

# otwork

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## Workplace program speeds return of workers with low-back injuries

According to new IWH research, workplace-based programs in which workers and supervisors jointly identify and solve return-to-work barriers help workers with low-back pain return to their jobs more quickly — especially workers who are often considered the most challenging return-to-work cases.

Here's the good news: Implementing a workplace-based program for workers who are absent due to low-back pain will help them return to work faster.

Here's the even better news: That same program will be particularly effective for workers often considered hard to return — older workers and those who have previously been off sick.

These are the findings of Institute for Work & Health (IWH) Scientist Dr. Ivan Steenstra, published in the May 2009 issue of *Spine* (vol. 34, no. 12, pp. 1243-1249). He came to these conclusions based on a study he carried out in the Netherlands while earning his PhD and then continued as a researcher at IWH.

"The results suggest a lot of progress can be made helping injured workers return to their jobs with a good workplace-based intervention, especially among those workers usually considered challenging cases," says Steenstra.

### Worksite program beats usual care

So what, exactly, does this return-to-work (RTW) program for workers with non-specific low-back pain look like? As Steenstra explains, it's based on the "Sherbrooke model," which refers to a program developed in Canada by Dr. Patrick Loisel and fellow researchers at Sherbrooke University. It involves the worker and the supervisor, with the help of an occupational health professional or ergonomist, identifying and solving RTW barriers, and then implementing the solutions in the workplace (see details on page 8).

Steenstra initially compared the results of this program with "usual care" among workers who had been off work for two to six weeks due to low-back injury. "Usual care" referred to being under the care of an occupational health physician only, without the worksite intervention.

continued on back page

## New centre focuses on workplace cancer

Canada has its first research centre dedicated solely to identifying, preventing and eliminating work-related cancers. Called the Occupational Cancer Research Centre, it was launched in March by Cancer Care Ontario, the Workplace Safety and Insurance Board (WSIB), the Canadian Cancer Society (Ontario Division) and the United Steelworkers. IWH is working with the new centre to explore potential research contributions.

## Pilot project offers free access to Cochrane

Canadians can now download reviews from the Cochrane Library for free as part of a pilot project. Until the end of 2009, Canadians can access the best evidence on a wide range of treatment procedures. That includes reviews from the Cochrane Back Review Group (CBRG) housed at IWH, as well as a review of workplace interventions for preventing work disability involving IWH Adjunct Scientist Dr. Renée-Louise Franche. To access reviews, go to: [www.thecochranelibrary.com](http://www.thecochranelibrary.com).

## IWH welcomes new science, KTE advisors

IWH is pleased to announce appointments to its Scientific Advisory Committee (SAC) and its Knowledge Transfer & Exchange Advisory Committee (KTEAC).

Joining the SAC are:

- Les Boden, a professor and associate chair of environmental health in the School of Public Health at Boston University, U.S.A.;
- Eira Viikari-Juntura, a researcher at the Centre of Expertise of Health and Work Ability at the Finnish Institute of Occupational Health; and
- Margaret Whitehead, who holds the W.H. Duncan Chair of Public Health in the Faculty of Medicine, University of Liverpool, U.K., where she is also the head of the World Health Organization Collaborating Centre for Policy Research on the Social Determinants of Health.

The new KTEAC members include:

- Maureen Dobbins, an associate professor in the School of Nursing at McMaster University and a scientist at the Ontario Ministry of Health and Long-Term Care;
- Paul Kilbertus, a corporate communications professional who has held positions with the Ontario Ministry of Health and Long-Term Care, Health Services Restructuring Commission and eHealth Ontario; and
- Jill Ramseyer, the health, safety and disability manager for the TDL Group, the operating company of Tim Hortons.

## WHAT RESEARCHERS MEAN BY...

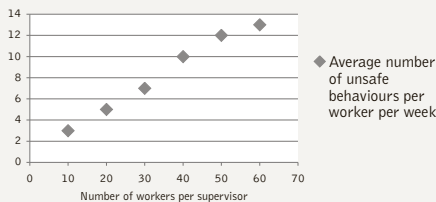
# Regression

**Scientists use regression techniques to find and illustrate trends in the relationship between two items, such as the relationship between degree of supervision and unsafe behaviours. These trends can then be used to make predictions.**

Suppose you were wondering if workers were more likely to work safely if they were more closely supervised. To learn more, you'd have to set up a study and use a common concept in research called regression.

