July/August, 2012
Issue 102

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What else do we do?

We are sometimes surprised when we get a call from a long-term client, asking if we do other stuff. For example, we may get a call from an industrial ergo client, wanting to know if we do office assessments too. We thought it would be worthwhile, having recently celebrated our 17 year anniversary, to review some of the interesting projects that we've taken on recently. We're hoping that some of them might "strike a cord" with you.

Physical demands descriptions: We've done them in virtually every imaginable environment including long term care (dietary, nursing, laundry), food processing, retail, slaughterhouses, all sorts of automotive parts manufacturing, municipal transit, a brewery, cement, pharmaceutical….and on and on. Our PDDs are the most detailed, quantitative reports that you'll find anywhere, and, while they do take some time to do, the feedback from our clients is *always* positive.

Demands-abilities evaluations: These are also called "job match evaluations" or "restriction reviews". They are an unbiased, third-party, quantitative determination of whether a job is suitable for an injured worker, or whether it can be made suitable. We usually do a PDD first, and we often communicate with the health care provider in order to thresh out the real intention of the worker's limitations. Of course, we are also regularly involved in "stay-at-work" projects with our regular clients, helping them to accommodate workers with temporary and permanent medical restrictions.

Sit-Fit testing development (for drivers): Karen has been working with a municipal transit company who needed help to develop a process for encouraging bus drivers to adjust their driving compartment optimally, and to identify the relatively rare situation when the characteristics of the seat and driver's compartment, in a particular bus model, could not accommodate a user with unique physical characteristics or medical limitations.

Other "Driver Ergo" projects: We've also done ergo assessments for bylaw enforcement officers, and we've been involved in "ergo" retrofits for transit vehicles. We've assessed concerns relating to climbing on and off forklifts, and we've helped employees to address concerns regarding loading materials in and out of their vehicles. We've helped a company to select an appropriate fleet vehicle, by comparing the "ergonomic" features of several short-listed vehicles.

Office ergo assessments: These are typically done on an individual basis; our assessments are perhaps the most comprehensive available. We always leave the employee more comfortable than we found him/her, and the report very clearly identifies what needs to be fixed or purchased after the assessment. A bonus for all of our assessments: you never wait for our reports, since we write them on-site, *immediately*.

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

Our team:

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Colin McKinnon
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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:

ACE
Association of Canadian Ergonomists
Association Canadienne d'Ergonomie

Lately we've been addressing lots of new issues such as multiple monitors, call centers with shared workstations, dispatch stations, and home offices. We also have office ergo services that involve awareness seminars (sometimes conducted as "lunch'n'learns" or, as we prefer, "dessert'n'learns"), followed by the ergonomist "floating" around to assist people with adjusting their own work stations.

Office re-location assessments: We've had several clients lately who have undertaken big moves, which has offered the opportunity to have the new (or relocated) workstations adjusted for each worker, prior to the employees' arrival. The ergonomist spends a few minutes with each employee, prior to the move, obtaining key measurements. The facilities group then uses these dimensions to set up keyboard, desk, and monitor heights, and to determine whether the desk should be on the left or the right. Some clients also include chair selection or settings in the process. These few minutes, spent prior to the move, pay off in spades after the fact!

Design reviews: Yes! Proactive clients are getting us involved at the concept or drawing stage for new equipment and lines. We've provided input into some major design projects in cereal, welding, a bakery, manufacturing, and poultry processing.

Job rotation: We've helped clients to develop new job rotation schedules, and to evaluate the effectiveness of existing rotation schemes.

Heat stress prevention: We have a heat stress prevention program and policy template that we have helped to customize and implement in several automotive parts plants recently. We also train the heat stress response team to measure heat stress with the wet bulb globe thermometer, and advise management of the heat relief needed. Some clients, who have their own heat stress policy, use us simply to evaluate energy demands quantitatively, to ensure that the appropriate amount of rest is provided when work-rest schedules are implemented.

Training: If you read this newsletter, you know that we do training, but did you know that we offer our workshops on-site, and we can customize them? We also offer a long list of one– or two-hour awareness seminars on topics ranging from driving, lifting tips, and ergo design, to or new session on supervisor "ergo" responsibilities.

CSA Z1004-12 March, 2012

Workplace ergonomics – A management and implementation Standard

This recently released CSA Z1004-12 Standard is structured for use with an occupational health and safety management system (OHSMS), such as CAN/CSA-Z1000; however, it may also be used independently or with other health and safety activities, as it employs a familiar identification, elimination, assessment, and control structure. This Standard is compatible with the Plan-Do-Check-Act (PDCA) model found in CAN/CSA-Z1000. The Standard provides an overall framework for addressing preventive and protective measures, worker participation, training, design, procurement issues, documentation, and legal and other requirements. The cost of the standard is $150. To purchase a copy, go to: http://shop.csa.ca/en/canada/general-workplace-ergonomics/z1004-12/invt/27032732012/

The structure of the standard itself is high-level—it helps to set a framework, describes the importance of management support, describes the ergo assessment process, and how to involve ergonomics in the design phase.

The "interesting bits" (from an ergonomist's perspective, that is) are in the Annexes. *Annex A* provides additional guidance for each section of the Standard.

