

Research and Workplace Innovation Program

Funding occupational health research and innovative workplace solutions

2009 ANNUAL REPORT



The Workers Compensation Board of Manitoba (WCB) is committed to the promotion of safe and healthy workplaces and the recovery and return to meaningful work of injured workers in Manitoba. The WCB has established the **Research and Workplace Innovation Program** (RWIP) to promote and fund scientific research, workplace innovation projects and knowledge transfer related to prevention of occupational injuries, diseases and return to work of injured or ill workers.

The RWIP makes available \$1 million each year through two streams of funding: workplace-based innovation projects that lead to improvements in workplace health and safety and foster successful rehabilitation and productive return to work; and high quality scientific research on significant issues of workers compensation.

More specifically, the WCB considers RWIP applications based on the following criteria.

Workplace Innovation Funding

The primary goal of funding workplace innovation is to support novel and creative projects that lead to positive change in the safety and health environment in Manitoba workplaces. The WCB supports workplace applications that propose to:

- Develop, implement and evaluate innovative, practical solutions to improve workplace health and safety and foster successful rehabilitation and productive return to work of injured or ill workers
- Apply new information and technology to address occupational safety and health issues
- Use existing knowledge in new ways to solve problems in occupational safety or health
- Transfer knowledge to the workplace through the development of education and training materials or programs in workers compensation issues or occupational safety or health.

Scientific Research Funding

The primary goal of funding scientific research is to support high quality studies that lead to a reduction in the incidence, morbidity and mortality from work-related injury and disease. The WCB supports scientific research applications that propose to:

- Develop a stronger understanding and further current knowledge of workplace injuries, illness, and disease
- Identify, prevent, treat or support recovery from workplace injuries, illness and disease
- Explore risk factors associated with specific industries, occupations, technology, work processes or other factors that may give rise to workplace injuries, illness and disease
- Expand Manitoba's research capacity in occupational health and safety and issues related to workers compensation.

The RWIP replaces the Community Initiatives and Research Program (CIRP), which had been in operation since 1997. Since that time, the funding has supported workplace prevention, education and training initiatives and 136 projects have been completed or are still in progress.

The program will continue to uphold the highest standards of merit-based evaluation of grant applications, including peer review of scientific research, diligent project monitoring and relevance to covered workers and employers.

New Grants Awarded in 2009

Workplace Innovation

FARM SAFETY PROGRAM

Yvonne Rideout, Keystone Agricultural Producers Inc. (KAP)
\$188,000

Keystone Agricultural Producers will pilot a project that will provide occupational health and safety services to farmers and farm workers, a sector newly covered by the WCB. The project will provide one-on-one safety and health education to farmers, undertake farm safety reviews and follow-up on farm safety improvements. Trained farm safety specialists will carry out on-site farm safety reviews and propose measures to mitigate risks. The project will take place over two years.



“We believe our project will greatly benefit the agricultural community in Manitoba. We hope to provide participating farmers with another tool to assist in making the workplace safer.”

- Yvonne Rideout

General Manager,
Keystone Agricultural Producers, Inc.

ECONOMIC EVALUATION SOFTWARE FOR MANITOBA WORKPLACES

Dr. Emile Tompa, Institute for Work and Health
\$69,453

This project will create a free training video to accompany customized economic evaluation software for small and medium-sized businesses in Manitoba's manufacturing and retail sectors. The use of the training video and software will enable employers to determine the cost- effectiveness of prevention initiatives.

"While many businesses believe in workplace safety prevention initiatives, they may be concerned about the financial costs. Our software program will enable small- and medium-sized businesses to do a thorough evaluation of all the benefits and costs of implementing a prevention initiative in their workplace."

- Dr. Emile Tompa

Institute for Work and Health
Economic Evaluation Software for Manitoba Workplaces



Scientific Research

HOW DO EXPECTATIONS, COPING AND DEPRESSION IMPACT ON RECOVERY AFTER A MUSCULOSKELETAL INJURY?

Dr. Linda J. Carroll, University of Alberta
\$119,685

Musculoskeletal injuries represent a large proportion of WCB claims. This study is an important step forward in understanding the complete process of injury response and recovery. The study will utilize a mixed-methods approach, applying scientific modeling and qualitative research methods. The results will assist the WCB in better understanding the factors impacting recovery from musculoskeletal injuries. It may also lead to more timely interventions and more effective case management services and strategies.