Your study might look at different ratios of workers to supervisors at several large plants: 10 workers per supervisor, 20 per supervisor, 30, 40, and so on up to 60 workers per supervisor. Then you might observe each worker for a set time period over different shifts, and record any unsafe behaviours.

To find out how these two items — the worker-supervisor ratio and unsafe behaviours — are related, and to see any trends in the relationship, you would fit a regression line. A regression is used to learn more about the relationship between two items or "variables." Have a look at the chart below (remember, these answers are fictional):



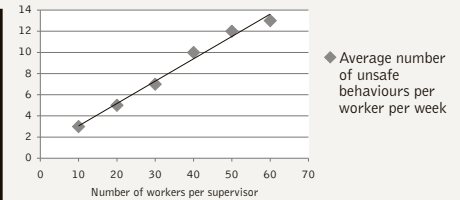
In this example, you see there are more and more unsafe behaviours as supervisors become responsible for a growing number of workers. The two "variables" are the worker-supervisor ratio and the number of unsafe behaviours.

This type of chart is called a scatter plot. It's the first step in identifying a regression line.

In this case, the worker-supervisor ratio is called the "independent" or predictor variable. It is fixed. The independent variable is mapped out along the horizontal or X axis. We want to see how this ratio affects or predicts our other variable, unsafe behaviours. The number of unsafe behaviours is called the "dependent" or response variable. It goes along the vertical or Y axis.

### Using regression to predict outcomes

Now let's see how the chart can be used. The next step is to draw a line that best "fits" the dots. This is a **linear regression** line, and it is often calculated by a software program. It's



also called a trend line as it shows that there is a trend between the two variables.

We can now use the regression line to make predictions. One example might be to estimate the number of unsafe behaviours when there are 25 workers per supervisor, which we didn't look at in the study.

Scientists may estimate a mathematical equation for the line called the **regression equation**. They can further analyze their results in different ways. They might consider how far each point falls from the line. They might also test how well their prediction matches the actual value by examining safety behaviours in units with different numbers of workers per supervisor than what they measured.

Sometimes, a straight line is not the best way to describe the relationship between the variables under study. Maybe a curve would be better. Regression techniques can accommodate these types of relationships, too.

### Working with more than one variable

But you may be thinking that other things affect workers' safety behaviours, too. For example, what about workers' experience? What about the amount of training they've had?

In such situations, with more than one item or variable that could predict an outcome, scientists can do a **multiple regression**. Multiple regressions are often used in research studies. They are more complicated to calculate, but they make the prediction more accurate.

Regressions are used in many different ways to help inform decision-making. You might use regression to measure the relationship between training hours and injury rates, mammogram screening rates and breast cancer mortality, Grade 12 averages and first-year university averages.

To see other columns, go to: [www.iwh.on.ca/what-researchers-mean-by](http://www.iwh.on.ca/what-researchers-mean-by). ➤



# Study suggests ways to improve safety among hard-to-reach, out-of-school young workers

Using youth employment centres for the first time to connect with out-of-school young workers about job safety, a new Institute for Work & Health study shows this hard-to-reach group possesses some basic knowledge of health and safety, yet it still experiences above-average injury rates.

They're young, but may have to work to pay for their food and shelter. They're mostly involved in temporary work in the accommodation, food services or retail industries. Their workplace injury rates are higher than average, yet they are familiar with the basics of workplace health and safety.

"They" are the subject of a new study that presents a detailed snapshot of a group of young workers who are particularly vulnerable to injury or illness: those aged 15 to 24 who are out of school – and especially those without a high school diploma. These young workers have higher work injury rates than those still in school. They are also considered harder to reach with high quality workplace health and safety programs.

The Institute for Work & Health (IWH) teamed up with First Work: Ontario Association of Youth Employment Centres to learn more about this group through an online survey. The survey was administered through most of the 70 First Work centres, which work closely with 42,000 youth each year.



