

Institute viewed as a top work-health research centre globally

The Institute for Work & Health (IWH) “easily ranks” among the top five occupational health and safety research centres in the world and has made “remarkable progress” in advancing work-health knowledge over the past five years. These assessments were made by an international panel convened to evaluate the quality, relevance and impact of the Institute’s work from 2002 to 2006.

Every five years, the Institute’s Board of Directors commissions an independent review by an expert panel to assess the Institute’s research and knowledge transfer and exchange (KTE) programs and provide recommendations for the next five years. The seven-member panel – chaired by

former WorkSafeBC president and CEO Ralph McGinn – submitted its final report to the Institute’s Board in May.

The panel’s 2007 report highlights the great strides the Institute has made in conducting research to support the improvement of worker health.

Over the three-day meeting held in Toronto in March, the panel met with 18 different groups who commented on areas of the Institute’s work. Members of these groups included researchers, clinicians, health and safety association staff, employers, organized labour, students, policy-makers and injured worker representatives. The panel also received written submissions from more than 40 individuals from policy-making organizations, international research institutes and others.

“The panel was delighted with the thoughtfulness and openness of both the participants appearing before it and the individuals who provided written submissions. The willing participation of research partners and stakeholders in the review process speaks highly of the Institute’s broad engagement in the field and the respect that it has garnered,” says the report.

After the meeting and reviewing all submitted material, the panel wrote a comprehensive report and made eight recommendations for the Institute’s consideration. (A copy of the report can be downloaded from the IWH website at www.iwh.on.ca.)

“The report is an important component of the Institute’s planning over the next five years,” says Institute President Dr. Cameron Mustard. “We will draw on the panel’s recommendations and consult with Institute staff, key agencies and partners to



“The report is an important component of the Institute’s planning over the next five years.”

– Dr. Cameron Mustard, IWH President & Senior Scientist

develop a strategic plan for 2008 to 2012.”

Three general areas in which the panel made comments and recommendations were student training, knowledge transfer and exchange, and funding issues.

Training new researchers is vital

From 2002 to 2006, the Institute continued to build and strengthen its role of training and mentoring young researchers. More than 70 graduate students, post-doctoral fellows, sabbaticants and visiting scholars have worked on many research projects while at the Institute. In addition, the Institute funds two scholarship programs: the *S. Leonard Syme Training Fellowship in Work & Health* and the *Mustard Fellowship in Work Environment & Health*. The panel noted the “very valuable role the Institute plays in building provincial and national researcher capacity” and recommended the Institute continue to maintain and protect its role in training, educating and mentoring students.

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Research Excellence
Advancing Employee Health

The Institute for Work & Health is an independent, not-for-profit organization whose mission is to conduct and share research with workers, labour, employers, clinicians and policy-makers to promote, protect and improve the health of working people.

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professionnelle et de l'assurance
contre les accidents du travail



What researchers mean by...

bias

A study often begins with a simple question. Researchers are motivated to find answers to the question and add to the overall knowledge on a topic.

However, once they publish their findings, you might hear other researchers say that they are sceptical of the results because they may be biased. What exactly are these researchers concerned about and why?

In a research sense, bias does not refer to an intentional attempt to mislead. Rather, it refers to flaws in the design, conduct and analysis that creep into the study that results in a systematic shift in the findings.

Bias can be introduced at any stage of research – from the initial stages when researchers are collecting data, to the analysis of results, to the publication of studies. Bias can also refer to things that happen before the study has started (for example, the construction of questions to include is often biased by previous research); or things that happen (or don't) when the study ends – such as publication bias (*see below*).

Here are some common forms of bias that occur:

Selection bias: Suppose you want to examine what young people think about their risk of getting injured at work. Ideally, you would ask this question to a random group of young workers. However, due to the difficulty in finding young workers, you select only those young workers who visit a young workers' safety website. Your selection would be biased. It is likely that this group has a better knowledge of workplace safety, or is more concerned about getting injured at work because they have visited a website with safety information. Based on the response from this group you might conclude that young people think their risk of getting injured at work is high. But because of the selection bias, this finding might be higher than the actual views of young workers in general.

