A quarterly publication of the Institute for Work & Health
Issue 56 Spring 2009

at work

IN THIS ISSUE

IWH briefing explores business cycles and workers' compensation

Through its publication *Issue Briefing*, the Institute for Work & Health provides research-based insights to policy-makers. A recently released briefing discusses the impact of today's shrinking economy on workers' compensation claim rates.

As the economic crisis continues to reverberate across the globe, questions about its impact on occupational health and safety and the workers' compensation system are emerging. Are injury rates affected by recessions? Are workers' compensation claims likely to be more or less frequent? Are work-related injuries likely to be more severe?

A recent *Issue Briefing* by the Institute for Work & Health (IWH) concisely summarizes past research that addresses these questions. The Institute's series of briefings aims to provide policy decision-makers with insights into employee health and safety topics based on research evidence.

"The Institute for Work & Health has a long history of contributions to policy development," says IWH President Dr. Cameron Mustard. "In many instances, our research has been useful in answering specific questions concerning the effectiveness of prevention practices, clinical programs or disability management policies. In other instances, our research has been useful in framing some of the options that policy decision-makers may consider."

Claim rates drop in poor economy

Researched and written by IWH Senior Scientist Dr. Ron Saunders, the March 2009 *Issue Briefing* looks at the impact of business cycles on workers' compensation, specifically on claim rates, wage replacement costs and medical costs. Based on studies dating back to 1938, Saunders shows that compensation claim rates drop, relative to the total number of hours worked, when the economy shrinks.

He also explores some of the reasons why rates drop. There may be fewer inexperienced workers because they are the first to be

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IWH contributes to health policy book

Institute for Work & Health (IWH) Scientists Dr. Emile Tompa and Dr. Peter Smith have co-authored separate chapters in the second edition of *Social Determinants of Health*. Edited by Dennis Raphael, professor of health policy at York University, the book explores the socioeconomic conditions (e.g. education, employment, food security, income, housing and more) that shape the health of individuals and communities. Tompa and Smith specifically discuss the impact of employment insecurity and other work dimensions on health. Reviewers have called the book "essential reading for university students, practitioners, program managers and policy-makers in all of the human service sectors." The second edition was released in December 2008 by Canadian Scholars' Press Inc. in Toronto. For more information, visit: www.cspi.org.

IWH workshops coming up

On June 18-19, 2009 in Toronto, IWH is offering a workshop on how to plan, conduct and communicate the results of **systematic reviews**. Systematic reviews provide an overview of findings from higher quality studies in answer to specific research questions. The workshop is intended for clinical trainees, clinicians, academics and researchers who have a general interest in systematic reviews or are planning to conduct one in the future.

IWH is also planning a two-day workshop on applying **measurement principles** in research. The workshop is designed for researchers, research assistants/coordinators, trainees and clinicians using multi-item measures as part of their research. The workshop will take place in the first week of July (final dates still to be confirmed) in Toronto. More information will be available shortly on the IWH website.

For more information, e-mail srworkshops@iwh.on.ca or go to: www.iwh.on.ca/workshops.

Deadline approaching for fellowship applicants

IWH is now accepting applications for fellowships for master's or doctoral students who intend to study work and health. Preference will be given to candidates whose research interests include understanding the social determinants of health and illness in work environments, evaluating workplace interventions to improve health, and/or exploring the measurement issues associated with either of these two areas. IWH is particularly interested in candidates who show a commitment to research that promises to reduce work-related injury, illness and disability in Ontario. The application deadline is May 29, 2009. For more information, visit: www.iwh.on.ca/syme.

WHAT RESEARCHERS MEAN BY...

Missing Data

Research data may have holes for a number of reasons — from questions left blank on a survey to people dropping out of a study. Sometimes the missing information matters; sometimes it doesn't.

In a researcher's perfect world, everyone asked to participate in a study would say yes, no one would drop out along the way, and all items on a questionnaire would be answered.

Alas, researchers don't operate in a perfect world. The information they collect often has holes, and they come up against a common challenge in their pursuit of answers to research questions: missing data.

