

# Institute for Work & Health Activity Plan 2018



**Institute  
for Work &  
Health**

Research Excellence  
Advancing Employee  
Health



## **2018 Activity Plan**

**Research  
Knowledge Transfer & Exchange  
Corporate Services**

Institute for Work & Health  
481 University Avenue, Suite 800  
Toronto, ON Canada  
M5G 2E9

Telephone: 416.927.2027  
Fax: 416.927.4167  
Website: [www.iwh.on.ca](http://www.iwh.on.ca)

## 2018 Activity Plan

The Ministry of Labour released “*Healthy and Safe Ontario Workplaces: A Strategy for Transforming Occupational Health and Safety*” in December 2013. The Institute for Work & Health is committed to supporting the priorities identified in the prevention strategy. The projects and activities documented in the Institute's 2018 Activity Plan demonstrate alignment to the priorities in the *Healthy and Safe Ontario Workplaces* strategy, and include the following:

- Continuing the Institute's longstanding commitment to describing the circumstances of vulnerable workers, many of whom are new workers, young workers, immigrant workers or older workers. We have important work in progress in this area and are actively supporting the Ministry of Labour's prevention and enforcement activities to address the needs of vulnerable workers.
- Continuing research efforts to identify the hazards associated with the risk of work injury and illness, and the most effective interventions to mitigate these hazards, particularly in the area of non-traumatic musculoskeletal disorders, the largest cause of work-related disability in Ontario.
- Supporting the promotion of a culture of health and safety, in collaboration with the HSAs, on the development of leading indicators of workplace occupational health and safety performance and on the development of tools to apply this knowledge.
- Strengthening our research portfolio's focus on supporting the needs of small businesses
- Continuing to build collaborative research and knowledge exchange partnerships with the HSAs, CREs, and other stakeholders through such forums as the IWH-chaired Prevention Knowledge Exchange Group and continuing our commitment to involve workplace parties directly in many of our research projects.
- Continuing to contribute high quality research evidence to support workplace practices in the prevention of work disability.

Dr Cameron Mustard

President & Senior Scientist

# 2018 ACTIVITY PLAN

## Table of Contents

<b>INTRODUCTION</b> .....	1
<b>A. PREVENTION OF WORK RELATED INJURY AND ILLNESS</b> .....	3
Vulnerable Workers	
Effective Occupational Health & Safety Practice	
Working Conditions and Health	
<b>B. PREVENTION AND MANAGEMENT OF WORK DISABILITY</b> .....	19
Clinical Treatment	
Return to Work Practices	
Compensation and Benefits	
Measuring Health and Function	
Evidence Guides and Tools	
<b>C. FOUNDATION PROGRAMS</b> .....	43
<b>D. KNOWLEDGE TRANSFER &amp; EXCHANGE</b> .....	49
<b>E. CORPORATE SERVICES</b> .....	59

## Introduction

The Institute for Work & Health promotes, protects and improves the safety and health of working people by conducting actionable research that is valued by employers, workers and policy-makers. The Institute is also committed to provide knowledge transfer and exchange services to improve access to and application of research evidence among agencies in the Ontario prevention system, workplace parties, occupational health and safety professionals, clinicians, and policy makers to support improved outcomes in the prevention of work-related injury and illness and the prevention of work disability.

The Institute is structured in three programs. The Research Program focuses on the prevention of work-related injury and illness and the prevention of work disability. The Institute for Work & Health has a specific focus on work-related musculoskeletal conditions which are responsible for approximately 50 per cent of disability compensation claims involving time lost from work-related injury and illness. The Knowledge Transfer and Exchange Program builds and maintains relationships with stakeholders to enable the ongoing exchange of information and research evidence and to facilitate their participation in research projects. We use a range of strategies to accomplish this goal and are committed to collaborations with partners in the Ontario prevention system, and with a wide range of other health and safety stakeholders. The Corporate Services Program provides facility management services, financial management services, human resource services and support to the Institute's Board of Directors.

The Institute is an independent not-for-profit organization with a twelve-member Board of Directors. The Institute's projected staff complement for 2018 will be 50 FTEs which are distributed across the three programs: Research, Knowledge Transfer & Exchange, and Corporate Services.

The 2018 Activity Plan describes individual research projects to be conducted over the course of the year, outlining project objectives, staffing, stakeholder involvement and the alignment to the Ontario Prevention Strategy. The work of the KTE Department and the organizational support role played by the Corporate Services Department are also described in the plan.

