May/June/July 2016
No. 123

taylor'd ERGO TIMES

Sneak previews of new presentations

We will be presenting four papers at the June 20-23 PREMUS conference in Toronto (for info see www.iwh.on.ca/**premus**2016)! Here are our abstracts...if they tweak your interest, please come and see us at the conference, or contact us for more info. We'd be happy to come and present the sessions at your workplace, after June 23rd!

Quick and Dirty Ergonomics: When is this approach appropriate? (Josie and Carrie0

A full and detailed assessment of a musculoskeletal disorder (MSD) hazard involves considerable time, and can uncover issues that are more severe, or more complex to solve, than the client anticipated. Some clients have asked us to offer informal assessments, an approach which offers the advantage of a greater volume of "advice" in a shorter period of time. (And this makes the ergonomist feel like a super-hero!) We have, until recently, been reluctant to provide this type of "quick and dirty" consulting, in the belief that it can sometimes cause more harm than good. For example, if we don't assess the risk of injury on a job, the client cannot distinguish tasks that present significant MSD hazards from those that present a mild inconvenience. If a significant financial investment will be required to address a recommendation, the client often requires a fuller assessment. Similarly, without a detailed assessment, the ergonomist cannot objectively compare the effectiveness of various alternative solutions. In spite of these concerns, we undertook a 16 week project where a client asked us to visit their site on a regular basis, with the goal of providing suggestions for as many MSD hazards as possible. The ergonomist provided hands-on ergonomics (hazard identification and control) training for all workers, and followed up on their concerns. She also investigated issues on a list that had been generated by the Health and Safety professional at the site. The ergonomist wrote brief "Rapid Ergo Directives" (REDs) that identified the hazard and provided suggestions for minimizing risk. She offered follow up support, and facilitated vendor quotes for products that she suggested. The client found that this approach met their needs, and requested further support for another location. This presentation describes the advantages and disadvantages of this approach, and offers suggestions regarding when it is appropriate.

SAVE A TREE, and DON'T MISS a THING!

We are working to reduce our hard copy distribution, and increase our e-news. If you enjoy our articles, you'll get more of them, more often, if you **convert to e-news.** Just send us an email at info@taylordergo.com, call 519 623 7733, or fax 519 623 9164. to provide your email address. And please remember to update us if you move!

Our mission:

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

Our team

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Follow us on:

All of our ergonomists are members of:

ACE
Association of Canadian Ergonomists
Association Canadienne d'Ergonomie

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Let us help you Ergo-Engage with your employees

Increase employee engagement with your ergo program by sponsoring an ergo contest, posting ergo tips, running ergo training, or setting up a test station.

What's a test station? You can get employees interested in new equipment, tools, or even a new work method by setting up a place for them to try it in an offline, safe environment. For example, one height-adjustable standing station can allow employees to log in and stand at work for an hour at a time, to see how it feels.

Or maybe you just want people to try mousing with the left hand. (Why? A better work distribution between left and right hands, the mouse is closer if you don't have to reach past the number pad, and left-mousing frees up space on the right for writing.) Set up a test station with a fun online game to let people prove to themselves that left-mousing isn't so hard!

Did you commit to holding an ergo awareness month in 2016...let us send you a package, including contests, posters, and draw prizes. Or have one of our ergonomists come out and provide hands-on face-2-face ergo training for all of your employees!

Check out our "ergo" products, such as travel tumblers, grocery bags, clip boards, lunch bags, and water bottles. (Contact us for volume pricing.)

Standing up, for workplace health (Carrie, Karen, and Josie)

Standing in office environments has been widely promoted as an effective intervention for the prolonged sitting "disease" that the media has reported to be "killing us". Employees, human resources professionals, safety professionals, and health care providers are in need of information to help decide whether standing at work would be beneficial for a particular person, and, if so, how to implement the change. This presentation reviews:

- Indications, and possible contra-indications for standing work
- Prioritizing "nice to do" vs. "need to do" when providing sit/stand stations
- Currently available options in the market, features, benefits, and limitations
- Guidance for employers and employees, as they introduce standing to their work day

Standing at work can have health benefits, but only if it is introduced with employee awareness and training, and with appropriate expectations.