Attrition bias: Often researchers are concerned about how conditions – such as unemployment – affect people over time.

You might have a large, diverse sample of workers from the population at the start of your study. Let's say you want to see how stress levels are related to unemployment, so you survey these workers. However, over time those people who are unemployed for a long period might move, perhaps to find work elsewhere. As a result, they might not be included in a follow-up measurement a year later. Because these workers are no longer in your study, it may impact on your results. This is called attrition bias.

Measurement bias: Sometimes it's difficult for researchers to measure what they plan to. They might use a proxy or substitute for what they really want to measure. For instance, it might be difficult for researchers to go into a company and ask to measure workplace injuries, so they might use the company's lost-time work injury claims as a proxy for workplace injuries. In this situation, researchers might end up with a less accurate measure that may lead to different results.

Analysis bias: Researchers may conduct an analysis that does not consider or adjust for another potential explanation for the findings. One example would be an analysis of young workers' injury risk that does not account for how long they've worked or the hazards in their workplace. Inexperience in general or high hazard working conditions can also affect the risk of injury.

Publication bias: This is a type of bias in which researchers only submit studies with results that they think are likely to be published in scientific journals. It can also occur when editors of these journals accept or reject articles for publication based on the direction or strength of the findings. For instance, a study that shows an intervention works might be selected over a study that shows it has no effect.

Bias can occur in almost any study, although researchers first try and limit the possibility of bias. However, sometimes this is not possible, so the researcher's job is to better understand and report how the bias they encountered might impact on their results. ☺

Can social marketing campaigns prevent workplace injury and illness?

You're riding on a public transit bus to work. As you look around the bus, you notice a poster of a man who's holding up his hand that only has three fingers – his index finger and thumb are missing. The poster's message underscores the importance of safe workplace practices. Does this message make you think or act differently in your job?

That poster could be a part of a social marketing campaign aimed at changing a person's values or beliefs on workplace safety. Such campaigns will often use mass media communication – such as television commercials and transit posters – as one way to promote changes in socially important behaviours. But are social marketing campaigns effective?

This is an important question that researchers Dr. Cameron Mustard and Amber Bielecky set out to answer with a recent systematic review. They examined published research evidence on social marketing campaigns in occupational injury, disease and disability prevention.

“Social marketing approaches have shown their effectiveness in many areas of public health, such as smoking,” says Mustard, Institute for Work & Health President and Senior Scientist. “In our review, we found emerging evidence that these methods can be effective in improving and protecting the health of workers.”

Mustard and Bielecky presented this review's findings and highlighted two effective social marketing campaigns at the International Association of Labour Inspection conference in Toronto this spring.

Slips, trips and falls decreased by 20 per cent

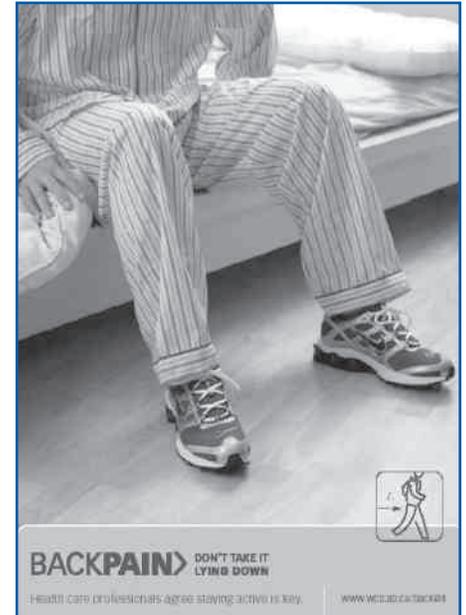
On The Right Foot was a campaign that ran from 2003 to 2005 in Germany. The campaign aimed to reduce slips, trips and falls by 15 per cent over two years. It used television and print advertising, posters and pamphlets, as well as workplace consultation and inspection that targeted 30,000,000 workers.

