

Inside Blindside

By Trisha Richards

Dreams offer an abundant supply of scenarios in which to embarrass ourselves. Consider completing what can only be described as a flawless presentation, awaiting the applause that is sure to come, but then notice you are without a stitch of clothing. How about that convivial conversation with the new boss, demonstrating your keen sense of company and self, just as you discover you've been zapped by a lazy zipper? Or what of the navigation skills needed to sit in an office chair, but your landing location being somewhat off the mark, you crash to the floor?

Some possibilities

What would your assessment be of the last example? Embarrassing? Sure. Painful? Probably. Clumsy? Maybe not.

Sandro Perruzza, executive director of corporate development at the Ontario Service Safety Alliance in Toronto, may have an explanation. An interesting feature of some older buildings in the city, for example, is that once they have settled, "the floor becomes uneven, so it creates a slope," Perruzza says.

Go on.

As a result, wheeled chairs may roll down the slope, causing a worker to miss the cushioned target.

Ah.

But don't feel too smug. Roving chairs can be (and could have been) avoided by simply placing mats underneath, Perruzza suggests. As a short-term solution, the mat provides the additional

friction needed to stop any unanticipated and unwelcome rolling.

The Keystone Kops quality of the wayward chair may seem amusing at first blush, but blush has the potential to turn to bruise (or worse) should a real fall and hard landing occur.

These are not the types of hazards that grab headlines, but their inconspicuousness and seeming innocuousness may well have allowed them to become firmly entrenched in what is regarded as among the "least dangerous" of workplaces: offices.

Safe haven?

Be clear: dangers lurk and demand vigilance, as would be the case with any working environment. "Most people think that, in an office, they don't have any serious risks," says Chet Ramphal, a trainer/consultant with Brantford, Ontario-based Occupational Health and Safety Consultants (OHSC). "Most

people think, well, how dangerous can a photocopier be?"

But just because "most people" may hold that view doesn't mean office environments are free of hazards, Ramphal says.

Oliver Howey, executive director of the Office Workers Career Centre in Toronto, agrees. Jammed packed as today's offices are with new technologies and equipment, Howey points out the environment is far different than in years past. "Technology has added an element that people underestimate," he says.

"People think, in an office environment, you're just sitting at a desk all day," Howey says. But multi-tasking is pretty much expected nowadays, with office staff "doing two or three things, all in a short period of time. So it can become quite a challenge."

While not "in your face" like the hazards that may be found in manufacturing, mining or construction, office conditions move beyond "balancing" challenges to actual physical hazards.

The adoption of information and communications technology also needs to be considered for safety's sake, notes information from Flexibility Ltd., a not-for-profit company out of the United Kingdom that seeks to promote flexible working. For example, extra heat from the equipment must be controlled or removed, and occupational health and safety risks relating to electrical hazards, eyestrain and sitting positions need to be addressed.

Workplace design plays a pivotal role in overall business performance by supporting the new work

modes of a knowledge economy, notes survey results from Gensler, a design and consulting firm based in the United States.

"As cost control becomes an even greater business priority over the next several years, office space reductions will be a common cost-cutting strategy," Diane Hoskins, executive director of Gensler says in a statement. "However, companies risk creating inefficiencies if they simply shrink space and continue with the same workplace paradigm," Hoskins cautions.

In administrative environments, Perruzza sees a lack of planning as being at the root of many slips, trips and falls. Oftentimes, he suggests a long-term view of space needs is not carefully considered right from the get-go — when an organization moves into an office.

But getting a firm grasp on future needs can be tough, Flexibility Ltd. reports. Changes in technology processes, working methods and the competitive environment, "make it virtually impossible" for organizations to forecast property needs.

Perruzza says companies that are successful, showing some growth, can quickly outgrow a space. "During that growth mode, the money that they're making will go into buying new equipment or paying the new staff they need," he suggests.

"They won't necessarily have the funds to move into a larger facility, so they wind up putting work stations in places where work stations don't belong."

Perruzza advises that desks located in common areas or in thoroughways are simply accidents waiting to happen. "If you put a desk in a location where there is no outlet and run an extension cord to it, now that extension cord is a trip hazard for people walking by."

Going down?

As winter inevitably approaches, Perruzza says, so do some slippery challenges. "You'll see that a lot of workplaces will get those rubber mats and put them in entryways," he says.

Mats, meant to absorb water and debris from footwear, are a good idea — until wear and tear creates features that, in themselves, become hazards. If edges start to curl, like dog ears, as employees walk inside, their heels can become caught, pulling the mat up and causing a fall.