Data can be missing for a number of reasons. Study participants may not answer a certain survey question because they don't see how the question applies to them. This would be the case if a survey asked, "In what year did you get married?" and the respondent is single. Or study participants may simply refuse to answer. This sometimes occurs in response to the question, "What is your income?"

Data are also called "missing" when people decline to take part in a study or drop out along the way. Take, for example, a study looking at return to work among injured workers. Some injured workers may not take part because they don't want to "make waves," or may later withdraw from a study because their situation has changed (e.g. they feel better or worse, or have competing demands on their time).

Some studies are based not on information collected by the researcher, but on administrative information collected by a public agency. This data, too, can be incomplete. At the Institute for Work & Health, for example, many studies rely on claims data from the Workplace Safety and Insurance Board. A claim file could be missing information — say, on marital status or employment start-date — that is relevant to a study.

Does missing data matter?

Missing data may or may not be a problem. Most important is whether or not the data are missing at random. If there is a pattern to the missing information, then drawing wrong conclusions is much more likely. For example, the results of a workers' compensation study could be skewed if those who refuse to take part largely come from a vulnerable group like recent immigrants, or if most of those who drop out do so because they have recovered. In other words, information that is consistently missing from the members of one group is a problem.

The impact of missing data also depends in part on the research question. If a study is looking at the relationship between health and socioeconomic status — as measured by income — then missing income information could be an issue. This is especially the case if people refuse to provide the information because of what their incomes are (e.g. on the high and low ends of the scale). If a study is looking at the relationship between health and marital status, then missing income information may not be important.

How much information is missing is also a factor. If two per cent is missing, then sound conclusions are likely still possible. The same can't be said if 20 per cent is missing.

Can anything be done about missing data?

Researchers don't necessarily call it quits when information is missing. They deal with the problem in a number of ways. Indeed, whole books have been written about missing data in the field of statistical analysis.

Researchers might simply discard any record (e.g. questionnaire or claim file) that is missing information. Or they might "fill in" the missing data using what are called "imputation," weighting or model-based procedures. These procedures are complicated. Each has its place, and none is perfect. Therefore, researchers need to be very clear in the "limitations" section of their studies about what information is missing and how that may affect results.

To view the full "What researchers mean by..." series, go to: www.iwh.on.ca/what-researchers-mean-by.

IWH disability benchmarking partnership helps workplaces improve outcomes, reduce costs

The Institute for Work and Health offers Workplace Disability Benchmarking — a research-based partnership that allows large employers and disability benefit trusts to measure, track and compare disability outcomes and identify program improvements that will protect employee health and the bottom line.

Following a successful pilot completed in 2008, Workplace Disability Benchmarking (WDB) is now actively recruiting employers and disability benefit trusts to take part in this made-in-Canada initiative. WDB reflects the ongoing commitment of the Institute for Work & Health (IWH) to develop practical workplace tools based on solid research evidence.

"One of IWH's research goals is to provide independent evidence on effective return-to-work and disability management practices that reduce both the incidence and duration of disability, thus improving workers' lives and reducing employers' disability costs," says IWH Scientific Director Dr. Ben Amick, the research lead on WDB. "WDB promises to help employers implement best practices that reduce the burden of disability and improve productivity."

How disability benchmarking works

WDB is a partnership between IWH and participating Canadian organizations interested in getting a clearer picture of their disability management performance. Backed by IWH's research expertise, WDB allows participants to:

- learn how well their disability management program is doing compared to similar organizations in their sector;
- track how their program is doing internally, year over year;
- determine those program areas that might benefit most from improvements; and
- determine what impact changes to disability management practices are having on employee health outcomes, disability costs and worker satisfaction.

WDB does this by measuring and tracking three areas of organizational disability management practice:

- outcomes with respect to short-term disability (STD), long-term disability (LTD), workers' compensation, casual absences, and emergency leave/compassionate care leave;
- employee and supervisor satisfaction with the disability management process; and
- disability plan design and processes.

You will find this WDB banner on the IWH home page.

