crop | Lighting | Settings | White |
| | | Shake | Work |

Free Ergo Speaker
If your *professional association* is looking for a speaker on an “ergo” topic, please contact Carrie in our office. We would be happy to come out to speak with your colleagues! (Of course, we’re hoping that some of them might be interested in asking some questions about our services after the presentation.) If you are within an hour radius of one of our offices, we can probably come at no charge! And, yes, we can definitely offer seminars to groups of employees at your *company*, but we do have to charge for these sessions.

P	I	X	E	L	H	S	A	L	F	T	E
N	H	F	Y	P	G	K	K	R	O	W	C
O	C	O	L	O	U	R	F	A	X	H	R
I	B	C	T	L	L	A	E	A	E	I	O
T	R	U	W	O	I	D	C	A	C	T	F
N	I	S	C	S	G	N	I	T	T	E	S
E	G	K	H	T	H	R	T	W	O	H	S
T	H	O	R	S	T	E	A	D	Y	I	T
T	T	T	R	A	I	N	M	P	O	R	C
A	N	S	N	R	N	T	O	O	H	S	K
K	I	H	E	T	G	C	T	O	E	Y	C
E	R	A	V	N	B	L	U	R	R	Y	A
N	P	K	E	O	O	M	A	N	U	A	L
N	E	E	R	C	S	H	A	R	P	R	B

Famous author Jack London had his portrait made by the noted San Francisco photographer, Arnold Genthe. Jack began the encounter with effusive praise for the photographic art of his friend and fellow bohemian.

"You must have a wonderful camera...It must be the best camera in the world...You must show me your camera."

Arnold then used his standard studio camera to take what has since become a classic portrait of Jack London.

When the sitting was finished, Arnold could not contain himself. "I have read your books, Jack, and I think they are important works of art. You must have a wonderful _____."

Source: <http://www.photoquotes.com>



Sitting—Might be killing you?

The word, “cathisophobia” refers to the “fear of sitting” (actually, a fear of being motionless). Is sitting really worthy of its own phobia? Lately, we’ve heard a lot of bad news about sitting. We already knew that sitting burns fewer calories per hour than standing, and by quite a margin. This means that when people who are used to standing or walking or generally moving about take an office job that involves primarily sitting, they will need to eat less. If they continue to eat at their usual rate, they *will* gain weight. We also knew that sitting places higher loads on the low back than standing. The lumbar (low back) curve is flattened in a seated position, even with a well designed chair. This places strain on the discs of the back. Muscle atrophy (weakening) also occurs with prolonged, day-after-day sitting, because sitting doesn’t require the muscle “exercise” that standing involves.

Here are some new stats, that we found at <http://www.medicalbillingandcoding.org/sitting-kills/>

- Sitting six or more hours per day makes you 40% more likely to die in the next 15 years, in comparison to someone who sits less than three hours. *Even if you exercise.*
- People with sitting jobs have twice the risk of cardiovascular disease than people with standing jobs.
- Those who watch three or more hours per day of TV are 64% more likely than average to die from heart disease. After three hours per day, every extra hour of TV leads to an 11% higher risk.

We’re hoping that these figures scared you right out of your seat! Cathisophobia just might save your life!



Physical Demands Description September 11-12, 2012 (and again January 8-9, 2013), in AYR (Cambridge)

This two-day session will allow participants, including ergo co-op students, nurses, safety coordinators, and return-to-work coordinators, to collect data and write a concise physical demands description report for the WSIB, employee's doctor or physiotherapist, or for internal company use. Learn to:

- Identify a **primary job objective**.
- Discriminate between **essential** and non-essential duties.
- Use tools to measure **force, posture, and repetition**.
- Learn to take **photos** effectively. (Bring a digital camera from your facility, or use one from our class set.)
- Measure and document **workstation** parameters.
- Describe environmental, sensory, and mobility demands.
- Write a **concise physical demands description report** including a summary of the "functional requirements" that matches the WSIB's FAF form.
- Validate** the report, obtaining worker and management verification.

Ergo Design October 3, 2012, in AYR (Cambridge)

Participants, including engineers, safety coordinators, and ergo team members, will learn to incorporate effective ergonomic design features into new workstations, jobs, and layouts, using our detailed design guidelines. Learn to:

- Describe and use "**anthropometric** (body size) data".
- Use design guidelines to identify the **specifications** of a solution. In particular, you will learn to apply the guidelines for working **height, reach,** and **clearance**, through a variety of case studies.
- The course also includes **detailed ergo design guidelines** for the following:

Carts	Design for repair	Hand work	Mechanical assists	Work design
Containers	Displays	Hand tool design	Personal protective equipment	Work flow/conveyors
Controls	Floor surface	Lighting	Seating	

Lifting Tips Train-the-trainer October 24, 2012, in AYR (Cambridge)

Participants will get hands-on practice lifting using 15 proper lifting techniques. They will also learn to effectively coach others to use the tips. Learn to:

- Describe the types of **injuries** associated with manual handling
- Identify workplace and individual factors that may **discourage** proper lifting technique
- Lift using **15 safe techniques/tips**
- Identify other management control measures, including **policies and engineering** controls
- Customise our **coaching plans** to take back to your facility
- Customise "**takeaways**" to reinforce each lifting tip (posters, handouts, puzzles, etc.)

More fall courses:

November 2012

Su	M	Tu	W	Th	Fri	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

November 14—Return-to-Work

November 21—Office Ergo (in London!)

To register, complete and fax this page to 519 632 7469, with your purchase order number, or mail it with a cheque to Taylor'd Ergonomics, Box 1107, Ayr, ON N0B 1E0. Your registration will be **confirmed by fax or email, 1-2 weeks before the course**. Register early, as space is limited. We do not accept credit card payment. Cancellations within one week of the workshop will be subject to a \$100 charge, although substitutions are welcome at any time.

Name(s): _____ Company: _____
 Phone: _____ Fax: _____
 e-mail: _____ P.O.# _____
 (if no PO, please send cheque with registration)

- Please register me for the:
- PDD** course on Sept 11-12, \$785+hst
 - Ergo design** course on Oct 3, \$425+hst
 - Lifting tips** course on Oct 24, \$370+hst
- HST#89765 6377

To register for other courses, please go to our website at taylordergo.com



A bi-monthly publication from
Taylor'd Ergonomics
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