Another entryway hazard is carpeting. Even if a worker's shoes are initially dry, they won't stay that way once he or she steps on and off a wet carpet. "You get on that linoleum floor, and now you'll slide," Perruzza cautions.

And just because morning rain (or snow) has stopped, one should not expect that everything, like carpeting, has also



dried out. "It's that unexpected wetness [that] kind of throws people," he says.

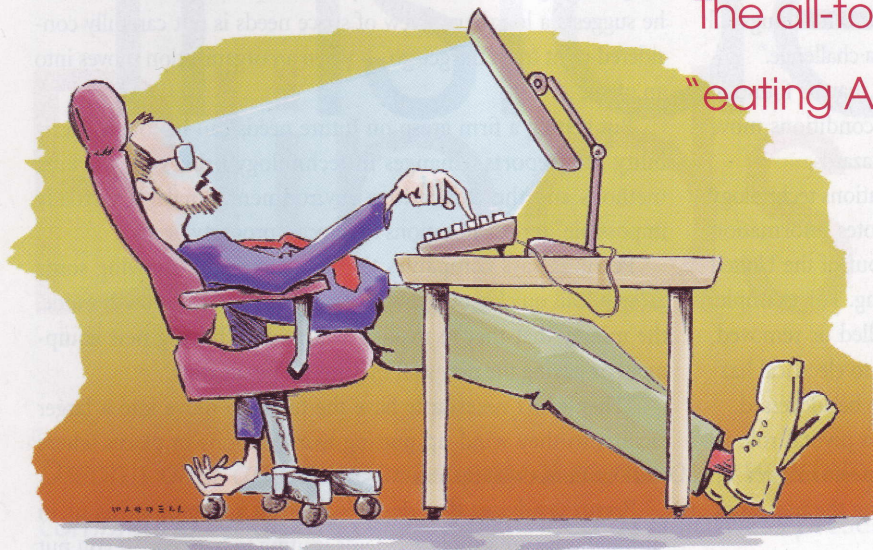
Weather, however, is hardly the only thing that can slip up office workers. Many such environments also have kitchen or coffee areas, Perruzza points out. "So, someone spills some coffee because they're in a rush, and then the next person... slips on the coffee, and there you go," he says.

Perruzza's advice to avoid a fall? Forego hard-leather or wooden-heeled shoes at the office and stick with non-slip footwear.

for several things. One main concern is ensuring the keyboard and mouse are at the correct height and position, Godkin says.

"Overuse of the mouse at the wrong height and position is the number one cause of office ergonomic injuries today," he reports. Resulting conditions can take the form of tingling fingers, carpal tunnel syndrome, golfer's/tennis elbow, rotator cuff problems, strained neck muscles, and frequent headaches in the temple area.

Another ongoing concern, says Godkin, is not having a height-adjustable keyboard tray wide enough to hold both the keyboard



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and the mouse. "Adjustability is the key when it comes to an office work station; a work station should have a fully adjustable chair and keyboard tray," he says.

Employers should have an ergonomics assessment completed for every employee who does computer work at a desk for more than four hours a day and who has reported some pain, Godkin contends.

Feeling comfy?

With footwear, protective steps can be taken, literally. But figurative steps can help minimize or prevent a host of other office hazards. One persistent issue has been ergonomics.

In a nutshell, Howey views ergonomics as the risk of greatest concern to office workers. "If people are going to be working in an office environment," he says, "they need to be properly positioned and situated."

Defining ergonomics as "fitting the job to the worker," Ramphal says failing to achieve that fit can prove costly in financial and worker health terms. For example, musculoskeletal disorders (MSD) account for 40 per cent of all lost-time claims filed with Ontario's Workplace Safety and Insurance Board. And those percentages are not so different in other jurisdictions country-wide.

"You can't redesign the human being, but you can redesign the work station," says Ramphal. MSDs are a result of overused muscles, tendons and ligaments, repetitive tasks, awkward positions and forceful movements.

General symptoms, notes information from the Canadian Union of Public Employees (CUPE), include numbness, tingling and burning, pain, clumsiness in the hands, swelling around the wrist and hand, and aches and pain that are strongest at night.

Bill Godkin, a consultant for Computer Ergonomics and Safety Consulting in Amherstview, Ontario, advises keeping an eye out

And pain need not be severe for protective measures to be pursued.

"Most employees will hesitate to discuss their pain problems and levels, as they tend to accept it as part of the job," Godkin suggests. If the worker has gone so far as to use a chiropractor, massage therapist, physiotherapist or family doctor to deal with pain issues, an assessment is clearly in order.