Best Practices for Identifying Best Practices, and Teaching Workers to Use Them (Carrie)

Ergonomists are often challenged to train workers to use "best practices"; however, textbook techniques that work in one situation are not always applicable in other work environments. Ergonomists and safety professionals who promote "off-the-shelf" techniques such as "bend your knees", when the loads or workstations do not accommodate this method, run the risk of losing credibility, and thereby rendering all of their training ineffective. Companies who are pursuing engineering controls for musculoskeletal hazards often have a legitimate need to provide training for workers as an interim measure, to ensure that workers are using optimum biomechanics for tasks with high force and awkward posture requirements. This paper presents a method for identifying best practices in the workplace, for substantiating these practices, and for developing training to enable workers to use these practices successfully in a variety of applications.

Pushing Ergo Upstream: Selling Ergonomics to Engineers (Karen, Carrie, Josie)

For over 20 years, ergonomists have worked mostly reactively, typically housed in safety departments. They have been responsible primarily for determining whether a job needs to be modified in order to mitigate injury risk. Despite these efforts, the incidence of musculoskeletal disorders (MSDs) has not reduced substantially. Ergonomists' recommendations are often dismissed as "too expensive" or not "justifiable", especially if lower cost administrative controls, such as job rotation or behaviour-based training, are available. However, in the past few years, some companies have begun to regard ergonomics as a potential tool to be used toward productivity and quality improvements. This presentation provides a few examples from the literature and our experience, and offers suggestions to help ergonomists to "sell" ergonomics to engineers as a purely cost-saving measure, in addition to preventing strain/sprain injuries.

Missing e-news?

Here's what we've been talking about lately:

- sit/stand stations do not require prolonged standing (despite what you may have heard)
- ways to improve ergo awareness in your workplace
- choosing appropriate sit/stand furniture
- "ergonomic" box cutters, and considerations for tasks performed on "boxing day"
- work flow in a warehouse setting
- why peer review of professional reports is important
- home health care, and why family members and professionals need training in safe handling

Ask for links to our e-news (info@taylordergo.com). Alternatively, follow us on facebook or twitter @taylordergo. Thank you for "liking" and "sharing" our content—your support helps us grow!

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Back injuries: Back to basics on safe lifting

It's been a while since we went right back to basics on lifting safety. Here are some bullet points for your next safety blitz:

1. First, look for a **mechanical device to move the load**. Some objects are just too heavy and awkward to be lifted, regardless of lifting technique. Hoists, pulleys, cranes, forklifts, ramps, and lift tables improve postures, and can reduce or eliminate effort. If you can avoid manual lifting altogether, do it!
2. When given the choice, you should **"push", before you "pull",** and **"pull" before you "lift"**. In other words, you have more strength and can use both hands when pushing, and you have more strength while pulling than while lifting or carrying. When you push or pull an object, you don't have to support its full weight.
3. **Test the load**. When preparing to lift an unknown weight, lift a corner to assess its weight. (Some loads might even be "tested" with a foot.) If you deem it too heavy or awkward to safely lift on your own, **ask for help. R**ecognize your own physical limitations, and do not lift, push, pull or carry more than you are able.
4. **Break down large loads** into manageable sizes. Although you may have to take more trips, the load weights will be within your physical capabilities, and thus easier to handle repetitively.
5. **Check your footing and path**. Slips, trips and falls place unexpected, high loads on your back. Carrying a load further than you need to also wastes human energy!
6. When lifting, pushing, pulling or carrying a load, **use the following techniques** to minimise your risk of a back injury:
   - **Arch your back** *before* you handle a load, especially if you've been sitting for a long time. Prolonged sitting causes our ligaments to "stretch", and puts uneven pressure on the discs. Stretching in an arch helps to re-set and prepare your back for lifting.
   - **Tighten the abdominal muscles**. Tightening the "abs" stabilizes the torso, and prevents your spine from "buckling". Don't forget to keep breathing!
   - Think "**butt out"** when lifting. Bending the knees and using the stronger thigh and gluteal muscles, while keeping the curve in your lower back, reduces pressure on the discs, and optimises the strength of muscles and ligaments.
   - **Keep the load close.** Lifting with the hands far away from your spine can create very high back loads, even with small weights. Walk around to get closer, or pull the object close before lifting it.
   - **Dress for the occasion.** If you expect to get messy, wear protective clothing so you can keep loads close to your navel.
   - **Avoid twisting the spine** while lifting so that the loads on the discs and ligaments are even, and the muscles of the torso can work effectively. Take a step, and keep your hips and shoulders facing the same direction.
   - **Communicate if lifting with a partner.** Good communication can make transfers easier and the loads even between you and your partners…."Lift on 3…1-2-3."
7. **Kneeling** (on one knee especially) can help you to keep a stable footing, and a neutral back posture for low level work such as wrenching or assembly at floor level. (Use a mat or knee pads to protect your knees.)
8. **Stay fit!** We know that the more fit we are, the easier a job is, relative to our capabilities. Fitness includes maintaining:
   - Flexibility, by stretching,
   - Strength, through resistance training (e.g. pushups, planks, or lifting weights at the gym), and
   - Heart and lung health. (e.g. walking, playing basketball, riding a bike, or climbing stairs)