Dr. Curtis Breslin

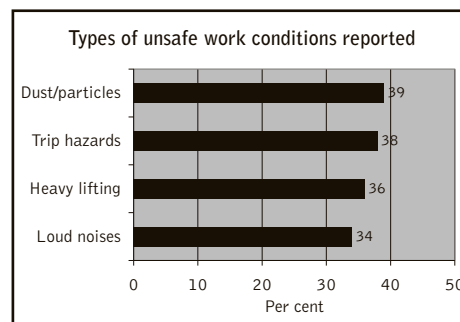
"The survey was unique in a number of ways," says Dr. Curtis Breslin, an IWH scientist who led the study. Young workers were asked about their workplace injuries, exposure to unsafe

conditions and safety training. More than 1,880 of these "hard-to-reach" young workers responded to the survey.

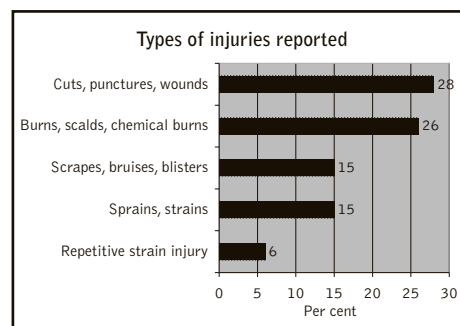
"It was a real breakthrough study," says Matt Wood, First Work director. "This is the first time youth employment centres have been specifically asked to be involved in workplace safety."

## Repetitive strain injuries reported

The study findings provide insights that point to practical recommendations. Having a job was important to these young workers, as more than half spent most or all of their earnings on basic necessities. Half were currently in school, and almost half were between 16 and 18 years of age.



The top three unsafe work conditions reported were exposure to dust or particles, trip hazards such as slippery or uneven floors, and heavy lifting. Overall, 12 per cent of these young workers reported having an injury that limited their activities over the past year. The most common injuries were cuts, burns, bruises/blisters, and sprains and strains, which is consistent with past research, says Breslin.



Just over six per cent reported a repetitive strain injury (RSI). "This is the first time we've heard about RSI in this age group," says Breslin. "This may be a breeding ground for these kinds of compensated injuries later in their lives."

## Work, school provide basic information

About 66 per cent said they had received safety training at work, on topics such as using equipment safely, protective equipment use, getting help in unsafe situations and reporting hazards. However, a significant number, four in 10, received their training solely in the form of a video.

"This is the least effective approach to achieve the goal of long-term retention," says Breslin. To help young workers retain the information, the researchers advise workplaces to increase supervision and use one-on-one training, rather than only relying on a video.

Outside of work, most of these young workers said they had received general workplace health and safety information from school (66 per cent), the media (42 per cent) and/or a parent or guardian (42 per cent). Only 14 per cent said they hadn't received any information about workplace safety from school or the media.

Wood wants to move forward in the area of workplace health and safety. "We need to build some momentum around being the voice of the most vulnerable young workers," he says. He also sees a role for employment centres in safety conversations with employers, which has been limited to date.

To read a copy of the report, visit:

[www.iwh.on.ca/youth-employment-centres](http://www.iwh.on.ca/youth-employment-centres).

## In Brief

Workers aged 15 to 24 who are not in school have a basic knowledge of workplace health and safety, but still experience higher-than-average injury rates.

## RESEARCH 101: Getting published

**In this series, Research 101, we are taking you behind the scenes of a research project at the Institute for Work & Health (IWH), from start to finish.**

We met the lead researcher, IWH Scientist Dr. Peter Smith, who told us about his study comparing trends in lost-time versus no-lost-time workers' compensation claims in Ontario (Part 1). We learned how the research team overcame roadblocks during data collection (Part 2) and about the importance of getting feedback on early results (Part 3). Now, Smith is eyeing the critical step of getting his results published. (For the full back story, go to: [www.iwh.on.ca/research-101](http://www.iwh.on.ca/research-101).)

### Early data ready to be reported

It's the spring of 2009, and the first part of Smith's study is essentially complete. Although he will still undertake a more detailed analysis of the type of injuries submitted as no-lost-time claims based on the coding work of Linda Kacur (see Part 2), he has analyzed the data already available, drawn some conclusions and confirmed these with his peers.