"It is really very linear," says WDB Partner Liaison Bev Lever, who joined IWH in January to support participating employers and disability benefit trust funds. "Benchmarking disability management identifies opportunities to improve policies and practices that result in greater satisfaction for both workers and the employer. This, in turn, has a positive impact on the program's bottom line, which brings greater shareholder value. It just makes good business sense."

Current participants already see benefits

WDB is currently benchmarking in three sectors — with financial service firms, research-based pharmaceutical companies and public service benefit trusts. Organizations already taking part in WDB see its benefits. "I was sold on this idea from the outset," says Charles Bruce, CEO of the Nova Scotia Public Service Long Term Disability Plan Trust Fund. "By establishing a baseline, future decision-making will be supported by scientific evidence. WDB will advance our approach to disability management."

Adam Marsella, manager of talent management at GlaxoSmithKline Canada, concurs. "WDB has been an excellent tool for helping us better understand our performance in disability management," he says "What's more, I have confidence in the integrity and accuracy of the data because they're backed by IWH expertise."

Bill Wilkerson, head of the Global Business and Economic Roundtable on Addiction and Mental Health, thinks all organizations should be looking for ways to improve disability management practices, especially now. "Investments in disability management by businesses are really investments in an increasingly valued resource — skilled and experienced people," he says. "This is particularly true at a time when businesses must defend their competitive position in the face of enormous financial pressures."

WDB offers a home-grown advantage. "It's Canadian-made," says Lever. "WDB measurements and outcomes are based upon Canadian systems, legislation and processes." WDB is also run on a cost-recovery basis, which is reflected in its fees.

For more information about the initiative and how to participate, visit the new WDB webpages at: www.iwh.on.ca/wdb. ✚

In Brief

Employers are invited to partner with IWH in its Workplace Disability Benchmarking initiative.

RESEARCH 101:

Getting feedback on early results

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.

In Part 1, we introduced you to the lead researcher, IWH Scientist Dr. Peter Smith, who formulated the research question: Why, over a 14-year period, have lost-time claims in Ontario decreased by more than 40 per cent while no-lost-time claims have decreased by only four per cent? In Part 2, we learned how the research team overcame a number of unanticipated roadblocks during data collection. (You can read the details at: www.iwh.on.ca/research-101.)

Peers help confirm findings

By the fall of 2008, three-quarters of a year into the project, Smith is starting to analyze no-lost-time trends based on the data available. He is also ready to share early findings with fellow researchers and non-academic stakeholders.

That's because Smith, like most scientists, wants to make sure the information he produces is meaningful and reflects what is actually happening in "the real world" — in his case, the world of OHS and workers' compensation. He wants to explain, not just describe. That's where feedback becomes important.

"I wanted to find out if I was on the right track, if there was another way of looking at the information, or if there were leaps in my logic," says Smith. "I also wanted help developing a coherent story from this information."

Smith gets important feedback from two sources: participants at the International Forum on Disability Management in Berlin and his own research team at IWH.

Find out what Smith's early results are saying — and if his fellow researchers think he is on the right track: www.iwh.on.ca/research-101.

Evidence elusive on procedures used to help heal fractures

Do electromagnetic stimulation and low-intensity pulsed ultrasound accelerate the healing of broken bones? Despite their frequent use — to the tune of $500 million a year in North America — solid evidence confirming the effectiveness of these procedures remains elusive, according to two new systematic reviews.

Dr. Jason Busse

Bone stimulators, which are commonly used to accelerate fracture healing, lack solid evidence to show they are effective, according to two new systematic reviews.

The results are surprising, says co-author Dr. Jason Busse, an Institute for Work & Health scientist. Bone stimulators — either electromagnetic stimulation or low-intensity pulsed ultrasound — are commonly recommended by surgeons, and two other reviews from 2008 reported positive evidence of their effectiveness.

Fractures are the fourth most common cause of lost-time claims at Ontario's Workplace Safety and Insurance Board. Whether caused by a work-related injury or not, fractures can affect a person's work or leisure activities for weeks, even months, particularly if complications arise.

