

# at work

Information on workplace research from the **Institute for Work & Health**

## This Issue

### For Clinicians

Clinical Grand Rounds tapes available;  
HEALNet holds annual conference

### For Workplace

Institute working with garment industry on RSI;  
Balanced Scorecard project underway

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Researchers examining state of nation's health

### For Researchers

Deyo and Voyer named to research advisory  
group; Australian WorkCongress moves  
2001 meeting

### This Issue's Supplement

Low back pain affects 60 to 85% of the  
population at least once in their life.  
Acupuncture is just one of the methods  
used to treat this pain. This issue of *Infocus*  
examines a systematic review of research  
on the effectiveness of acupuncture.

For additional copies of this newsletter,  
please contact Laura Maniago by e-mail,  
info@iwh.on.ca.



**Research Excellence  
Advancing Employee Health**

## Institute is active in new health research network

The Institute for Work & Health is playing a leadership role in the development of the Canadian Institutes of Health Research (CIHR). Cameron Mustard, the Institute's scientific director, is a member of CIHR's Interim Governing Council. Terrence Sullivan, the Institute's president, has worked with representatives from the Canadian Population Health Initiative, Canadian Institute for Health Information, Health Canada, and the University of Toronto to bring together researchers from across Canada to develop a focus on population health and work-life health as part of a suggested slate of institutes for CIHR.

In its 1999 budget, the federal government announced \$550 million over four years for health-related research and innovation. These new funds helped establish CIHR, a new initiative to integrate health research nationally and to enhance the health of Canadians.

The institutes being developed through CIHR will create networks — not brick and mortar institutions — to draw together scientists across the full spectrum of health research from basic science to clinical research

to health services to prevention and social determinants of health.

The government's commitment of this funding will advance Canada's position as an investor in R&D among other countries of the Organization for Economic Cooperation and Development (OECD). In 1997, Canada invested 1.6% of its gross domestic product in research and development — far behind top performing countries such as Sweden which invested almost 4%. Sullivan remarked, "The availability of this funding is a tremendously exciting opportunity for all of us in the health research community and I am personally looking forward to the insights researchers and Canadians will reap from this investment in the years to come."

Recognizing the importance of workplace health as a component of a larger strategy to address population health, the Institute has a research program that includes a focus on population/workforce health studies. ▲▲

For more information on the Institute for Work & Health, visit our web site at [www.iwh.on.ca](http://www.iwh.on.ca). For more on this topic, contact Jackie Cooper at [jcooper@iwh.on.ca](mailto:jcooper@iwh.on.ca) or visit CIHR's web site at [www.cihr.org](http://www.cihr.org).



Terrence Sullivan



Cameron Mustard

The Institute for Work & Health is a knowledge-based change organization that strives to research and promote: new ways to prevent workplace disability, improved treatment, and optimal recovery and safe return-to-work.

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# Some Clinical News



## CLINICAL PRESENTATIONS AVAILABLE ON VIDEOTAPE

The Institute is now publishing a series of videotapes and booklets based on its successful Clinical Grand Rounds. These packages were mentioned in issue 13 of *At Work* and the first five are now available for purchase, with the remainder ready by the end of March.

This series, hosted by the Institute and the Workplace Safety & Insurance Board, were initiated in 1998 to facilitate the transfer of the results of research conducted by the Institute, and others in the field, to nurse case managers, adjudicators and physicians and to promote evidence-based practice in the continuum of care for injured workers. Institute researchers, senior scientists and colleagues from the WSIB collaborate in presenting on a variety of topics.

Each package includes the videotape, a copy of the handout materials and a reference list and cost \$25.00. Some of the available titles are: *Upper Extremity Disorders: Managing in the Grey Zone*, *Back Belts for the Prevention and Treatment of Occupational Low Back Injuries*, *Prognostic Factors for Soft-Tissue Injury Claimants*, *Diagnostic Labeling or Classification: What's in a name?*, *Psychosocial*

*Risk Factors for Musculoskeletal Disorders*, and *The Principles of Evidence-Based Practice*. ▲▲

For more information regarding the presentations or to purchase, contact **Laura Maniago** at 416.927.2027 Ext. 2101 or by e-mail: [info@iwh.on.ca](mailto:info@iwh.on.ca). Our publications catalogue is also available on our web site, [www.iwh.on.ca](http://www.iwh.on.ca). The project leader for the Clinical Grand Rounds is **Deirdre McKenzie**, [dmckenzie@iwh.on.ca](mailto:dmckenzie@iwh.on.ca).