Annex B provides a "Workplace screening checklist for ergonomics related hazard identification". This checklist provides questions for 24 categories/sub-categories including: workstation design, posture, repetition, displays/equipment/ tools, force, environment, PPE, work organization, and cognitive considerations. If an element is identified as "applicable" in this checklist, users can refer to the appropriate observation and recommendation tool number in this Annex for further assistance or information. For each category, a table containing ***Design Factors***, and associated ***Why Be Concerned*** and ***Recommendations***, are provided. These tables are supplemented by recommended load/weight tables for manual handling based on task heights, reaches, frequency, and provides correction factors for headroom, asymmetry, heat stress, coupling, clearance, and duration.

We wanted to compare this new CSA document against the Ontario MSD Prevention Guide and Toolbox, which was

About this newsletter…

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 Jen Winters of Toyota Boshoku Canada, who earned a shirt 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!

released in 2008. (You can find this document at http://www.labour.gov.on.ca/english/hs/topics/pains.php)

The CSA document:

- Asks questions that may come up at the design stage, and gives recommendations to resolve potential issues before they arise.
- May be better suited for individuals with minimal ergonomics background and expertise, and is an excellent guide when building an ergonomics program.
- Does not provide insight into the level of risk.
- Includes a "screening checklist for ergonomics related hazard identification" (Table B.1), which is a 7-page list of rather general questions such as "What do you see in terms of the position of the back?" and, "What do you observe in terms of the horizontal distance for grasping the load." The user checks "applicable", "not applicable", or "Comment". If an issue is identified, then the user is directed to the corresponding detailed guidelines, which include "why be concerned", and "recommendations". The guideline uses descriptors such as "prolonged" or "repetitively" without guidance. To complete the screening checklist for a job with a one-minute cycle would likely take 2-4 hours, including identifying some recommendations, assuming that the detailed guidelines were used.
- Includes guidelines for manual handling (B3.3.4 to B3.3.8), which are based on the Mital et al. book that was published in 1997, which is a great document and method, but a bit tricky to use. Annex B also provides guidelines and suggestions for vibration, noise, cold, heat stress (using the ACGIH guidelines, as we do), lighting, PPE, computer work, work organization factors, and cognitive considerations.

Free Ergo Speaker

If your *professional association (e.g. HR group, Safety group, Engineering group)* 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! If you are within an hour radius of one of our offices, we can probably come at no charge!

The **Ontario MSD Prevention Guideline** provides detailed information on MSD hazards, root causes, and specific tools that ergonomists can use to assess risk. The strength of the MSD Prevention Guide lies in the toolbox, where readers are directed to methods for quantifying risk. The MSD prevention guideline includes a basic "Risk Assessment Checklist" (RAC, in Section 3B) that employers can use to "screen" jobs for hazards. The RAC includes criteria for repetitive movements, static postures, and manual handling. The manual handling guidelines were adapted from Snook and Ciriello (1991). The RAC comes with some fairly extensive instructions on how to use it, including how to measure force. To complete the RAC for a job with a one-minute cycle would likely take about an hour, and would result in the identification of some key hazards that should be addressed (but not necessarily recommendations).

Both documents are useful. We don't really know if or how our Ontario Ministry of Labour will "encourage" the use of the new CSA standard. If they refer to this document, we may need to incorporate it more literally into our programs. We are not aware of situations where the MOL has referenced the Ontario MSD Prevention Guidelines, but it's a good document that is easy to use, and difficult to argue with. (i.e. The thresholds included in it make sense, in light of the available research.)

"Ergo" sling bag for beach or shopping!

Looking for a way to promote ergonomics over the summer? This non-woven polypropelene bag is big enough for a beach towel and change of clothes, or a day's worth of boutique shopping treasures. Note how the design hold the bag close to your body and leaves the hands free to shop, or to hold a railing or a child's hand. The graphics are custom-designed, and feature our ergo mannequins, and a series of tips for "ergonomic" shopping.

Order enough for everyone at these prices:

1-9 bags: $6 each, plus hst and shipping

10-50 bags: $5 each, plus hst and shipping

51 or more bags: $4.each, plus hst and shipping

Driving wisdom for your summer travels

Find the quote from Bill McGlashen, by weaving through the maze, starting at ➲ and finishing with ⌦.

E	I	S	S	O	L	I	V	T	E	R	G	O	X
C	N	E	I	M	E	T	H	H	T	E	R	G	O
➲	P	A	T	A	E	Z	I	I	U	T	E	I	X
R	E	R	D	E	L	M	N	G	Y	O	T	E	I
B	V	I	V	H	T	N	I	A	O	U	N	E	A
E	A	E	U	B	U	C	E	M	D	A	O	E	H
H	I	N	O	I	T	N	R	I	T	H	E	A	Y
U	O	D	Y	S	X	O	T	I	N	T	L	D	⌦

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Physical Demands Description September 11-12, 2012

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.

You will 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

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. **You will 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	

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 Sept11-12, $785 + hst

☐ **Ergo Design** course on Oct 3, $425 + hst HST#89765 6377

Coming up...

October 24, Lifting Tips Train-the-Trainer
November 14: Return-to-Work
November 21: Office Ergo
January 8-9: PDDs

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