## **Research**

The Institute's research plans for 2018 are organized in two focus areas: 1) the primary prevention of work-related injury and illness and, 2) the prevention and management of work disability. Research projects in the area of primary prevention focus on working conditions and health, vulnerable workers, the prevention of musculoskeletal disorders, the effectiveness of occupational health and safety programs and practices and the influence of regulation and economic incentives on workplace practices. Research projects in the area of work disability management & prevention focus on the measurement of health and function, the effectiveness of clinical treatment, optimal return-to-work practices and the influence of compensation and benefits on the social and economic circumstances of disabled workers. In both of these two areas of research, we devote efforts to the development of evidence-based guides and tools that may be useful to our non-research partners.

## **Knowledge Transfer & Exchange**

The aim of knowledge transfer and exchange is to put research findings into the hands of key decision-makers in a timely, accessible and useful manner. The decision-makers could be workers, employers, OHS professionals, policy-makers, clinicians or other researchers. Additionally, KTE staff ensures that stakeholders are either involved in or informed of research projects that may be relevant to them, KTE initiatives to strengthen stakeholder relationships and to make research evidence available, understandable and useable are described in the 2018 Activity Plan.

## **Corporate Services**

Corporate Services at the Institute provides facilities support, human resources management, finance and accounting capacity and oversees the purchase and maintenance of equipment and supplies. The administrative infrastructure and human resource function supports the diversity and complexity of work at the Institute. It also provides liaison and support to the Institute's Board of Directors. A description of 2018 Corporate Services activities follows the Research and KTE sections.

## **Prevention of Work Related Injury and Illness**

In this section, we provide an overview of the Institute's research plans for 2018 focused on the prevention of work-related injury and illness. Our portfolio of projects addresses vulnerable workers, the effectiveness of occupational health and safety programs, working conditions and health, and economic incentives on workplace practices. We also focus on the development of evidence-based guides and tools that may be useful to our non-research partners. The Institute's knowledge transfer & exchange staff will engage with our partners to support the transfer of research evidence to policy and practice and will continue to strengthen relationships with workplace parties (employers, organized labour, health and safety associations, and OHS professionals) to support their participation in our research activities.

### **Protecting vulnerable workers**

Protecting vulnerable workers from the risks of work-related injury and illness is a central priority of the Ontario prevention system. New workers, some of whom are in temporary employment arrangements and many of whom are young workers, are most at risk of injury during the first month on a job. Immigrant workers, who make up an increasing segment of the Canadian labour force, may also be more vulnerable to workplace injury or illness. The proportion of workers aged 50+ is increasing and there are growing incentives for older workers to continue employment beyond the age of 65. Finally, not all workers enter the workforce with optimum health. Many have pre-existing physical and mental health conditions or develop health problems that may make them vulnerable to workplace injury or illness. New and young workers, immigrant workers, older workers and those with pre-existing health conditions will continue to be a research priority for the Institute for Work & Health in 2018.

### **Effective workplace health and safety practices**

The role of workplace organizational policies and practices in ensuring the health and safety of workers will continue to be an important focus of the Institute's research in 2018. The Institute's research will continue a focus on understanding of the relationship between occupational health and safety investments by workplaces and the broad economic benefits of these investments. Institute staff will continue research on optimal approaches to the measurement and auditing of organizational policies and practices within Ontario workplaces. In 2018, we will continue our work on utilizing benchmarking reports to identify relevant leading indicators of injury and illness in the construction sector. The data will be used in the creation of a dashboard for firms to manage and improve their occupational health and safety metrics over time. As well, we will continue to evaluate the implementation and effectiveness of the Ontario working at heights training standard, which came into force April 1, 2015.

### **Working Conditions and Health**

The impact of working conditions on health will continue to be a focus for the Institute's research in 2018. The Institute will continue to conduct surveillance research on the relationship between working conditions and work-related disorders and to document trends. In addition, we will examine trends over time in the incidence and duration of work-related injury and illness. In 2018, we will begin a study that aims to address recommendations made to the Ministry of Labour from the Expert Advisory Panel of Occupational Health and Safety by making use of population-based records of emergency department visits to improve the surveillance of work-related injury and illness in the province of Ontario, with a particular emphasis on vulnerable workers. Also new in 2018, we will commence work on a project aiming to gather knowledge on how workers use cannabis in relation to the workplace and their perceptions and attitudes towards workplace use. We will continue to endeavour to create a more nuanced understanding of how sex/gender shape injury risk, the relationship between the work environment and chronic illnesses, and time off work after a work-related injury, with a view to help shape the development of gender- and sex-sensitive policies and practices to improve the health of all working Canadians.