## HEALNet TO HOLD 5TH ANNUAL CONFERENCE IN APRIL

HEALNet's 5th Annual Conference, **Are Health Report Cards Measuring Up?: A report card on health report cards**, will feature nationally and internationally recognized speakers critically debating recent research findings and current practices relating to performance measurement and accountability.

The Institute's Lynda Robson will be presenting on *Decision aids and performance assessment tools in the workplace* at the conference. The keynote address, to be delivered by HEALNet investigator Dr. G. Ross Baker, University of Toronto, is entitled *Models and Measures: Performance Measurement and Accountability in Health Care*.

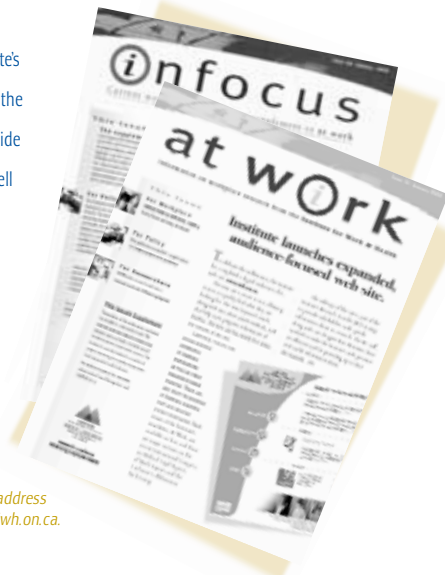
The conference is being held at Marriott Eaton Centre, Toronto, Ontario, Canada, April 2-4, 2000. Further information and registration forms are available at the HEALNet web site <http://healnet.mcmaster.ca/nce> under Events. ▲▲

## At Work to modify subscription structure

**S**ubscribers to *At Work* have been receiving notices regarding the Institute's intention to modify the method of distributing our newsletter. Beginning with the May 2000 issue, we will no longer be mailing printed copies to addresses outside of Ontario. Exceptions will be made for co-researchers and organizations as well as our Members. The Institute receives the majority of its funding from the Ontario WSIB and thus has an obligation to Ontario stakeholders.

We will be posting the full text of *At Work* and *Infocus* to our web site, in both HTML and Adobe's Portable Document Format (PDF). We will be starting an e-mail announcement list to notify those interested when we publish a new issue. The e-mail will be sent once every two months and will contain a summary of the material in that month's newsletter.

For more information regarding this new policy or to provide us with your e-mail address for inclusion in our announcements please contact the editor by e-mail: [atwork@iwh.on.ca](mailto:atwork@iwh.on.ca). To inquire about the Membership Program, contact **Laura Maniago** at (416) 927-2027 Ext. 2101, or [info@iwh.on.ca](mailto:info@iwh.on.ca). Our web address is [www.iwh.on.ca](http://www.iwh.on.ca).





## STOPPING RSI PAIN IN THE GARMENT INDUSTRY

Last fall, the Union of Needletrades Industrial and Textile Employees (UNITE), the Institute for Work & Health, and the Ontario Health Clinics for Ontario Workers (OHCOW) launched a joint project to investigate work-related musculoskeletal disorders (WMSDs), also known as RSIs, in the garment industry.

The researchers hope this study will help reduce musculoskeletal pain in garment industry workers. They plan to distribute the findings of the study widely, not only within the apparel industry but also to other light-manufacturing industries, especially those that use piece-work. “We hope the study will not only give a good descriptive overview of what is happening in our industry, but will also be able to identify good organizational practices,” says Jonathan Eaton, assistant to the Canadian director of UNITE, and principle investigator for this project.

UNITE received funding from the Ontario Workplace Safety and Insurance Board to carry out the initial 12-month study. A proposal has been submitted to continue the study for two more years. The first phase of the study includes a descriptive report of WMSDs looking at trends in lost-time injuries, ergonomic assessments, and a questionnaire that surveys union and management representatives on prevention practices.

By the end of February, Jennifer Gunning, the project coordinator from UNITE, and Joe Maltby, an ergonomist with OHCOW, planned to have nine plants completed out of a projected 30 to 35. “We are getting about two plants surveyed in a week,” says Gunning. “It is going extremely well. We have received terrific support from the Institute and OHCOW, and everyone in the union is very supportive. The UNITE staff have been working very hard to get us access to the plants, and management staff at the plants have been very open to the project.”

The Institute has helped UNITE develop the overall study, including the questionnaire about organizational matters and work practices, as well as health and safety committee practices geared towards ergonomics. Some of the organizational issues that are covered include mental stress, feelings of job security, workload, and conflict and cooperation. There are also questions about how familiar people are with WMSDs, and the company’s inclusion of early intervention and/or modified work programs.