The evaluation showed improved workplace conditions and a decrease in injury rates. In 2005, slip, trip and fall injuries were reduced by 20 per cent compared with 2002 rates. Plus, a 47M Euro reduction in compensation costs was also realized over the same period.

Back pain campaign saves \$40 million

In Australia, a media campaign was effective in reducing back pain claims and lowering compensation costs. *Back Pain: Don't Take It Lying Down* targeted those workers who had already experienced an episode of back pain to help reduce disability, a leading cause of health-care costs.

The campaign included television and radio commercials that featured



This ad from Alberta is similar to what was used in the Australian Back Pain: Don't Take It Lying Down campaign.

health-care professionals, local celebrities and actors. There was a billboard and poster component, plus management guidelines of back pain that were targeted to doctors.

Over a three-year period after the campaign, the number of back pain claims were reduced by more than 3,300 claims and more than \$40 million was saved in compensation costs.

While these two campaigns showed that social marketing campaigns can be effective in a workplace health context, more high quality evaluations are needed to confirm the findings from this review.

“The quality of information available on the effectiveness and cost-effectiveness of social marketing is very weak,” says Mustard. “However, these weaknesses can be addressed if investments in social marketing campaigns incorporate resources to support high quality evaluations.”

In Brief ...

There is emerging evidence that social marketing campaigns are effective in improving and protecting the health of workers.

Tell us what you think

We're interested to find out if *At Work* is meeting your needs, how you're using it and what you think needs to be changed.

A survey is inserted into this newsletter. Please take a few moments to complete it and return it to us by fax at 416-927-4167 or complete it online at www.iwh.on.ca/survey.php.

As an incentive, fill out the survey and you will be entered into a draw for an IWH prize pack including a coffee table book, *Canadians at Work*, a USB data key, and an IWH stainless steel mug.

The next issue... Celebrating 50 issues

The *At Work* newsletter is celebrating its golden anniversary publication this fall. Since it first came off the press in the spring of 1995, *At Work* has been keeping readers in-the-know on research and knowledge transfer and exchange projects related to work and health.

Watch out for our newsletter retrospective in the next issue.

Training program attracts work and health researchers

Each year in Canada, the costs of disability arising from work-related causes – including workers' compensation and health-care costs – exceed \$6.7 billion. Despite the significant financial and social impacts of worker injury and illness, only a small fraction of Canadian researchers are dedicated to examining work disability prevention issues.

An innovative program that attracts international students, the Work Disability Prevention Canadian Institutes of Health Research (CIHR) Strategic Training Program, aims to build research capacity in young researchers and to create a strong network that examines these complex issues.

The Institute for Work & Health (IWH) is one of five research training centres affiliated with the program and several IWH researchers serve as mentors (*see sidebar*).

Based at the University of Sherbrooke in Quebec, the program is led by Dr. Patrick Loisel, an orthopedic surgeon and expert in work disability prevention. The program brings students

and mentors together to create awareness, share ideas and discuss practices related to preventing disability in workers. Since the program's launch in 2003, 44 students have enrolled and 12 have graduated from the three-year program.

Janne Skakon is a student with the program. An occupational psychologist and a researcher at the National Research Centre for the Working Environment in Denmark, Skakon says she values the program's transdisciplinary approach.

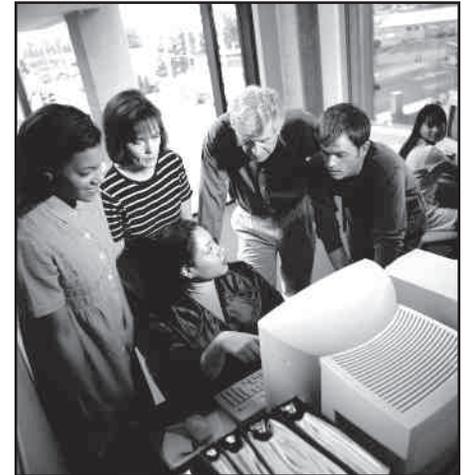
"As a researcher anchored in my own discipline, my original understanding – including theories and methods – are being challenged in a constructive way," says Skakon. "The impact of the economical, political and legal issues was new and interesting, which enhanced my initial understanding of the field."