Now, he has enough information to document which factors, in general, are driving the relatively large drop in lost-time claims compared to no-lost-time claims in Ontario over the past 14 years. The question now is where to document them. That is, which scientific journals should Smith consider for publishing his findings based on claims data routinely collected by the Workplace Safety and Insurance Board?

The decision is not as cut-and-dry as you might think. A number of factors determine which journals researchers approach when it comes time to publishing study results. Some of these factors include:

- subject area or discipline of the journal;
- the journal's "impact factor";
- previous experience with the journal; and
- articles previously published in the journal.

Find out how Smith approaches this task in the publish-versus-perish world of scientific research: [www.iwh.on.ca/research-101](http://www.iwh.on.ca/research-101). ■

## ERGONOMICS CASE STUDY Car parts manufacturer realizes benefits of PE program

An Ontario manufacturer opened its doors to researchers who helped implement a participatory ergonomics (PE) program to improve the musculoskeletal health of workers. The company has since learned that the PE program saved it almost a quarter-of-a-million dollars — and in the most unexpected place.

Participatory ergonomics (PE) can be cost-effective for a firm. Just ask the auto parts plant in central Ontario that set up a PE program — a process that brings workers, supervisors and other key workplace personnel together to identify and solve problems to reduce the risk of musculoskeletal disorders (MSDs). The firm discovered, through an economic evaluation by the Institute for Work & Health (IWH), that it saved about 10 times more than it spent on

the program — to the tune of almost \$245,000.

"It indicates that PE can play a role in both primary and secondary prevention in the workplace," says IWH Scientist Dr. Emile Tompa, who led the economic evaluation, a process that looks at the costs and consequences of an occupational health and safety program. "In other words, it can be effective in not only reducing injuries, but also reducing the severity of injuries when they do occur."

### NEW IWH GUIDE AIMS TO IMPROVE EFFECTIVENESS OF PE PROGRAMS

Inspired by this auto parts manufacturer to undertake your own participatory ergonomics (PE) program? The Institute for Work & Health (IWH) has just released the guide you need to get started.

Called *Reducing MSD Hazards in the Workplace: A Guide to Successful Participatory Ergonomics Programs*, this



concise booklet provides advice on what needs to be done up-front to give your program the best chance at success and to prevent problems down the road. It is a useful companion to the step-by-step advice offered in *Participative Ergonomic Blueprint*. The guide is designed for workplace parties and practitioners (such as ergonomists) who are interested in implementing a PE program to identify and reduce risks that can lead to musculoskeletal disorders.

The advice is based upon an IWH systematic review examining the factors that resulted in successful PE programs in workplaces. Led by IWH Associate Scientist Dwayne Van Eerd, the review pointed to a number of "process" and "implementation" factors that can make or break a program. These gave rise to the following key points, each of which is brought to life in the booklet through a case study:

- Address key barriers to the process.
- Create PE teams with appropriate members.
- Involve a PE champion to guide and monitor the process.
- Provide training.
- Involve the right people from the workplace in the overall PE process.
- Define team members' responsibilities.
- Make decisions using group consultation.

"We feel this guide is the place to get started," says Van Eerd. "The hope is that, by following its advice, whatever PE process follows will be more successful."

You will find the new guide at: [www.iwh.on.ca/pe-guide](http://www.iwh.on.ca/pe-guide).

### Worksite team follows PE Blueprint

The firm's journey began in 2001. The 175-employee company, which manufactures foam parts for vehicle interiors, took part in a PE intervention study led by IWH Adjunct Scientist Dr. Richard Wells, director of the Centre for Research Expertise for the Prevention of Musculoskeletal Disorders (CRE-MSD) at the University of Waterloo.

An ergonomics change team was set up to implement the program at the worksite. The team included worker representatives from all shifts, a union and a corporate health and safety representative, a mechanical engineer, the production manager, the tooling supervisor, human resources representatives, and a person from the research team. Following the steps outlined in the how-to guide *Participative Ergonomic Blueprint* (available at [www.iwh.on.ca/pe-blueprint](http://www.iwh.on.ca/pe-blueprint)), the team identified and prioritized potential ergonomic changes based on departmental injury rates, worker suggestions, worker pain reports, and production and quality issues.