The all-too-common response of "eating Advil like candies" needs to stop, Godkin argues. For many employees, it has become an accepted practice, but it also masks bigger problems.

"Workers with a repetitive strain injury in one part of the body may develop problems in other areas at the same time," CUPE reports. "When feeling discomfort or pain from doing work in one particular way, they may try and compensate through movements that cause other strain injuries," the union adds.

"Employees need to come forward and report their concerns to their employer and seek treatment for their pain," Godkin advises. The best thing a worker can do is to listen to his or her body and take charge of personal health.

Godkin networks with a number of health care providers to address a condition they call the "circle of pain," he says. Patients with ergonomics problems seem to complete an average of eight treatments. "After each treatment, they return to work in a poor ergonomic environment, and their pain problems continue to exist, sometimes even worse."

The thinking of those undergoing treatment, but having pain return, is that treatments are simply not working, Godkin reports. In reality, if a proper ergonomics assessment had been done and changes made, he argues the "circle of pain" would be broken.

Some common recommendations include positioning work so a person can sit comfortably and minimize stress on any specific area of the body, varying positions and tasks, and matching tools to an individual's size and preferences.

Ergonomics is so much more than a work station or a chair, Godkin suggests. Other elements that must be considered as part of any assessment are the quality of work station components, lighting levels and quality, employee stretching, appropriate and comfortable footwear, and hand and finger safety.

The very best modern buildings, notes the information from Flexibility Ltd., incorporate zoned temperature and air quality control, natural lighting and good sound insulation.

Offices with better maintenance programs, Haverkate says, will likely decrease the potential for unhealthy airborne particles.

In the air

When it comes to office settings, it's not just about where you walk and how you sit. Indoor air quality (IAQ) is an ongoing issue because building design, outdoor air pollution, cleaning products and office equipment and products — such as photocopiers, laser printers and computers — can increase the level of indoor air contamination, notes information from Health Canada.

The Canadian Centre for Occupational Health and Safety (CCOHS) in Hamilton, Ontario reports that poor IAQ has spurred reports of the following health issues:

- sick building syndrome — describes cases in which occupants of buildings experience adverse health effects apparently associated with the time they spend in the building;
- building-related illness — refers to less frequent (but often more serious) cases of people becoming ill after being in a specific building at a certain time; and,
- multiple chemical sensitivities — defines the reaction of a

worker to a number of chemicals in indoor air, each of which may occur at very low concentrations.

Frank Haverkate, an environmental consultant/trainer for Haverkate and Associates, and director of the Toronto chapter of the Indoor Air Quality Association, says that, as a countermeasure, some newer buildings are keeping printers and photocopiers in a single room with dedicated ventilation systems to draw out any airborne particulates.

Ramphal explains that whatever air leaves the office environment must be balanced by an equal amount of fresh air coming in. If this pattern is not in place, inadequate ventilation will inevitably lead to illnesses related to airborne contaminants, he argues.

Health Canada notes the number of IAQ-related complaints is up in recent years with the increase in building tightness, the growing use of synthetic materials, and energy conservation measures that reduce the amount of outside air supply.

Occupant complaints, multi-factorial in nature, often have an elusive link to chemical, microbiological, physical and psychological mechanisms, the department reports.

Ramphal says that, in general, about 85 per cent of the people who work in offices spend all of their time indoors. "If your office space is designed for seven people, but you put 10 people there instead, where is that carbon dioxide (CO₂) going to go?" he asks.

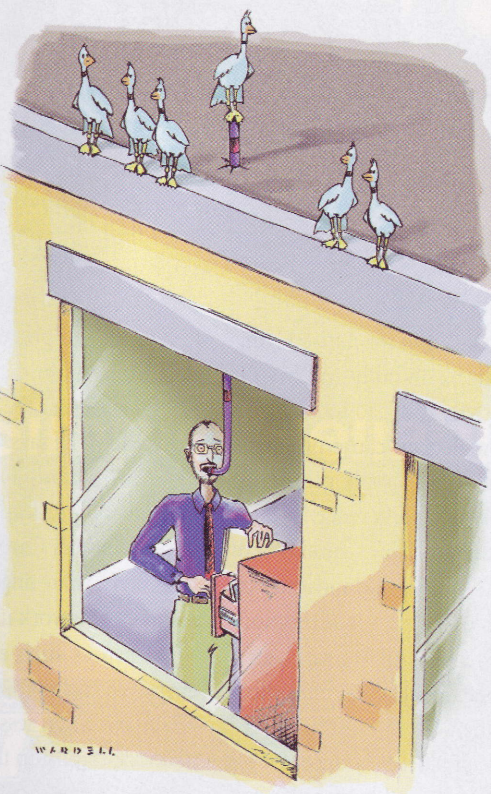
If CO₂ levels are high as a result of poor ventilation, Haverkate points out, that creates a whole host of additional problems, such as elevated humidity, dust levels and chemical offgassing.