In fact, the transdisciplinary nature of the program, with mentors and students from such varied disciplines as ergonomics, health policy, medicine, biostatistics and ethics, often changes the way students view work disability prevention.

"Students who have graduated from the program report that they have changed their practice and broadened their views of work disability prevention issues," says IWH Scientist Dr. Ellen MacEachen, a mentor with the program. MacEachen dedicates one week each year at the University of Sherbrooke, mentoring first-year students and co-teaching a methods course with IWH Senior Scientist Dr. Sheilah Hogg-Johnson.

MacEachen, who is a qualitative researcher, says sharing experiences and learning from others make this program unique. She says the instructors teach, "how to think rather than what to do."

Led by more than 25 mentors, the part-time program is available to doctoral and post-doctoral students. It comprises four educational components: e-learning, a summer session, a synthesis



course and optional courses or topics such as knowledge transfer. As part of the program, students can complete a training practicum at a designated research centre, such as the Institute for Work & Health.

Skakon, who's completing her PhD studies at the University of Copenhagen, spent six weeks at IWH last year. She worked with MacEachen analyzing qualitative data from interviews with leaders and employees in a large pharmaceutical company. The interviews are part of her PhD project on how leaders' stress affects employees' stress and well-being. "I found the work environment, the multi-faceted and open dialogue at IWH highly inspiring," she says.

The program receives funding from the CIHR. Students who are accepted into the program automatically receive a scholarship to cover most of the program costs including university fees, transportation, lodging and meals. ☘

To find out more, visit:
www.usherbrooke.ca/wdp/eng/progr/

Institute involvement

The Institute for Work & Health takes pride in training and providing mentorship to the next generation of work and health researchers. The IWH has been involved with the work disability prevention program since its inception in 2003. It is one of five international research centres students may visit to complete their practicum. Several IWH researchers serve as mentors including:

Dr. Claire Bombardier
Dr. Curtis Breslin
Dr. Donald Cole
Dr. Pierre Côté
Dr. Renée-Louise Franche
Dr. Sheilah Hogg-Johnson
Dr. Ellen MacEachen
Dr. Emile Tompa

In Brief ...

The Institute is part of an international program dedicated to training researchers in work disability prevention.

Amick appointed as NIOSH counselor

Dr. Benjamin C. Amick III, the Institute's Scientific Director, has been appointed to the Board of Scientific Counselors for the U.S. National Institute for Occupational Safety and Health (NIOSH). The purpose of this board is to provide guidance on the quality, relevance and applicability of NIOSH's research activities and programs. Its 15 members meet twice a year.

Workplace drinking culture studied

A workplace's drinking culture can affect employees' overall alcohol consumption, according to a new study involving Dr. Benjamin C Amick III, IWH's Scientific Director. Amick, who joined the Institute in January 2007, conducted this research while based at the University of Texas School of Public Health in Houston.

The study showed that employees at companies that most discouraged social drinking were 45 per cent less likely to be heavy drinkers than those in workplaces with the most liberal attitudes to drinking, after considering other factors that influence drinking levels. Heavy drinking was defined as having five or more drinks a day in the past month outside of work. The study was published online in May in the journal *Occupational and Environmental Medicine*.

The findings are based on surveys of over 5,000 employees in 16 different companies in the U.S. They represented a range of different sectors. Employees were asked how often, when and where they drank alcohol. They also answered questions about social drinking, such as their attitudes towards drinking with colleagues after work, drinking with clients, drinking and health, and others. Supervisors and managers were also surveyed.

Those less likely to drink were women and people with strong religious beliefs. Smokers and workers under the age of 35 were more likely to drink.

Institute sponsors play

The Institute recently sponsored a play about the impact workplace injuries have on workers and their families.