Job characteristics, such as shelf height, load weight, and barriers to reach, are important hazards; ergonomists can assess the risk of injury for a manual handling condition (or any task), and suggest changes that will improve safety. We would never suggest that simply following the tips above will prevent *all* back injuries. Some items just shouldn't be lifted. Back injuries can also be caused by other hazards, such as prolonged sitting, or repetitive bending, even without any weight in your hands. Good work practices allow you to reduce your minimise by taking control of the things you can change yourself.

Need help to reinforce this message? Contact us for info on our one-hour, hands-on lifting training, or our Lifting Tips train-the-trainer program.

A lifting riddle: Name an item that is very, very light, but cannot be lifted? (answer on page 4)

Free Ergo Speaker

If your *professional association* is looking for a speaker on an "ergo" topic, please contact Carrie. We would be happy to come out to speak with groups of human resources professionals, safety professionals, disability managers, production managers, or engineers! If you are within an hour radius of one of our offices, we'll come at no charge! (We also offer many seminars and workshops for groups of employees—call for pricing.)

Build in-house ergo resources with Taylor'd Ergo training

For more details, or to register online, please visit our website www.taylordergo.com/workshop/.

Please register me for:

☐ **Physical Demands Analysis**, May 11-12, 2016 AND September 7-8, 2016

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 an objective, concise physical demands analysis report for the WSIB, employee's doctor, physiotherapist, or for internal company use. Participants learn how to measure forces, quantify "repetition", and obtain useful workstation and task photos. $785+hst HST#89765 6377

☐ **Driver Ergo** Tuesday, June 9, 2015

Participants learn to how identify ergo hazards encountered by drivers, and how to implement some solutions. Learn how to adjust the driver's compartment for optimum comfort and safety, and how to select the best vehicle for you, or for your fleet. $365+hst HST#89765 6377

ONLINE registration and payment is now available at www.taylordergo.com. We're also happy to receive your registration "old-fashioned way." Just complete and fax this page to 519 623 9164, with your purchase order number, or mail it with a cheque to Taylor'd Ergonomics, 38 Water Street South, Cambridge, ON N1R 3C5. Your registration will be **confirmed by email, 1-2 weeks before the course.** Register early, as space is limited. 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)

Need in-house ergo training for your employees? Our hands-on, skill-based one-hour "face-2-face" sessions (driver, office, industrial, or lifting) can be provided for as little is $275/group (4 sessions in one day), plus materials ($5 per person), and mileage. Find more info under the "training" tab at www.taylordergo.com.

Riddle solution: A bubble

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