That's where good housekeeping comes in. That alone can help reduce IAQ complaints in offices, suggests Haverkate. "We see offices that are maintained and cleaned properly, have good maintenance practices, and then we see offices that don't," he points out.

Offices with better maintenance programs, Haverkate says, will likely decrease the potential for unhealthy airborne particles.

Getting a professional assessment is the safest course of action, he suggests, but that doesn't mean building staff and owners should wait to take whatever steps possible to ensure the heating, ventilation and air conditioning system is well-maintained.

With regard to mould, the mere mention of which can elicit considerable anxiety, any water damage that contributes to mould growth must be "addressed right away," Haverkate says.



And whatever gets wet must be properly dried out, preferably within 24 to 48 hours, or the mould will simply return, Haverkate advises. For example, water damage to ceiling tiles may show as water stains. Making sure that tiles are changed after they become wet, coupled with addressing why that damage occurred in the first place, is essential, he says.

"You need to establish that health and safety is an ongoing concern, regardless of the type of environment you work in."

Shape up

Clearly, paying attention to what equipment is available and ensuring that systems are in proper working order must be part of the mix to ensure office environments are as safe as possible. But attention is also needed on the human side.

Even employees who recline in padded chairs in front of their desks for much of the day are at risk of injury, Ramphal suggests. Inactivity, such as "sitting for a long period of time or static postures in a chair that's not comfortable," can produce pain that may sideline an employee.

If much of the day is spent seated, says Judith Down, director of the Alberta Centre for Active Living in Edmonton, there may be negative effects on body and health. "Postural problems and too much inactivity can lead to back and neck complaints, and repetitive movements can cause problems with wrists, hands and fingers," Down says. "Simply getting up and moving around every hour can make a big difference."

Enhanced activity over the course of the workday may also have benefits that move beyond the physical, Down suggests, namely by improving attention and focus, particularly in the afternoon. "Many workers use caffeine, snacks or chocolate to give them a boost, but going for a walk or doing some stretches is more effective," she says. "It gets some energy flowing."

Employers can do their part to help employees be more active at work by ensuring they take regular breaks and their full lunch hour. It would be a good idea to impress upon employees that these are opportune times for a little get-up-and-go, Down adds.

Ramphal reports he once worked for a company that adopted a policy that no one be at their desks during breaks and lunch.

If something more organized is preferred, some workplaces have walking groups so participants can get moving and enjoy a little sunshine mid-day. "Employers can also allow employees to modify their work hours so that they can have a longer lunch hour in order to accommodate [an] exercise class," Down suggests. "They would then work later to make up the time," she says.

And that may not only be good for worker health, but for employer costs as well. The Public Health Agency of Canada (PHAC) reports that disease prevention is the fastest way to reduce overall health care costs, and business involvement in employee health programs can serve as a win all the way around.

"The question is no longer whether companies should get into work site wellness programs, but how best to design, implement and evaluate these programs for optimal results," notes information posted on PHAC's website.

Ramphal is concerned that a resource crunch (both time and money) could cause companies to think twice about investing in oh&s programs, training and testing. "It basically all boils down to cost, really. And the time."

Haverkate is of the mind that if the budget is there, some form of annual environmental testing should be done. "To be able to catch things early is much cheaper in the long run than [to] let it brew for a number of years," he says.

Training and awareness are critical, Ramphal suggests. OHSC offers an orientation package on office hazards, in addition

to policies and procedures on which office managers should train staff. Much of the cost resulting from worker injuries can be avoided "if you invest the money and train your employees on how to work safely," he says.

Employee buy-in is crucial to reduce office hazards, "from a managerial and leadership standpoint," says Howey of Toronto's Office Workers Career Centre. "You need to establish that health and safety is an ongoing concern, regardless of the type of environment you work in," he recommends.

Measures such as establishing oh&s committees, collecting employee suggestions on how to reduce or eliminate hazards, and lunch-and-learn sessions addressing health and safety can keep the issue uppermost in the minds of workers, Howey suggests.

What's the most effective solution to reinforce the message among workplace parties in offices? "We just need to keep reminding people," he says.

Trisha Richards is a writer in Toronto.