Easy Money – written and directed by Kate Lushington – was based on a research project that examined injured workers' experiences after a workplace incident. The purpose of the play was to communicate the messages stemming from the project's findings to many audiences including injured workers, policy-makers and others.

The Toronto Arts Council, Ontario Arts Council, Ontario Federation of Labour, Ontario Network of Injured Worker Groups, Canadian Auto Workers and the Ontario Public Service Employees Union (OPSEU) were the other supporters.

Institute viewed as a top work-health research centre globally (continued from page 1)

Significant advancement in KTE

One of the recommendations from the previous five-year review in 2002 was to ensure that relevant stakeholders knew about the Institute and how to make contact. In reviewing this and other past recommendations, this year's panel noted that IWH's knowledge transfer and exchange (KTE) program has "advanced significantly over the past five years, building strong relationships, engaging stakeholders early in the research cycle and bringing them to the table to better inform the Institute's priorities."

One significant area of direct stakeholder involvement is within the Institute's systematic review program. According to the panel, "the evolving expertise in systematic reviews has brought researchers and scientists into more collaborative working relationships

with many non-research partners. It has facilitated knowledge transfer and exchange approaches across the full cycle of a research initiative and expanded the Institute's activity in educating various stakeholder groups in the field."

Funding issues addressed

The research program's expanded activities over the past five years were applauded by the panel. The Institute has continued to receive consistent funding from the Workplace Safety & Insurance Board and has increased its overall operating budget by increasing funding revenues from external grant sources. These sources now account for approximately 34 per cent of the IWH's total funding which, the panel says, reflects well on the energy and talent of the scientists and attests to the quality of the Institute's work.

By the numbers

From 2002 to 2006, Institute staff:

- published 225 publications
- made more than 800 presentations at local, national and international conferences and workshops
- were representatives on more than 50 research governance and research funding organizations and on around 40 journals, policy councils and committees.

In order to maintain and enhance ongoing and future research interests, the panel recommends that the Institute should "look strategically for additional sources of core funding." ☛

Safety climate has “great potential” in reducing workplace injury rates

The 1986 nuclear power plant explosion in Chernobyl, Ukraine, which killed more than 30 workers and led to mass evacuations, holds a spot in history as the worst incident of its kind.

The disaster led not only to improvements in how nuclear plants were run and regulated worldwide, but it also spawned the widespread use of the term “safety culture.” In the Chernobyl context, the safety culture was described as “deficient” in terms of the way the plant was managed and safety protocols were disregarded.

Safety culture captures the notion that the values, attitudes and behaviours among workers at a firm, with regards to how they think and act towards safety, can have a significant impact on the firm’s safety performance.

Safety climate – a related but different term – provides a way to measure what workers think about safety culture in their company at a given point in time. Safety climate refers to workers’ shared perceptions of their firm’s and their leaders’ approach to safety. And it provides a focus point to make changes to improve safety.

There has been growing interest in the use of safety climate in injury prevention.

“Safety climate holds great potential in improving a company’s health and safety performance and reducing workplace injury rates,” says IWH Scientist Dr. Philip Bigelow. The Institute is involved in several areas of research on safety climate (see *Spring 2007 At Work*).

People use the terms safety culture and climate interchangeably, but there is a difference. The culture of an organization, as with the culture of a country, is hard to measure and difficult to change.

In comparison, a company’s safety climate can be determined by a survey that asks employees how their immediate supervisors and senior managers deal



with safety issues. Climate can be used, somewhat like a barometer, as a forecasting tool.

Studies have shown that safety climate is related to safety performance, so the results of these surveys could provide a way to predict workplace injury. Growing research evidence also suggests that the use of safety climate could have a significant impact in injury prevention, if organizations were to measure their climate and take action to improve it.

“If a company routinely monitored its safety climate and made an effort to strengthen it, this could lead to sustainable improvements in occupational health and safety (OHS) performance,” says Bigelow.

The need for innovative ways to prevent workplace injuries is crucial. In Canada, almost 500 workers died on the job in 2005 as a result of a traumatic injury. Despite reductions in workplace injury rates across the country, 338,000 workers – roughly the population of London, Ontario – were injured seriously enough to receive compensation that year.