Over the next 11 months, the team introduced 10 physical changes to the plant. They included five easier-to-implement "fast track" changes, such as installing anti-fatigue matting to reduce leg and back fatigue, and fabricating a 45-degree angle on a tool to reduce wrist flexion. They also included five more-involved "full process" projects, such as installing platforms to reduce low-back stressors and changing a packing protocol to reduce above-shoulder work.

Wells' research team concluded that the PE program reduced exposures to MSD risk factors. But what about the cost-effectiveness of the PE program? How did the company fare on that front?

### Duration on STD/LTD drops

That's where Tompa and his team came in with the economic evaluation of the program. They calculated program costs of \$24,400, including the time and money spent on training, meetings, change implementation, ergonomics expertise and equipment.

They then looked at the number and duration of workers' compensation claims, modified work cases, first-aid-only injuries, short- and long-term disability (STD/LTD) claims and casual absences before and after the PE program was introduced. As reported in the first 2009 issue of *Journal of Safety Research* (vol. 40, issue 1, pp. 41-47), significant reductions were seen in only one measure — the length of time workers spent on STD/LTD benefits. That figure went down by 52 per cent, representing a savings of about \$244,420 over 23 months.

All in all, the findings indicate how important it is for companies to look beyond workers' compensation costs when determining the economic benefits of prevention programs. "The benefits of a PE program can surface in many places within a company," Tompa points out. This is especially the case with MSDs, which often arise from the interplay of personal, workplace and non-workplace risk factors.

For summaries of this and other IWH research, visit: [www.iwh.on.ca/research-highlights](http://www.iwh.on.ca/research-highlights). ■

## IWH associate wins Vanier scholarship

**Nancy Carnide, a research associate at the Institute for Work & Health (IWH), is among the first group of doctoral students in Canada and abroad to be awarded a prestigious Vanier Canada Graduate Scholarship.**



Nancy Carnide

Federal Minister of State for Science and Technology Gary Goodyear announced the first 166 recipients of the new scholarship — worth \$50,000 a year for up to three years — on April 30. "It was certainly a surprise," said Carnide about being among the first to receive this sought-after award. "This will allow me to really focus on my research."

Carnide, a PhD student at the University of Toronto, is studying the use of pain medication for work-related musculoskeletal disorders. She is exploring how and when these medications are used, their impact on work disability, and the potential role of mental health. Carnide's research into depressive symptoms among injured workers appeared in the Spring 2009 issue of *At Work*.

"The recipients of these scholarships are the world's leading doctoral students and the next generation of researchers, professors and industry leaders who will make considerable economic and social contributions in Canada and abroad," Goodyear said. ■

## What's new at [www.iwh.on.ca](http://www.iwh.on.ca)

Don't miss these recent additions to the Institute for Work & Health website.

The latest *Issue Briefing* explores the policy implications of emerging research showing that "newness" — whether it's young workers, workers of all ages new to their jobs, recent immigrants or employees in newly established firms — is associated with higher injury rates: [www.iwh.on.ca/briefings/newness](http://www.iwh.on.ca/briefings/newness).

New Research Highlights briefly describe findings from IWH research on:

- temporary workers and work-related sick days;
- saving money with participatory ergonomics; and
- X-ray use in chiropractic schools:

[www.iwh.on.ca/research-highlights](http://www.iwh.on.ca/research-highlights).

A new guide is available to help with those infrequent but potentially costly situations when an injured worker is not recovering and returning to work as expected:

[www.iwh.on.ca/rtw-problems-guide](http://www.iwh.on.ca/rtw-problems-guide).

### In Brief

**A firm can realize significant savings by investing in a PE program, although it may have to look beyond workers' compensation costs to find them.**



The Research Action Alliance on the Consequences of Work Injury has brought together academics and injured workers in a five-year research project that is scientifically documenting and communicating the effects of work injury. As the initiative moves past its halfway mark, the academic and injured worker communities take a look at its achievements and the opportunity it has provided to learn from each other.

It began simply enough. A group of injured worker representatives and researchers came together in December 2003 to explore joint research projects. Inspired by the possibilities of this collaboration, the group decided to apply for funding through a program called the Community-University Research Alliance.