## **A. Prevention of Work Related Injury and Illness**

### Vulnerable workers

Addressing essential skills gaps among participants in an OHS training program: a pilot study (1340/1341) .....	5
Evaluating the impact of mandatory awareness training on OH&S vulnerability in Ontario (1336) .....	6

### Effective Occupational Health and Safety Practices

Employer investments in occupational health and safety: establishing benchmarks for Ontario (1345)...	7
Evaluation of the implementation and effectiveness of the Ontario working at heights training standard (1360) .....	8
Health and safety practices in the Manitoba construction industry (1365).....	9
Implementing participatory organizational change: evaluation a participatory intervention in long-term care (1281) .....	10
Research grant opportunities: Public Services Health and Safety Association (2225) .....	11

### Working Conditions and Health

The measurement and surveillance of working conditions and lost-time claims in Ontario (0417).....	12
Examining gender/sex differences in the relationships between work stress and disease, work injury risk, and the consequences of work injury (1310) .....	13
Developing a gender/sex-sensitive understanding of how the psychosocial work environment is related to chronic disease (1315).....	14
Improving information on worker health protection in Ontario (1370).....	15
Measuring cannabis use in Canadian workplaces (1375) .....	16
Evaluation of prevention strategies for reducing the future risk of cancer in the Ontario construction industry (2285).....	17
Central nervous system agents and the risk of workplace injury and death: a systematic review of the literature (3200).....	18

## **Addressing essential skills gaps among participants in an OHS training program: a pilot study (1340/1341)**

**Project Period:** Ongoing, project to be completed Q2 of 2018

**Introduction:** The study is designed to develop, implement and evaluate a pilot occupational health and safety (OHS) training program designed to improve training outcomes for workers with essential skills gaps by embedding curriculum that enhances essential skills. The pilot involves the hoisting and rigging training program offered by the training centre of local 506 of the Labourers' International Union of North America (LiUNA), using curriculum developed by the Infrastructure Health and Safety Association (IHSA).

### **Objectives:**

- To determine the extent to which a redesigned curriculum for the hoisting and rigging safety training program that addresses essential skills gaps improves learning of the health and safety content and adherence to safe practices.
- Should the pilot prove successful, the longer term goal is to apply the model to a range of other OHS programs, thereby improving worker / workplace safety more broadly.
- To develop an understanding of the trainees/ instructor experience taking/delivering the regular and modified hoisting and rigging OHS training program, and insights on how to improve the process of modifying an OHS training program to address gaps in essential skills.

**Researchers:** Ron Saunders (Principal Investigator), Curtis Breslin, Siobhan Cardoso, Morgane LePouésard, K Myers (Blueprint)

**Collaboration and Partnerships:** The training centre of LiUNA local 506 and the IHSA are key partners. The training centre is delivering the program and conducting assessments of learning outcomes. IHSA is assisting with curriculum development, which is being led by a consultant, Tracy Collins. We also consulted with Workplace Safety & Prevention Services, Public Safety Health and Safety Association, and Workplace Safety North.

**Potential Audiences and Significance:** The process used to develop the pilot could be a model for the improvement of other OHS training programs that serve a trainee population with essential skills gaps. We will explore such opportunities with other health and safety associations (besides IHSA) through meetings with them based on the findings from the pilot.

**Links to MOL Prevention Strategy:** Integrated planning and service delivery, preventive workplace culture

### **Project Targets for 2018:**

*First Quarter:* Disseminate process guide to relevant stakeholders  
Conduct interviews with HSAs/training centres to determine potential use of guide  
Conduct follow-up consultation with HSAs to identify a viable training program to test the use of the guide

*Second Quarter:* Provide initial support to an organization to conduct a similar intervention

*Third Quarter:* No activity

*Fourth Quarter:* No activity

## Evaluating the impact of mandatory awareness training on OH&S vulnerability in Ontario (1336)

**Project Period:** Ongoing

**Introduction:** On July 1 2014, the province of Ontario introduced a mandatory awareness training program. The aim of this province-wide intervention is to increase worker and supervisor knowledge of basic occupational health and safety (OH&S) rights and responsibilities under the Ontario Occupational Health and Safety Act. This increased knowledge among workplace parties will in turn improve the effectiveness of workplace level policies and procedures to prevent workplace incidents and injuries. The regulation introduced along with the mandatory awareness training intervention requires employers to provide and document that their employees have received a minimum level of training on a variety of topics. The introduction of mandatory awareness training was designed to improve the OH&S of Ontario's most vulnerable workers. It also represents a large public investment in OH&S by the province. It is important to evaluate the impact of this program using rigorous methods and relevant measures, as the findings of such an evaluation will provide unique information that can be used to support or modify existing and future primary prevention efforts. The aim of this research is to evaluate the impacts that the introduction of mandatory awareness training has had on worker level of OH&S vulnerability.