Data collection should be completed by the end of May 2000. If funding is obtained, the second phase of the project should take about two more years. It will include doing an in-depth analysis of three companies, looking at the effect of implementing an ergonomics program. This time, 20–25 people will receive ergonomic assessments. In one company, the researchers will use a passive approach and act as consultants providing ergonomic assessments and recommendations. In the second company, they will use a participative approach and get both the union and management involved in the assessments and recommendations. The third company will act as the control.

“There is a need for more knowledge about the physical and social aspects of RSI in the apparel industry,” says Eaton. “This study will shine a light on organizational practices in our industry. We are looking at how companies are run, and how people are structuring their activities.” Gunning notes that the reputation the Institute has with employers and unions has been very helpful in getting UNITE researchers into the companies with such ease. “Both the employers and the union are on board and recognize that we are doing something positive,” she says. “The partnership between the Institute, the Worker Clinics and the union is really very positive.” 🏔️

For more information visit our web site at [www.iwh.on.ca](http://www.iwh.on.ca) or contact **Dee Kramer** at [dkramer@iwh.on.ca](mailto:dkramer@iwh.on.ca). UNITE’s web site is [www.unite-svti.org](http://www.unite-svti.org).

## HEALTH & SAFETY BALANCED SCORECARD PROJECT IS LAUNCHED

The Institute for Work & Health and St. Michael’s Hospital, Toronto, are collaborating on a new project that will look at indicators of worker health and safety. This project will develop a customized health & safety performance measurement tool, using a framework that is based on the Institute’s current conceptual model of a Healthy Workplace.

“This is a great opportunity,” says Dr. Lynda Robson, principal investigator of the Healthy Workplace Performance Assessment Project at the Institute for Work & Health. “We expect the workplace and researchers to learn from one another during the scorecard’s development. The end result will be a relevant, research evidence-based technique for workplace parties to use in their efforts to improve working conditions.”

Robson will work with other Institute staff, in collaboration with Dr. Linn Holness and her team. Dr. Holness is Chief of the Department of Occupational and Environmental Health at St. Michael’s Hospital. This project has received financial support from the Health Evidence Application and Linkage Network (HEALNet), one of the federal Networks of Centres of Excellence.

The model and the framework for the Health & Safety Balanced Scorecard were inspired by the Kaplan & Norton balanced scorecard, a very popular tool that is used in business management. The business scorecard balances a group of financial outcome indicators with leading indicators of these outcomes. These leading indicators measure internal business processes, customer perspectives, and organizational learning and growth.

Following this idea, the Health & Safety Balanced Scorecard compares a group of H&S outcome indicators with three categories of leading indicators of these outcomes. The St. Michael’s Hospital project, like any application of the Health & Safety Balanced Scorecard, will yield a customized set of indicators for their scorecard, based on the health and safety strategy of the hospital. (to be continued on page 4 ➡️)





## WORKCONGRESS 5: NEW DATES AND LOCATION ANNOUNCED

The organizers of next year's International Congress on Work Injuries Prevention, Rehabilitation and Compensation are in the process of finalizing dates and locations.

The congress is now being held from the 18th to the 21st of March 2001, and the current planned location is Adelaide. Continuously updated information is available from the web site at [www.workcongress5.org](http://www.workcongress5.org). Information about the last congress, hosted by the Institute in 1999, as well as links to abstracts and papers is available on the Institute's web site, [www.iwh.on.ca](http://www.iwh.on.ca). ▲▲

## NEW MEMBERS BRING EXPERTISE TO INSTITUTE RESEARCH ADVISORY GROUP

The Institute has announced the appointment of two new members to its Research Advisory Committee (RAC). In February Terrence Sullivan, the Institute's president, invited Dr. Rick Deyo, MD, MPH and Mr. Jean-Pierre Voyer to join the council.

The RAC is an international committee of researchers and board members who advise the Institute on strategic directions and planning of research projects.

Dr. Deyo is a professor in the Departments of Medicine and Health Services at the University of Washington. He is a member of the Back Pain Outcomes Assessment Team and a deputy editor at *Spine*. In 1999 he co-authored *Evidence-Based Clinical Practice: Concepts and Approaches*.

Over the past 4 years, Mr. Voyer has devoted his energy to the establishment of the Applied Research Branch of Human Resources Development Canada, and he is currently the director general of that branch. He is also involved with the Organization for Economic Co-operation and Development (OECD) and is chairman of its Education, Labour and Social Affairs Committee. ▲▲

For a complete list of members of the Institute's Research Advisory Committee, visit our web site at [www.iwh.on.ca](http://www.iwh.on.ca).