“Musculoskeletal injuries are substantial. Our project will evaluate the complete process of injury response and recovery regarding these types of injuries and create a better understanding of the factors impacting recovery to help enhance the WCB’s case management services and strategies.”

- Dr. Linda J. Carroll

University of Alberta,
How do Expectations, Coping and Depression Impact
on Recovery after a Musculoskeletal Injury?

PROGNOSTIC FACTORS FOR TIME AWAY FROM WORK IN WORKERS AWAY FROM WORK DUE TO ACUTE LOW BACK PAIN: AN UPDATE OF A SYSTEMATIC REVIEW

Dr. Ivan Steenstra, Institute for Work and Health
\$40,361

Time lost from work by workers due to acute low back pain is a significant issue. This study will interpret and synthesize the large body of knowledge available on prognostic factors for delayed return to work. Upon completion, the study will make available the most up-to-date information on prognostic factors for managing low back pain claims. It will also add to the body of knowledge regarding the proper assessment and treatment of low back pain, which is a complex issue.

“Acute low back pain leads to a significant number of time loss claims every year. Our study will create a knowledge database for assessing low back pain claims that will help shed some light on the possible complexity of a claim and how to address it in the early phase of the disability process.”

- Dr. Ivan Steenstra

Institute for Work and Health
Prognostic Factors for Time Away from Work in Workers
Away from Work Due to Acute Low Back Pain: An Update
of a Systematic Review



Projects Completed in 2009



“The WCB, through the Research and Workplace Innovation Program, helps its partners in the community create innovative projects that reduce workplace injuries and disease and help injured workers recover. The projects supported through the program contribute to a strong culture of safety in Manitoba.”

- Doug Sexsmith

President and CEO,
Workers Compensation Board of Manitoba

MANITOBA IMMIGRANTS' SAFETY INITIATIVE

Mike Waite, Safety Services Manitoba
\$198,700 awarded in 2006

In support of new Canadian immigrant workers and their employers, the Manitoba Immigrants' Safety Initiative (MISI) project delivered a number of useful resources:

- *A Safe Immigrant Workforce for Manitoba: An Employer's Guide for Health and Safety Training* – which helps employers educate immigrant employees on core elements of workplace safety.
- A wallet card, postcard and poster on *Multilingual Rights and Responsibilities* for immigrant workers and their employers which are available in French, German, Mandarin, Punjabi, Russian, Spanish and Tagalog.
- *CD-ROMs* of the project's resources – which are a cost-effective and efficient way to distribute this resource to small and medium-sized businesses.

The WCB's investment in the health and safety of immigrant workers will continue with the MISI-Community Coalition with partner agencies and other community stakeholders. Brandon and Morden-Winkler are planning regional coalitions to work with the MISI on a similar initiative.

Resources are available on the following websites:

http://safetyervicesmanitoba.ca/manitoba_immigrants_safety_initiative.aspx

http://safemanitoba.com/manitoba_immigrants_safety_initiative.aspx

SAFE WORK FOR AN AGING WORKFORCE PROJECT

A. Dolhy Ergonomics Inc.

\$37,300 awarded in 2006

A two-day conference was held to address workplace health and safety issues for older workers. Key speakers included Dr. Don Voaklander from University of Alberta; ergonomist Ben Zavitz; Winnipeg Blue Bombers' athletic therapist Alain Couture, and Dr. Allen Kraut, an occupational health physician at the Health Sciences Centre.

The conference attracted over 100 participants who heard from 19 speakers and participated in the development of an action plan to review workplaces. As a result, 10 workplaces were inspected to identify their safety initiatives and job accommodations available for older workers.

This project developed an awareness pamphlet, *SAFE Work for an Aging Workforce*, which provides examples of SAFE Work procedures for older workers. The pamphlet and the audio recording of the conference are available on the following website:

http://safemanitoba.com/aging_workforce_brochure.aspx

ANALYSIS OF THE LANGUAGE, CULTURAL AND LITERACY NEEDS OF WCB CLIENTS

Prairie Research Associates Inc.

\$124,906 awarded in 2007

This study established that a very small percentage of WCB clients face barriers due to language, culture or literacy in communicating with the WCB. Language barriers emerged as a more important issue than cultural or literacy barriers. Clients who face a barrier in one dimension are more likely to experience barriers in others. The study identified that multiple overlapping barriers complicate the distinctive factors that impact communication between the WCB and its immigrant clients. The results of this study will enable the WCB to develop strategies that will address the needs of newcomer and immigrant workers and employers in Manitoba.