### **Objectives:**

- To measure four dimensions of the work context that are thought to place workers at a higher risk of work injury in a sample of workers in Ontario and BC prior to the introduction of mandatory awareness training.
- To examine changes in these dimensions after the introduction of mandatory awareness training in Ontario to changes occurring in British Columbia, where no similar program is taking place
- To examine if changes in Ontario at the population level are similar within labour market sub-groups (e.g. Age, workplace size) and if there are implications on inequalities in work-injury risk in Ontario workers.

**Researchers:** Peter Smith (Principal Investigator), Curtis Breslin, Ron Saunders, Emile Tompa, A Lamontagne (Deakin University)

**Collaboration and Partnerships:** The proposed project involves collaborations with three Health and Safety Associations (Public Services Health & Safety Association, Workplace Safety & Prevention Services, and the Workers Health & Safety Centre). The research team will also consult with staff at the Ministry of Labour Prevention office.

**Potential Audiences and Significance:** This project is relevant to multiple stakeholder groups involved with primary prevention activities. These include policy makers, workplaces, organised labour and workers.

**Links to MOL Prevention Strategy:** Preventive workplace culture, vulnerable workers

### **Project Targets for 2018:**

*First Quarter:* Analyse fourth OHS vulnerability survey.

*Second Quarter:* Write up study findings and present results at open plenary.

*Third Quarter:* Submit study findings to peer-review and complete project.

*Fourth Quarter:* No activity

## **Employer investments in occupational health and safety: establishing benchmarks for Ontario (1345)**

**Project Period:** Ongoing

**Introduction:** This research study will obtain detailed estimates of firm-level expenditures and investments in occupational health and safety (OHS) for a representative sample of employers in the province of Ontario. The study will replicate a study design pioneered by the International Social Security Association (ISSA) and the German Social Accident Insurance funds (DGUV). This groundbreaking study, titled “Calculating the International Return on Prevention for Companies: Costs and Benefits of Investments in Occupational Safety and Health” obtained detailed estimates of firm-level OHS expenditures and investments for more than 330 companies in 19 countries. The ISSA/DGUV study reported that the average investment per employee per year was more than €1,200. There is no comparable source of information on employer expenditures and investments in occupational health and safety in the province of Ontario. This study will address this gap by replicating the features of the ISSA/DGUV structured interview design in a sample of approximately 350 Ontario employers recruited from among firms that have previously participate in the Ontario Leading Indicators Project (OLIP).

### **Objectives:**

- To obtain detailed estimates of firm-level expenditures and investments in occupational health and safety (OHS) for a representative sample of employers in the province of Ontario.
- To obtain estimates of OHS expenditures and investments on the following five dimensions: 1. Management and supervision, 2. Training, 3. Personal protective equipment, 4. External consulting services and 5. OHS improvements attributed to new capital investment in facilities, vehicles and equipment.

**Researchers:** Cameron Mustard (Principal Investigator), Morgan Lay, Emile Tompa

**Collaboration and Partnerships:** Data collection and preliminary analysis has been completed on this project. Over the course of 2018, the project team will offer briefings on the study findings to interested employer organizations, including the Canadian Manufacturers and Exporters Association, the Business Council on Occupational Health and Safety and Ontario health and safety associations.

**Potential Audiences and Significance:** Participating employers have received a benchmark report comparing their OHS expenditures to peer organizations in the economic sector. Safety Group sponsors and trade associations will have interest in the findings of this research as well as provincial Ministries of Labour and provincial workers’ compensation authorities.

**Links to MOL Prevention Strategy:** Preventive workplace culture

### **Project Targets for 2018:**

First Quarter:	Initiate analysis of the representativeness of the sample of participating employers Provide briefings to interested employer organizations
Second Quarter:	Complete analysis of the representativeness of the sample of participating employers Provide briefings to interested employer organizations
Third Quarter:	Complete manuscript describing employer investments in OHS Provide briefings to interested employer organizations; complete project
<i>Fourth Quarter:</i>	No activity

## Evaluation of the implementation and effectiveness of the Ontario working at heights training standard (1360)

**Project Period:** Ongoing

**Introduction:** The recommendations of the Expert Advisory Panel on Occupational Safety & Health (2010) emphasized the development of mandatory fall protection training for workers working at heights (WAH). In response to this recommendation, the Prevention Office, Ontario Ministry of Labour, has implemented regulations defining training program standards and has established a program for the accreditation of training providers. The Occupational Health and Safety Awareness and Training Regulation requires employers in Ontario to ensure that workers on construction projects successfully complete a WAH training program if they may use specified methods of fall protection. A training provider approved by the CPO must deliver the program. The training requirements came into force on April 1, 2015. By the end of 2016, more than 200,000 people had been trained by more than 100 accredited training providers.