Welcome to Australia  
Welcome to Australia  
5<sup>th</sup> International Congress on Work Injuries Prevention,  
Rehabilitation and Compensation, Australia, March 2001

WorkCongress5



← continued from page 3 )

The Institute's framework is based on case-study information from interviews with ten workplace representatives (from senior management and from labour). They gave their recommendations for an ideal workplace performance assessment tool, identified some existing needs in this area, and gave specific feedback on two tools proposed by the Institute.

One of the key advantages of the Health & Safety Balanced Scorecard is its flexibility and adaptability to individual workplaces. It can be used as a vehicle for the introduction or upgrading of an organization-wide strategy for health, safety and wellness. As a tool, it can enable workplaces to take a preventive approach towards workplace health. As a concept, it places the health and safety of workers front-and-centre in an organization's strategy for overall improvement. ▲▲

For more information contact **Dee Kramer** at [dkramer@iwh.on.ca](mailto:dkramer@iwh.on.ca).  
**Lynda Robson** may be contacted at [lrobson@iwh.on.ca](mailto:lrobson@iwh.on.ca).

## Worker-Centred Research

IWH, CAW & The Bancroft Institute are hosting a workshop on answering questions on health, safety & workers' compensation through research.

May 17, 2000

Contact: Toronto Workers' Health & Safety Legal Clinic 416.971.8832

# Institute News

## KNIGHTHOOD FOR INSTITUTE ADVISOR

Professor Michael Marmot will be adding Sir to his list of titles, after being cited for "services to epidemiology and understanding health inequalities" in the Queen's New Year's Honours List last December. Sir Michael has been a member of the Institute's Research Advisory Committee since its inception in 1993. He is currently the head of the Dept. of Epidemiology and Public Health at the University College London, UK.



Sir Michael Marmot

## PUBLICATIONS

### Report Released on Chiropractors and Return-to-Work

Pierre Côté, winner of the 1999 Chiropractic Researcher of the Year award, has completed *A Report on Chiropractors and Return-to-Work: The Experiences of Three Canadian Focus Groups*, along with co-authors Judith Clarke, Suzanne Deguire, John Frank and Annalee Yassi. To buy a copy, contact Laura Maniago at [info@iwh.on.ca](mailto:info@iwh.on.ca) or by visit our web site [www.iwh.on.ca](http://www.iwh.on.ca).

# Of Interest to Policy Makers



## LEARNING THE STATE OF THE HEALTH OF THE NATION

*We need to increase our knowledge of the non-medical factors influencing health through research and analysis. This will lead to reports on such issues as how the gap between the rich and poor affects health and how achieving a healthier population can enhance our economic capacity and competitiveness.*

*Health Canada, February 3, 2000*



John Lavis

The population as a whole is getting healthier, but what does that mean for different groups or communities. Why are some people healthy and others not? Is there a way of investigating non-health-care aspects of society, such as the environment or the workplace, that can have a long-term effect on people's health? Is there a way of identifying related population health indicators, and monitoring them so that we can continue to live healthy and productive lives?

As the need for accountability has grown more urgent, there have been a number of attempts at selecting key indicators of non-medical determinants of health. The Canadian Institute for Health Information (CIHI) method selected a large number of indicators that were agreed upon at a national consensus conference of over 500 experts. Some of the indicators were performance indicators for the health-care system, but they also selected 18 key non-medical determinants of health, three of which were work related.

Another method was community-focused. In this case, indicators were chosen by a wide variety of community members, and their criteria stated that the indicators should be easily understandable and open to improvement by the community. A group of citizens and community organizations agreed on 58 indicators, two of which were work related.

Both these methods are dependent on personal judgement. "In the absence of information, the consensus and community-based methods are good," says John Lavis,

scientist and associate research director at the Institute for Work & Health. "But if there is research you can draw on, then these methods can be improved upon."

This is the process that Lavis and Institute researchers Cameron Mustard, Jennifer Payne and Mark Farrant followed when they examined key non-medical population health indicators. They undertook a systematic review of the available research on one major upstream category of health determinants: work. They examined data on how employment and working conditions were related to individual health.

They looked at 12 sub-categories of experience that relate to the availability of work, such as unemployment and job insecurity, and 14 sub-categories relating to the nature of work, such as job strain. They selected original research, published in English, that used rigorous cohort or case-controlled designs. This gave them 102 studies to examine.

Then, they attempted to extract data from the studies, and only 29 studies yielded usable data. These studies were then judged by objective validity criteria. This final selection brought the number of eligible studies down to 16.