In 2006, the group received a resounding endorsement from the program administrator, the Social Sciences and Humanities Research Council. The council awarded \$1 million to the group for the next five years (and, thanks to matching funds, this number has grown by half again). A

formal partnership between the injured worker community and research organizations, including the Institute for Work & Health (IWH), was born. It is called the Research Action Alliance on the Consequences of Work Injury (RAACWI – pronounced raa-kwee).

Today, both the injured workers and researchers involved are proud of what they have achieved together. Talk to injured workers, and they will tell you that their work with researchers has allowed them to add the weight of evidence to their personal stories of post-injury hardship. Talk to researchers, and they will tell you that the quality of their work has been greatly enhanced by having direct access to injured workers and their experiences.

Talk to either, and the word “trust” invariably pops up early in the conversation.

RAACWI community lead Steve Mantis, secretary of the Ontario Network of Injured Workers Groups, puts it this way: “RAACWI *really* is a partnership. A lot of trust has been developed between the injured worker community and researchers. It’s blossomed beyond our initial expectations.”

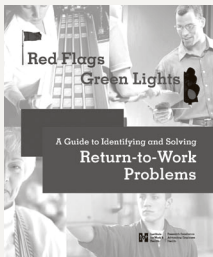
Dr. Emile Tompa, a scientist at IWH and the RAACWI academic lead, concurs. “Building this kind of trust is a long process, and it takes time,” he says. “But it’s been worth every minute. It has resulted in meaningful work and real results. That’s the most satisfying reward an applied researcher like me can hope for.”

### Initiative sets ambitious goals

RAACWI’s work is guided by an overarching question: How does the workers’ compensation system help or hinder the protection of injured workers — immediately and over time — against the negative economic, social, physical and mental health consequences of injury?

The group’s research is divided into four themes: legislation, financial security and work experiences, health and well-being, and history and political activism. The specific questions being asked by individual research projects range from “What role do doctors play within the workers’ compensation system?” to “What are the mental health and

### RESEARCH TO ACTION: IWH GUIDE HELPS SOLVE RTW PROBLEMS



For people who play a hands-on role in helping injured workers return to work, a new publication called *Red Flags/Green Lights: A Guide to Identifying and Solving*

*Return-to-Work Problems* is available from the Institute for Work & Health (IWH) to help you deal with potentially challenging cases.

Most injured workers return to their jobs successfully. But for those who don’t, this evidence-based guide offers advice on identifying and solving the problems that may be complicating their recovery and return to work (RTW). Produced with funding from the Workplace Safety and Insurance Board’s Research Advisory Council, the guide differs from others in that it largely tackles the “systems hurdles” that can impede a work-return.

“Barriers to returning to work are often mundane and procedural,” explains IWH Scientist Ellen MacEachen, the lead researcher on a study of complex compensation claims that gave rise to the guide. “This guide teaches about RTW barriers beyond worker motivation and the nature of the injury.”

The guide lists “red flags” and “green lights” within four domains of RTW practice: the workplace, vocational rehabilitation, health or medical

management, and workers’ compensation. “Red flags” refer to warning signs that a worker may not be recovering or progressing through the workers’ compensation or RTW process as expected. These are based on real-life situations described by both injured workers and service providers during MacEachen’s original research. “Green lights” refer to suggested practices to address the “red flag” barriers. These were generated by experts during workshop sessions held across Ontario and funded by RAACWI.

MacEachen notes that many of the procedural problems surrounding return to work stem from poor communications and an assumption that workplaces are “models of harmony” and “always in compliance.” As a result, administrators don’t always have all the facts and may base decisions on incomplete pictures.

As well, the RTW process is not usually derailed by just one issue, MacEachen says. “Usually three, four, five red flags go up, one on top of the other, and then there’s a problem.” This kind of “piling on” of problems is made evident in the real-life case studies included in the guide.

*Red Flags/Green Lights* is now available free from the IWH website, but you are being asked to sign in first to download it. “We are trying to track how our guides are being used to help us learn more about getting our information out,” explains MacEachen. To download the guide, go to: [www.iwh.on.ca/rtw-problems-guide](http://www.iwh.on.ca/rtw-problems-guide).

**“RAACWI REALLY IS A PARTNERSHIP,”** says Steve Mantis. “A lot of trust has been developed between the injured worker community and researchers. It’s blossomed beyond our initial expectations.”

addiction consequences of a work injury?”