The first Safety Climate Survey was developed in 1980 by Dr. Dov Zohar, an Adjunct Scientist at the Institute for Work & Health and professor at the Israel Institute of Technology (see *sidebar, page 7*).

Improving climate through leadership

How can a company improve its safety climate?

Despite the abundance of research in this area, “There has been very little research on climate improvement,” says Zohar. He notes that most research has focused on different ways to measure safety climate. There are perhaps 30 safety climate surveys, but he cautions that most have not been validated – or in other words, they haven’t been shown to measure what they intend to measure.

“The one exception is that people started to notice the relationship between leadership and climate,” he says. This is an area he has been researching himself for the past seven years. “Effective leaders can improve climate.”

An effective leader has the ability to change safety behaviours. Leaders’ concern for the welfare of their workers, their relationships with workers, and the value they place on safety are all aspects that contribute to effective leadership.

Improving safety leadership should, therefore, lead to improved climate. This idea showed that it had merit in a recent study.

The study involved a safety leadership intervention in a large manufacturing company in Nova Scotia. Zohar began this research while he was a Visiting Scientist at the Institute from 2003 to 2005. David Stuewe, a professor in the School of Public Administration at Dalhousie University and former CEO of Nova Scotia’s Workers’ Compensation Board, is another member with this study team.

The intervention included a workshop with general managers, department heads, direct supervisors and union representatives at the company to introduce them to the concept of safety leadership. The workshop was followed by weekly, confidential coaching sessions over several months.

These sessions were based on a unique approach in which informal daily conversations of managers were randomly chosen. The conversations were then analyzed to identify main messages, to see if there was discussion about safety, for instance. Given the longstanding premise that “Leaders create climate/culture at the workplace,” the main theme of coaching was: Which kind of climate are you currently promoting through your daily messages?

The second phase involved coaching sessions with pairs of leaders who had direct reporting relationships with each other. Each pair had six to nine sessions. At these sessions, they defined expectations of each other, agreed on safety objectives and evaluated their progress based on their daily conversations. The underlying focus was on sending clear



“If a company routinely monitored its safety climate and made an effort to strengthen it, this could lead to sustainable improvements in occupational health and safety performance.”

- Dr. Philip Bigelow, IWH Scientist

and effective safety messages during daily communication.

All employees at the company were surveyed before the intervention, at the end of the intervention phase, and six months later to see if safety climate changed. Each survey yielded more than 450 responses, with more than seven in 10 employees participating.

At each stage, there were improvements, with an overall 11 per cent improvement in safety climate. As verification, improvements were also recorded through random observations of safety procedures and of leadership safety interactions.

The IWH's Bigelow, along with Zohar, Stuewe and other researchers, will be developing a pilot project to introduce safety leadership development in unions and to managers in British Columbia. The project will be delivered through a series of workshops with the aim of targeting 3,000 people.

Other ways to improve climate

Other types of OHS programs might provide another avenue to change climate.

Bigelow and another research team are exploring this idea as part of a study in Ontario's electrical and utilities sector. Although the study was not specifically designed to improve safety climate, the researchers are examining whether it improves after a participatory ergonomic (PE) intervention is introduced in six companies. More than 1,000 employees are involved in the surveys.

The participatory approach to addressing ergonomic issues can improve both the physical as well as the psychological and social (psychosocial) factors associated with musculoskeletal disorders, explains Bigelow. “We believe that firms that are implementing PE interventions will improve their safety climate.”

Ontario's Workplace Safety and Insurance Board (WSIB) has seen improvements in safety climate in companies participating in its Safety Groups program. In this program, firms voluntarily join a group along with other companies to improve their OHS programs, with scheduled meetings and expectations. The firms commit to initiating or improving performance

The Safety Climate Survey: a brief history

In 1980, Dr. Dov Zohar published the first study on safety climate. The idea developed out of the broader concept of organizational climate. Zohar wanted to redefine this idea in a more precise way.