In a recent survey, about 45 per cent of responding Canadian trauma surgeons said they recommended bone stimulators when fractures healed slowly or incorrectly and, in some cases, for fresh fractures. In North America alone, the bone stimulation market is large, worth an estimated $500 million per year.

Neither review offers compelling evidence

The review of electromagnetic stimulation showed it did not have a significant impact on the healing of long bones. Findings were based on 11 studies that met the review's inclusion criteria. Because the quality of the studies was generally low, the research evidence is still inconclusive as to whether or not the technique works, the researchers pointed out. The review, co-authored by Busse, was published in the November 2008 American edition of *Journal of Bone and Joint Surgery*.

In the review of low-intensity pulsed ultrasound, led by Busse, the evidence was again very low to moderate in quality, and results were conflicting. However, this research team noted that overall results from 13 studies were "promising." These results were published in the March 14, 2009 issue of *British Medical Journal* (BMJ).

"With the high rate of reported use, I thought the evidence would have been more compelling," says Busse. He suggests that the reviews in which he was involved were more rigorous than previous ones, which were much more positive about the state of the evidence. So the question still stands: "Does the evidence justify the expenditure?"

Busse hopes to contribute to the answer. He and colleagues from McMaster University are conducting a clinical study of ultrasound in healing shin bone (tibial) fractures. The study will randomly assign patients to receive the ultrasound treatment or to a control group that gets "fake" ultrasound — and evaluators won't know who is getting what, to avoid bias. It will also incorporate measures important to patients, such as health-related quality of life and time to return to work, to gauge recovery.

For summaries of IWH research, visit: www.iwh.on.ca/research-highlights.

Mental health and injured workers:

Depressive symptoms linked to delayed work-returns

New research from the Institute for Work & Health indicates that depressive symptoms are pervasive among workers disabled by musculoskeletal disorders. For those whose symptoms persist, sustainable work-returns are less likely, and treatment by a mental health professional may be needed to improve recovery.

What role does mental health play in the recovery and return to work of workers with musculoskeletal disorders (MSDs)? How can family doctors be made more aware of potential mental health problems among injured workers? These are the types of questions being asked by the Institute for Work & Health (IWH) as it focuses its mental health research on the optimal clinical and workplace management of mental health disabilities.

"Mental health disorders among working-age adults have a substantial impact on labour force participation, productivity and disability," says IWH President Dr. Cam Mustard. "Yet, our knowledge of optimal practices for supporting the recovery and return to work of workers with mental health disorders, whether occurring on their own or with other injuries, is limited. How do we bring these workers back to sustainable work? That's the mental health research focus at IWH."

Depressive symptoms "pervasive"

Answers are starting to come. An ongoing study at the Institute is looking at the relationship between depression and MSDs, namely back and upper extremity injuries.

Led by IWH Adjunct Scientist Dr. Renée-Louise Franche, director of disability prevention at the Occupational Health and Safety Agency for Healthcare in British Columbia, with the active involvement of IWH Research Associate Nancy Carnide, the study concludes that depressive symptoms are pervasive in workers with MSDs. This is particularly true in the weeks immediately following injury and among workers who later have problems returning to and staying at work.

The study, accepted for publication in the *Canadian Journal of Psychiatry*, follows a group of about 600 workers who had not been diagnosed with depression in the year prior to their injury. These workers were interviewed one month and six months after their injury. "This is the first study we are aware of that followed a group of workers over time to document their mental health problems post injury," says Carnide.

" The mental health of injured workers needs to be addressed. It has been neglected for too long." — Nancy Carnide

The results are telling. One month after injury, just under half reported high levels of depressive symptoms. At the six-month mark, this group split almost equally into two: those whose symptoms had resolved and those who still reported high levels of depressive symptoms. Workers who had not reported depressive symptoms one month after their injury were unlikely to report them at six months.

Ongoing symptoms have effect

The ongoing presence of depressive symptoms matters. Among those who had not returned to work or who had tried but left work again by the six-month mark, almost one in four had high levels of depressive symptoms. This was more than double the rate among injured workers who had returned to work and stayed.