Through this collaborative research, RAACWI hopes to achieve the following:

- add to the body of research about the consequences of work injury and illness;
- encourage evidence-informed policy decision-making in workers’ compensation;
- equip injured workers with skills to continue their involvement in research and communication;
- increase academia’s capacity to conduct community-based research in this area;
- increase sensitivity to and knowledge of injured workers’ experiences; and
- increase awareness of the need to involve non-academic communities in research.

#### **RAACWI research results in concrete action**

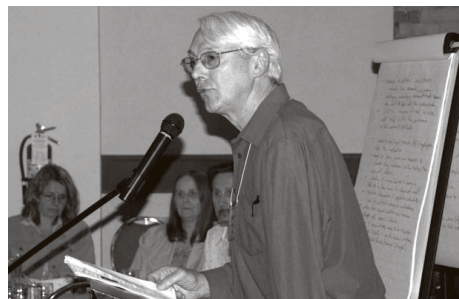
At a symposium held in May, 75 people heard how far RAACWI has come in meeting these goals. They learned how RAACWI’s work is contributing to concrete change, practical tools and improved skills among both community and academic members.

For example, RAACWI research contributed to a new “anti-stigma” initiative at the Workplace Safety and Insurance Board (WSIB), which WSIB President Jill Hutcheon described at the symposium. She acknowledged that there exists “a very real perception that injured workers are ‘lazy’ and ‘scamming’ the system.” This misperception exists among some employers who don’t understand the need for time to heal, some neighbours who look skeptically upon an injured worker out gardening, and even some WSIB staff who see employers as the paying client, forgetting that injured workers gave up their right to sue in the historical compromise that gave birth to the workers’ compensation system.

Hutcheon promised to lead the way in combating this stigma. “Based on RAACWI research, we are introducing a new initiative this year to reduce stigmatizing attitudes and behaviours among WSIB front-line workers and WSIB communications,” she said. “I know changing attitudes and behaviours isn’t easy, but I believe that, in partnership with

RAACWI, we can make change. We want to ensure a positive and respectful environment for injured workers.”

Another concrete outcome of RAACWI work is its involvement in a guide to help those injured workers whose safe and sustainable return to work might be getting bogged down in complications. The guide is



Steve Mantis speaking at the RAACWI symposium

based on IWH research that identified the problems or “red flags,” as well as RAACWI-funded workshops at which solutions or “green lights” were identified.

“It focuses on those rare but potentially costly situations in which claims are not proceeding in a straightforward manner,” IWH Scientist Ellen MacEachen said at the RAACWI symposium (see box on page 6).

#### **RAACWI builds skills**

Perhaps most impressive is the degree to which RAACWI is increasing the ability of injured workers to get involved in research, and scientists to work with the injured worker community. RAACWI identified early on that, “in order for injured workers to participate as equals in research, and to share their research knowledge with other injured workers and decision-makers in workers’ compensation and the provincial government, they need training to get their skills and confidence up,” says community lead Mantis. “This has been a big success.”

RAACWI offers the Injured Workers’ Speakers’ School, a weekly program lasting 12 weeks. Upon completion, graduates are prepared to get more actively involved in research and to speak confidently.

This was evident at the symposium, at which four graduates told their stories. For example, Beryl Brown framed her story around the concept of “remembering” — remembering her joy and excitement about contributing to her new home in Canada, the day she heard her workplace injury might be permanent, and the days of pain, depression and poverty that followed. “I remember nights of great pain, praying to God for some measure of peace so I could sleep,” she said. “I remember the mean things said by people who should have cared.”

After hearing Brown and her colleagues, panel members commenting on the presentations unanimously agreed that the Speakers’ School is working. “You are articulate spokespersons for injured workers, putting into words what others are silently thinking,” one panel member said. “You have all touched my heart and the hearts of every other person in this room,” another said.

As for the academic world, Tompa reports that RAACWI has supported four post-doctoral, 17 PhD/masters and 10 undergraduate students. The hope is to build a group of scientists who continue to pursue community-based research interests.