The results from this thorough evidence-based review study showed that the health of individuals can be strongly determined by experiences like unemployment and job strain. "This process of matching upstream indicators at the population level with experiences found to be associated with poor health at the individual level, can help policy makers conceptualize, develop, and track the performance of health policies with much greater confidence," says Lavis.

"We used very stringent eligibility criteria,"

he says. "But since decision-makers could use these indicators to make changes to employment and working conditions, there is a need to ensure that we select indicators that can be backed by strong science."

This approach towards choosing population health indicators is unique, but it is hoped that this is only the beginning of an evidence-based selection process. The method's strength is in its transparency and its flexibility. As Lavis says, if policy decision-makers feel the criteria are too stringent, the process can easily be repeated using different criteria. As well, the evidence underpinning this selection process can also inform the consensus and the community-based methods by taking some of the guess-work out of their deliberations. ▲▲

*For more information contact Dee Kramer at [dkramer@iwh.on.ca](mailto:dkramer@iwh.on.ca) or visit our web site: [www.iwh.on.ca](http://www.iwh.on.ca).*

## INSTITUTE STAFF APPOINTED TO NATIONAL HEALTH RESEARCH AGENCY

*Cameron Mustard, scientific director at the Institute for Work & Health, and Terrence Sullivan, the Institute's president, have been appointed to the governing council of the Canadian Population Health Initiative (CPHI).*

*This appointment was announced in February 2000 by federal Health Minister Allan Rock, and Michael Decter, Chair of the Canadian Institute for Health Information (CIHI). Established under the umbrella of CIHI, the Canadian Population Health Initiative has received \$20 million of the \$95 million provided to CIHI through the 1999 federal budget to improve health information over a four year period. Under the stewardship of the Council, the CPHI will provide support to innovative research programs focused on the non-medical determinants of the health and well-being of Canadians and will also support innovative approaches to stimulating public debate and discussion about public and private sector policies which influence the health of Canadians. ▲▲*

*More information on both CIHI and CPHI is available from their web site: [www.cihi.ca](http://www.cihi.ca).*

# Work-Related Health Research at Accident Prevention Conference

Two of the Institute's researchers will be presenting workshops highlighting the importance of work-related health research at the Industrial Accident Prevention Association (IAPA) conference this year. *Health & Safety 2000* is the largest conference for health and safety stakeholders in Canada and takes place in Toronto from April 10–12, 2000, at the Metro Toronto Convention Centre.

The Institute's three workshops will all be given on Monday morning, April 10th.

Lynda Robson, a research associate at the Institute, will be presenting a talk: "The Health and Safety Scorecard," which will profile an Institute pilot study. The study examines the Health & Safety Balanced Scorecard, a

comprehensive performance measurement tool inspired by the *Balanced Scorecard*, currently popular in general management. The workshop will present a generic framework for health & safety scorecards that can be tailored to individual workplaces.

Donald Cole, a senior scientist at the Institute, together with Robert Norman from the

University of Waterloo, will be giving a workshop titled "You too can do research." This workshop will assist participants in grappling with the nature of research and explore ways to increase the amount of research on work and health. The workshop will brainstorm (1) what is research; (2) to what extent are participants already doing research or using research; and



Dr. Donald Cole

(3) how can organizations utilize or generate research, and for what purpose.

The third workshop, given by Cole and research transfer associate Dee Kramer, will be on: biomechanical and psychosocial effects on injury in the workplace. This interactive workshop will explore workplaces, looking at how risk factors can be documented and organizational structures can be contributing factors to workplace injury.

The Institute will have a booth at the Conference's tradeshow (#114). The booth will have three slideshows demonstrating the three aspects of our thematic message: Reduce injuries and achieve a healthier workplace by improving BOTH the *physical* and the *psychosocial* work environment. There will also be an Institute presence at the *Healthy Way* display, organized by the Workplace Safety & Insurance Board. ▲

For further information on the Institute's work and our role at the IAPA conference, visit our web site at [www.iwh.on.ca](http://www.iwh.on.ca) or contact Dee Kramer at [dkramer@iwh.on.ca](mailto:dkramer@iwh.on.ca). The IAPA's web site is available at [www.iapa.on.ca](http://www.iapa.on.ca).



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Published by  
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250 Bloor Street East, Suite 702  
Toronto, ON Canada M4W 1E6  
Tel: (416) 927.2027 Fax: (416) 927.4167  
Email: [atwork@iwh.on.ca](mailto:atwork@iwh.on.ca)  
Website: [www.iwh.on.ca](http://www.iwh.on.ca)

Manager, Communications: Peter D. Birt

Editor: Chris St. Croix

Design: Vigeon Design & Associates

Photography: Larry Newland

Contributors: Jackie Cooper,  
Dee Kramer

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