"Whether depressive symptoms contribute to or are the result of a delayed return to work could not be determined from our study," says Carnide. "But, presumably, returning to the workforce and resuming regular routines can have a positive impact on injured workers' mental health, especially for those who can maintain their return to work. That said, higher levels of depressive symptoms may develop in those struggling to return to work, making recurrences of work disability more likely."

Furthermore, injured workers with ongoing depressive symptoms do not seem to be getting the diagnosis and treatment that may be needed. Among those at the six-month mark who still reported high levels of depressive symptoms, relatively few (about one in eight) had been diagnosed with depression. (However, a limitation of this study is that depressive symptoms can be present due to a mental health condition other than depression, which was not assessed in the study.)

These findings indicate "the mental health of injured workers needs to be addressed," says Carnide. "It has been neglected for too long." They also reinforce the importance of the clinical assessment of depressive symptoms to identify who needs further assessment and treatment by a mental health professional.

"We still need to understand what distinguishes a temporary reaction to a workplace injury from a problematic reaction, and within what time frame," Carnide points out. "Nonetheless, our findings suggest an important window of opportunity for physicians to address symptoms prior to six months."

For summaries of IWH research, visit: www.iwh.on.ca/research-highlights.

In Brief

Depressive symptoms are common in workers disabled by musculoskeletal disorders, particularly in the weeks immediately following injury and among workers who later have problems returning to and staying at work.

OHS management audits differ in what they assess and how

The nature and delivery of occupational health and safety (OHS) audits vary greatly. As a result, employers should determine why they are auditing and what they hope to find out when choosing an audit that best suits their needs.


Dr. Lynda Robson

This is the advice emerging from a study of OHS management audits conducted by the Institute for Work & Health (IWH). Led by IWH Associate Scientist Dr. Lynda Robson, the research team looked at a number of audits conducted by organizations within Ontario's prevention system (defined as the province's health and safety associations, Ministry of Labour, Workplace Safety and Insurance Board, Centres for Research Expertise and Institute for Work & Health).

"There is a good deal of variation in the content and procedures of the audits we looked at," says Robson. "Workplaces need to consider the stage of development of their OHS management system when choosing an audit. Some audits target organizations just starting to develop their OHS management systems and others target organizations that are much further along. They also need to consider the relevance of an audit to their specific sector."

Audits play important role

OHS management audits identify strengths and weaknesses within a workplace's OHS program in areas such as accountability, policy, hazard identification and control, training, communication and more. They do this by assessing how well the OHS program meets legislation, regulations, guidelines and established best practices. As such, audits play an important role. For example, they can:

- identify areas that need improvement in order to protect workers from injury and illness;
- ensure legislative compliance;
- benchmark OHS practices; and
- determine organizational rewards and penalties administered by regulatory and certification bodies.

Despite the importance of OHS audits, little is known about how reliable and valid they are. Robson and IWH Adjunct Scientist Dr. Philip Bigelow discovered this when they were involved in a previous project that reviewed the available research on this subject. As that 2005 review concluded, "there is little published research information on the measurement properties [i.e. reliability and validity] of OHS management audits" and what research is available "is often weak in quality."

In this newest research, Robson and her team — with a grant from the WSIB Research Advisory Council — aimed to start filling this knowledge gap. They took a broad look at 17 audits used within Ontario's prevention system. They also took an up-close look at five of them in particular — those determined by the researchers to be "the cream of the crop," as Robson describes them — to find out more about audit content and procedures.

Five audit types identified

Looking at the 17 audits overall, the researchers found a lot of variety. They classified the audits into the following five types:

- legal compliance only,
- legal compliance plus some best practices beyond those incorporated in legislation,
- basic OHS management system, which assessed legal compliance, some best practices and the system framework,
- comprehensive, which assessed legal compliance and a full complement of best practices, and
- comprehensive OHS management system, which assessed legal compliance, a full complement of best practices and the system framework.