Ontario Minister of Labour Peter Fonseca closed the RAACWI symposium on a positive note. “With goodwill and collaboration, we will be able to build a stronger, more resilient system that is fair to everyone,” he said. “It’s crucial that we’re *all* here to get it right. This is how constructive ideas emerge to address the obstacles of injured workers.”

To find out more about RAACWI, go to: [www.consequencesofworkinjury.ca](http://www.consequencesofworkinjury.ca). ■

#### **In Brief**

**The Research Action Alliance on the Consequences of Work Injury, a collaboration of academics and injured workers, is leading to concrete action to improve the lives of injured workers.**

## AT WORK

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Director, KTE: Jane Gibson  
Editor: Cindy Moser  
Layout: Philip Kiff  
Contributor: Anita Dubey

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## INSTITUTE FOR WORK & HEALTH

481 University Avenue, Suite 800  
Toronto, Ontario M5G 2E9  
Phone: 416.927.2027 Fax: 416.927.4167  
E-mail: [atwork@iwh.on.ca](mailto:atwork@iwh.on.ca)

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The Institute for Work & Health conducts and shares research that protects and improves the health of working people and is valued by policy-makers, workers and workplaces, clinicians, and health & safety professionals.

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Workplace program speeds return of workers with low-back injuries continued from front page

The results were definitive. The workers in the worksite-based program returned to work faster than those who received usual care only. They returned to work 30 days earlier, on average, than the usual-care group and at only slightly higher cost.

## Older and previously sick workers best served

This led Steenstra to wonder, "Does this workplace intervention work better for some rather than others?" So he dug deeper into his findings. He discovered that factors such as gender, functional status, pain and heavy work did not make a difference to the program's effectiveness. However, two factors did — age and sick leave taken in the previous year.

Workers aged 44 years and over who took part in the workplace-based program returned to work 2.5 times faster than workers the same age in the usual-care group. Workers who were sick in the previous year who took part in the program returned to work 2.8 times faster than workers who had been sick and received usual care.

"There might be a tendency to not bother investing in older and previously sick workers because they're considered too difficult to return to work," Steenstra says. "But according to this study, that's the wrong way to think. This analysis suggests a lot of progress can be made with a good intervention, especially among those considered challenging cases."

For a summary of the original study, visit [www.iwh.on.ca/highlights/workplace-program-speeds-rtw](http://www.iwh.on.ca/highlights/workplace-program-speeds-rtw). +

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## AT A GLANCE: RTW PROGRAM FOR WORKERS WITH LOW-BACK PAIN

**STEP 1:** A worker who has been off work due to low-back pain for two to six weeks sees an occupational health physician, who stresses the importance of keeping up or returning to normal activities, including work. This physician keeps in touch with the worker's family physician to ensure they are in agreement with respect to recovery advice and the importance of returning to work.

**STEP 2:** The occupational health physician refers the worker to an ergonomist or occupational health nurse (further references to an ergonomist below also refer to an occupational health nurse). The ergonomist meets with the worker at the worksite to learn about his or her workstation, job tasks and perceived RTW barriers. The ergonomist then meets with the supervisor to get his or her perspective on RTW barriers.

**STEP 3:** Based on the information collected from the worker and supervisor, the ergonomist prepares an inventory of RTW barriers with respect to the low-back pain. The three then sit down together to reach a consensus on the top three or four RTW barriers. Disagreements are mediated by the ergonomist. In a brainstorming session, they identify as many solutions as possible to these barriers. The solutions are evaluated and chosen, with preference for solutions that are easy to implement at little to no cost (e.g. lifting aids are preferred over a complete workplace redesign).

**STEP 4:** The ergonomist, worker and supervisor agree on a plan for implementing the chosen solutions, identifying who is responsible for each solution and within what time frame. As much as possible, the worker or supervisor is held responsible (e.g. if a solution calls for a new ergonomic chair, the worker or supervisor will be asked to order and test the chair, not the ergonomist).

**STEP 5:** A month after the plan is agreed upon, the occupational health physician evaluates the degree to which it has been successfully implemented. Solutions and other workplace adjustments are fine-tuned at this point, if necessary. The implementation plan is called successful when the worker returns to the same job he or she held before the low-back injury (or to an equal job at the same pay) and remains in that job for at least four weeks.