To determine the particular dimensions of safety climate, he looked at differences between companies with high accident rates and low accident rates. One consistent finding was that in factories with successful safety programs, top managers were strongly committed to safety. This was shown by their routine involvement in safety activities, by the priority given to safety in meetings and production scheduling, and in other ways. These companies also gave higher status to safety officers, emphasized the importance of safety training and had open communication and frequent contact between workers and managers, including safety inspectors.

These findings were incorporated into the initial safety climate questionnaire, which was given to 400 workers at 20 industrial plants in Israel. The results, published in the *Journal of Applied Psychology*, showed that employees agreed on their perceptions of how safety was valued in their firm – or in other words, on its safety climate. The study also showed that a firm's safety climate level was related to the effectiveness of its safety program, as judged by experienced safety inspectors.

In recent years, the questionnaire (on page 8) has been distilled to eight questions. This version is faster and more practical for firms to use. The briefer version was tested at a large manufacturing company in Nova Scotia. Further work in this area is ongoing.

8 Question Modified Safety Climate Survey

Please check ONE box that best describes your position.

Worker Front-Line Supervisor Management

This survey examines the safety at your work as you see it (i.e. there are no 'correct' or 'incorrect' answers).

For the questions below, please circle the number that best describes the situation as you see it (one number for each sentence: 1 being completely disagree and 5 being completely agree). Only circled numbers will be counted.

How much do you agree with each of the following sentences? Top management in this plant/company –

1. Reacts quickly to solve the problem when told about safety hazards
1 2 3 4 5
2. Tries to continually improve safety levels in each department
1 2 3 4 5
3. Invests a lot of time and money in safety training for workers
1 2 3 4 5
4. Listens carefully to workers' ideas about improving safety
1 2 3 4 5

How much do you agree with each of the following sentences? My direct superior –

1. Discusses how to improve safety with us
1 2 3 4 5
2. Refuses to ignore safety rules when work falls behind schedule
1 2 3 4 5
3. Is strict about working safely when we are tired or stressed
1 2 3 4 5
4. Says a "good word" to workers who pay special attention to safety
1 2 3 4 5

in five safety areas per year, and may withdraw at any time without penalty.

After participating in a safety group, firms in four sectors – construction, forestry, manufacturing and transportation – showed improvements in safety climate scores measured by the WSIB.

Leading indicators in prevention

Traditionally, a company's record of its injury rates has been used to provide an indication of its safety performance. This is known as a "trailing indicator."

Safety climate falls under the category of "leading indicators," as it provides a sense of a company's safety performance and potential for injuries before they occur.

In this regard, safety climate might also be particularly useful in small- and medium-sized workplaces. In the course of a year, injuries occur less frequently in smaller workplaces than in larger workplaces. Monitoring the rate of injury events – for example, the rate of injuries occurring per 100 workers in the course of a year – may not provide timely information on the safety performance of smaller workplaces.

Other leading indicators include OHS audits, checklists and risk management tools. These focus on technical solutions and compliance.

"These other leading indicators are necessary building blocks," says Bigelow. "But safety climate is the bridge that focuses on the day-to-day interactions, and how they affect safety." ❖

Grant Round-up

In addition to the Institute's core funding from the WSIB, Institute scientists receive peer-reviewed grants and awards from funding agencies.

Cameron Mustard	Mortality by occupation in Canada: a 10-year follow-up of a 15% sample of the 1991 census.	WSIB RAC ¹ : \$224,300	2007-2008
Peter Smith	Examining changes in injuries submitted as no-lost-time claims in Ontario between 1991 and 2005.	WSIB RAC ¹ : \$204,650	2007-2008
Agnieszka Kosny	Immigrant workers' experiences after work-related injury and illness.	WSIB RAC ¹ : \$164,971	2007-2008
Ellen MacEachen	An ethnographic study of process and experience with labour market re-entry.	WSIB RAC ¹ : \$140,605	2007-2008

¹Workplace Safety & Insurance Board's Research Advisory Council