No matter what the category, all OHS audits required the auditor to review documents and interview "key informants" at the workplace (e.g. OHS manager, joint committee members, etc). Most used onsite observations to verify information gathered. Some also used them to determine the extent to which hazards were eliminated or controlled. Fewer used anonymous employee surveys to assess OHS management effectiveness.

The time required of an auditor to complete an audit, from preparation to writing the report, ranged from half a day to 15 days, with a typical length of two days. The cost to employers for an audit ranged from nothing at all to thousands of dollars, up to tens of thousands for comprehensive audits conducted at large firms.

"There is a good deal of variation in the content and procedures of the audits we looked at," says Robson. "Workplaces need to consider the stage of development of their OHS management system when choosing an audit."

Audit contents fairly comprehensive

The five more detailed audits chosen for closer examination fell into either the "comprehensive" or "comprehensive OHS management system" classification. These audits were compared to the contents of the Canadian Standards Association (CSA)'s Z1000-06 *Occupational Health and Safety Management*. This 2006 standard draws upon other well-known standards and guidelines to create a Canadian reference for designing, implementing and auditing workplace OHS management systems.

On average, the more comprehensive audits fully or partially incorporated three-quarters of the contents included in the CSA standard in their own assessments. "This is a relatively high proportion," says Robson.

Some CSA standard elements were particularly well incorporated, including worker participation, hazards and risk assessment, emergency preparedness, communication, incident analysis, and preventive and corrective action. Incorporated more weakly were elements that are characteristic of OHS system frameworks: targets/objectives, documentation, management review and internal audits.

As for administration of these audits, "variety" was again the operative word. The researchers found a range of data collection, scoring and reporting procedures. They noted differences in the recruitment, training and on-the-job assessment of auditors. "As is the case in benchmarking exercises, knowledge of this variation may assist auditing organizations that are seeking to improve their audit methods," says Robson (see box above right).

Inter-auditor consistency a challenge

One area of particular interest to stakeholders taking part in the study was inter-auditor consistency; in other words, ensuring that different auditors will reach similar results in similar situations. "The organizations delivering the comprehensive audits pointed to this as one of their most important challenges," says Robson. "Consistency can't be taken for granted, even with well-trained auditors. Auditing organizations are particularly interested in ensuring audit quality in this area."

Bigelow and Robson's 2005 review pointed out that, in the very few cases where inter-auditor reliability had been examined, it was found to be "surprisingly low," she says. This was the case, even when the audit's content was shown to be top-notch. Inter-auditor reliability is not a large concern for audits used only for an initial assessment of OHS management systems, Robson adds. "It *is* a concern when audits are used to measure ongoing progress in the development of an OHS management system and when they are used to certify a certain level of OHS management system quality."

Recently, Robson and Bigelow updated the 2005 research review and found that the state of the literature remains the same. For more on the 2005 review, click on "Occupational health and safety management audit instruments" at: www.iwh.on.ca/systematic-reviews. For more information about the current study, contact Lynda Robson at: lrobson@iwh.on.ca.

OHS MANAGEMENT AUDITS: STUDY RECOMMENDATIONS AT A GLANCE

Based upon its review of 17 audits used within Ontario's prevention system, the IWH research team developed "actions to consider" for auditing organizations looking for ways to improve their methods. Many actions had already been identified as valuable by the organizations taking part in the study. In making these recommendations, the team is not implying that each is needed by all organizations. In addition, there may be good reasons (e.g. economic constraints) for not adopting a recommendation.

The recommended actions to consider, especially when an audit is used to measure workplace performance, are:

- structuring the auditing program so that individuals do not audit organizations to which they are also providing consulting advice;
- ensuring that audits are conducted frequently enough to maintain auditors' skills;
- ensuring auditors get substantial practice and feedback in the field, under the guidance of expert auditors, before they begin conducting audits on their own;
- training auditors in interviewing skills and providing them with detailed interview guides;
- ensuring inter-auditor consistency in scoring evidence against audit criteria by:
  - providing feedback to auditors on their scores during training
  - making decision-making guidelines for auditors explicit
  - measuring consistency on an ongoing basis as part of program monitoring;
- arranging field-based reviews by managers or peers to ensure ongoing learning by auditors;
- ensuring that auditors' observations of workplace hazards and their controls play a big part in an audit's final score;
- ensuring that the content of current audits reflects the content of the Canadian Standards Association (CSA)'s Z1000-06 standard on occupational health and management, especially in the areas of targets and objectives, internal audits, documentation and management review; and
- tying action planning closely to audit results.