ESTABLISHING OCCUPATIONAL EXPOSURE LIMITS IN YOUR WORKPLACE

John Elias, OHG Consulting Inc.

\$24,900 awarded in 2007

OHG Consulting Inc. developed a Guidance Manual to assist workplaces with limited resources in complying with the Threshold Limit Values regulation in Manitoba.

The manual identifies a variety of risks in relation to the Threshold Limit Values in workplaces. These risks are classified in three levels:

Class 1: the risk to workers is low and action is not necessary

Class 2: there is a risk to workers; basic steps are described that can be implemented by the safety committee

Class 3: the risks are complex and difficult to define; expert advice is needed.

The Guidance Manual enables employers to independently screen exposure levels and sensitize themselves and their employees to the different reactions that may occur among workers to similar exposures in the workplace.

The Guidance Manual and other resources are available on the following websites:

http://safemanitoba.com/establishing_occupational_exposure_limits.aspx

<http://www.adjustingtlvs.com/>

HEALTH & SAFETY GAP ANALYSIS – YOUNG MANITOBBANS WITH DISABILITIES

Yvette Milner, On-Site Safety & Health Management Solutions

\$75,000 awarded in 2007

On-Site Safety & Health Management Solutions surveyed employers and agencies that support the health, safety training and placement of youth with disabilities entering the workforce. Results revealed that this group of young workers had little prior knowledge of health and safety issues.

Analysis also revealed that 97 per cent of placement agencies did not view the provision of information or training about health and safety as their responsibility. More than half of the agencies surveyed did not provide safety information to their clients. Educational tool kits were developed and distributed to members of the Manitoba Supported Employment Network and Manitoba Family Services and Consumer Affairs staff. The tool kit is available on request.

YOUNG WORKERS, LEARNING DISABILITIES AND SAFE WORK

Annette Dreilich, Twin Valley Co-op Ltd.

\$90,000 awarded in 2007

This project analyzed core functions and developed orientation and safety training for entry-level positions that are typically filled by young workers and workers with disabilities.

Twin Valley Co-op Ltd. (TVC) is a member of Federated Co-operatives Limited, with stores located in the Manitoba communities of Rosburn, Russell, Birtle, Miniota and Elkhorn. The project targeted young workers with learning disorders who needed to be trained differently when taking up entry level positions in TVC's retail outlets. The project developed eight different orientation and training modules that utilize online and e-learning methods, practical demonstrations, short time blocks and frequent learning. The customized training modules are for the following positions: gas bar attendant, yard worker, cashier clerk, receptionist/office worker, clerk and delivery salesperson.

Passport to Success, a tracking and assessment tool, was developed to support the training modules. The new training tools were tested and it was revealed that these tools made the training and orientation of new workers easier, simpler and more consistent. The training tools will be distributed to the Federated Co-op outlets. The training modules are available on request.

Projects in Progress



“The Research and Workplace Innovation Program funds workplace safety innovations which will ultimately benefit Manitoba employers and workers. This helps employers by reducing the costs of business associated with workplace injuries and also benefits workers by helping them stay safe.”

- Michael Werier

Chairperson,
Workers Compensation Board of Manitoba

ANALYSIS OF DISABILITY MANAGEMENT PROGRAMMING IN MANITOBA'S CONSTRUCTION SECTOR

On-Site Safety & Health Management Solutions
\$90,000 awarded in 2008

This project provides a global view of the current state of disability management and return to work strategies among small firms in the building construction sector. The study's recommendations will be piloted in three to five selected firms to demonstrate the practicality of its solutions.

OCCUPATIONAL EXPOSURE PREVENTION AND THE CO-OCCURRENCE OF WORK-RELATED SKIN AND RESPIRATORY SYMPTOMS AND DISEASE

Dr. Linn Holness, St. Michael's Hospital, Toronto and
Victoria H. Arrandale, University of Toronto
\$142,064 awarded in 2008

The study explores the relationship between routes of exposure and disease outcomes in the skin and respiratory systems. A cross-section of workers who are seeking treatment for occupational skin or lung disease will be examined. A better understanding of these associations, as well as the information on the affected workers' work environment and work history will provide information that will help workplaces establish suitable protective exposure limits and appropriate prevention strategies.

HOME CARE WORKER MUSCULOSKELETAL INJURY PREVENTION

Regional Health Authority of Central Manitoba
\$200,000 awarded in 2008

This initiative aims to prevent musculoskeletal injuries among home care workers. The project provides teaching and on-the-job training to homecare workers. The services of an occupational therapist will be available to homecare workers to assist them in caring for their clients, observe the way they handle clients, and provide corrective instruction as needed.