In Brief

Workplaces should consider how well developed their OHS programs are when choosing an OHS management audit.

AT WORK
At Work is published by:
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Issue #56 / Spring 2009 / ISSN # 1261-5148

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MISSION

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.

The Institute for Work & Health operates with the support of the Ontario Workplace Safety and Insurance Board.

WSIB Workplace Safety & Insurance Board
CSPAAT Commission de la sécurité professionnelle et de l'assurance contre les accidents du travail

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laid off. With lower production, the least safe equipment may not be used. Hazardous industries with higher injury rates may experience the largest decline in employment during recessions.

"The recession has a wide-ranging impact, and it is important to pay attention to its effects on the workers' compensation system, on occupational health and safety, and on worker health more generally," says Saunders. "This briefing focuses on workers' compensation claims, but IWH has also done work on the effects of unemployment on worker health, and I expect this will be an issue of renewed interest."

Next briefing will look at "newness"

This timely issue is one of a number of topics in the *Issue Briefing* series that may interest policy-makers in compensation boards, ministries of labour and other organizations. The next briefing topic is on the state of being "new" and the risk of workplace injury. Saunders noticed that the theme of "newness" cut across a variety of IWH research: that new workers, young workers, short-term employees, immigrants and new firms were all associated with a risk of higher workplace injury.

Issue Briefing will be published several times each year and will be posted on the Institute's website: www.iwh.on.ca/issue-briefings.

AT A GLANCE: THE IMPACT OF BUSINESS CYCLES ON WORKERS' COMPENSATION

The current *Issue Briefing* from IWH includes these key messages about the relationship between a shrinking economy and workers' compensation rates and costs.

- There is a long-term trend in Canada, the United States and a number of other countries towards fewer workers' compensation claims per hour worked.
- There is fairly strong evidence that, relative to this trend, the frequency of workers' compensation claims per hour worked tends to decline in recessions and increase in times of economic recovery. Some possible explanations are that during recessions:
  - there are fewer inexperienced workers;
  - the least safe equipment is taken out of use;
  - the pace of work is slower;
  - workers fearing job loss may defer filing claims; and
  - hazardous industries experience the largest decline in employment.
- While it is also possible that workers facing layoff are more likely to file claims, the evidence indicates that this is outweighed by factors tending to reduce claims in recessions.
- The evidence regarding costs per claim — both wage replacement and medical costs — is thinner and somewhat mixed. The available evidence suggests that it is unlikely that recessions would accelerate the growth of these costs.

What's new at www.iwh.on.ca

Don't forget to check out the revamped Institute for Work & Health website, where you'll find lots of information about preventing workplace injury and disability. As well, you'll find new information on:

- upcoming IWH workshops on systematic reviews and measurement principles — see **www.iwh.on.ca/workshops**;
- how to apply for training fellowships and student placements at IWH — see **www.iwh.on.ca/syme** and **www.iwh.on.ca/internships**;
- Workplace Disability Benchmarking, a research-based initiative designed to help employers improve their disability outcomes and costs — see **www.iwh.on.ca/wdb**;
- the potential impact of the current economic downturn on workers' compensation costs, included in a just-released briefing from IWH — see **www.iwh.on.ca/issue-briefings**;
- preventing upper extremity musculoskeletal disorders and making occupational health and safety work in small businesses, the two most recent systematic reviews from IWH — see **www.iwh.on.ca/systematic-reviews**; and
- IWH research summaries of studies published in peer-review journals — see **www.iwh.on.ca/research-highlights**.

You can also subscribe to *At Work* through the website. Go to: **www.iwh.on.ca/e-alerts**.