SAFE WORK FOR AN AGING WORKFORCE: SMALL BUSINESS INTERVENTION AND EVALUATION PROJECT

A. Dolhy Ergonomics Inc., 2008
\$119,500

The purpose of this project is to develop case studies of ergonomic interventions for older workers employed by small businesses. Based on actual workplace assessments, the case studies quantify risk reduction and job accommodation.

YOUNG WORKER RESPONSES TO WORKPLACE HAZARDS

Dr. Nick Turner, Asper School of Business, University of Manitoba and Sean Tucker, Queen's University
\$55,232 awarded in 2007

This study explores how young workers respond to hazards in the workplace. Responses received in experimental and field settings will identify the factors that inhibit working teenagers from responding constructively and safely to workplace hazards.

WELDING EXPOSURES IN SMALL BUSINESS

OHG Consulting Inc.
\$48,925 awarded in 2007

This project measures exposure among 200 welders in 40 small welding shops. Each business surveyed will be provided with a report of their workplace exposure levels and the options for corrective action. The findings will be presented in a report and a brochure on welding safety.

MANAGEMENT COMMITMENT TO WORKPLACE SAFETY

Dr. David Stuewe, Institute for Work and Health (IWH)
\$93,258 awarded in 2007

This survey of CEOs, managers and frontline workers in Manitoba investigates the impact of management commitment on the health and safety climate in workplaces. The IWH researchers will poll workplaces on strategic leadership and safety climate in the workplace. The project will provide opportunities for stakeholders to further enhance workplace prevention and safety, and to understand the factors that drive senior leaders' commitment to workplace safety and health.

MANAGER AND SUPERVISOR ROLES: ENHANCING THE SAFETY AND HEALTH CLIMATE FOR HEALTH CARE PROVIDERS

Dr. Sue Bruning and Deirdre McCaughey, Asper School of Business, University of Manitoba
\$53,996 awarded in 2007

The project surveys the attitudes and perceptions of managers, supervisors and healthcare providers about health and safety in healthcare facilities in Manitoba. The survey targets 50 top managers, 200 supervisors and 750 employees from healthcare facilities across the province. It will explore and develop suggestions on actions to improve health and safety risk factors and the overall safety environment of healthcare facilities. The results of the survey will provide suggestions for developing customized training programs for the target groups surveyed.

BRAIN TRAINING FOR MEMORY ENHANCEMENT

Manitoba Brain Injury Association, 2007

\$59,460

This project aims to measure the effects of a computerized, cognitive training program on the skills of individuals who have experienced a traumatic brain injury. The project targets individuals who have been unable to return to previous employment because of cognitive changes resulting from their brain injury.

WINGS OF CHANGE

Manitoba Federation of Labour (MFL) Occupational Health Centre, 2007

\$121,236

The goal of this project is to help Workplace Safety and Health committees deal with workplace issues through the use of Sharing Circles. The project seeks to better engage Aboriginal workers with non-Aboriginal workers when dealing with workplace health and safety issues.

ABORIGINAL SAFETY AND HEALTH AWARENESS INITIATIVE

Ma Mawi Wi Chi Itata Centre, 2007

\$94,055

The purpose of this project is to identify barriers and hazards to workplace safety in the urban Aboriginal community and to deliver culturally appropriate workplace safety and health information to urban Aboriginal communities.

DEVELOPMENT AND IMPLEMENTATION OF H&S GROUPS FOR RURAL WORKPLACES IN MANITOBA

MFL Occupational Health Centre, 2006

\$173,900

The goal of this project is to develop Health and Safety Groups in rural Manitoba communities with an emphasis on workplace health, safety and ergonomics and to provide Health and Safety Groups with resources to undertake self-audits of their health and safety program.

MINERVA SAFE MANITOBA

Manitoba Labour and Immigration Workplace Safety and Health Division, 2006

\$50,000

The WSHD - through Minerva SAFE Manitoba - provides opportunities for post-secondary institutions to incorporate occupational health and safety into the core curricula of business, engineering and other post-secondary programs.

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For copies of completed reports, including those completed before 2009, contact Bruce Cielen, Manager, Research and Workplace Innovation Program, at bcielen@wcb.mb.ca, (204) 954-4650 or toll-free outside Winnipeg at 1-800-362-3340, extension 4650. Please visit the website at www.wcb.mb.ca for more information on the Research and Workplace Innovation Program.

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