### Objectives:

- To analyze administrative data describing characteristics of working at heights learners (e.g., geographic region) and trends over time in the incidence of falls from heights.
- To interview MOL inspectors about the enforcement of and observed effects of the WAH standard
- To survey construction employers on compliance with and the effectiveness of the WAH standard
- To conduct a learner follow up study to assess changes in knowledge and self-reported work practices attributable to the training, as well as barriers to transferring learning to the work site
- To survey members of selected trades about compliance with and effects of the WAH standard
- To survey training providers about changes in the nature of the fall prevention training provided.

**Researchers:** Lynda Robson (Principal Investigator), Cameron Mustard (Co-Principal Investigator), Ben Amick, Peter Smith

**Collaboration and Partnerships:** IHSA is a collaborator on the learner follow up study. Two stakeholder advisory committees are being formed (employer/labour representatives and training providers)

**Potential Audiences and Significance:** There is strong interest on the part of stakeholders in the construction sector to document the effectiveness of the mandatory training standard and learn from the experience of its implementation.

**Links to MOL Prevention Strategy:** preventive workplace culture, hazard assessment and control

### Project Targets for 2018:

- First Quarter:* Conduct survey of compulsory trade workers  
Complete analyses of the data from the learner administrative records, inspector interviews, and employer survey  
Meet with stakeholder advisory committees; submit interim report
- Second Quarter:* Complete analyses of the learner follow up study and trade worker survey data  
Conduct survey of training providers
- Third Quarter:* Complete analysis of training provider survey data  
Meet with stakeholder advisory committees; submit interim report
- Fourth Quarter:* Complete analysis of trends in the incidence of falls from heights; submit final report

## Health and safety practices in the Manitoba construction industry (1365)

**Project Period:** Ongoing

**Introduction:** The project is a partnership with the Construction Safety Association of Manitoba (CSAM) and its 5,678 member employers. The primary research goal is to identify relevant leading indicators of injury and illness in the construction sector using the Organizational Policies and Practices Questionnaire (OPPQ), the IWH-OPM tool, and a tool assessing Joint Health and Safety Committee functioning. Having a set of tools that CSAM and OHS leaders can use will potentially improve OHS management practices, impact workplace hazard reduction, and improve worker health and safety. The data will be used to develop evidence-based organizational benchmarking reports and to build a dashboard that will allow firms to manage and improve their occupational health and safety metrics over time, contributing to a new conversation about best practices in OHS performance and a community of practice to share these best practices within the CSAM. The intent is to affect a significant shift in the health and safety culture of construction businesses, especially small businesses who have limited time and resources to engage in OHS safety improvements.

### Objectives:

- To examine the reliability and validity of the OPPQ, IWH-OPM and JHSC Functioning.
- To examine the relationships between historical Workers' Compensation Board (WCB) claim rates and organizational and management metrics.
- To develop evidence-based benchmarks representative of all employers in all regions in the construction sector in Manitoba to support the dissemination of benchmarking information
- To develop and test the usability of a benchmarking dashboard to help organizations improve their OHS performance over time.

**Researchers:** Ben Amick (Principal Investigator), Jonathan Fan, Sara Macdonald, Christopher McLeod, Colette Severin, Dwayne Van Eerd, M Jones (Construction Safety Association of Manitoba)

**Collaboration and Partnerships:** IWH will partner with CSAM and its members on this project.

**Potential Audiences and Significance:** Construction Safety Association of Manitoba (CSAM) member employers, WCB of Manitoba's/SAFE Work Manitoba, and Workplace Safety and Health Manitoba.

**Links to MOL Prevention Strategy:** Hazard assessment and control, preventive workplace culture

### Project Targets for 2018:

*First Quarter:* Finalize contact list; begin telephone recruitment/data collection  
Obtain WCB claims data  
Conduct workshop at CSAM annual conference

*Second Quarter:* Begin development of benchmarking reports  
Hold Advisory Board meeting #2  
Finalize recruitment/data collection

*Third Quarter:* Begin linkage of WCB data; begin analysis  
Develop propensity scores and finalize benchmarks  
Begin dissemination of benchmarking reports

*Fourth Quarter:* Continue data analysis; develop alpha version of dashboard  
Finalize dissemination of benchmarking reports

## **Implementing participatory organizational change: evaluation a participatory intervention in long-term care (1281)**

**Project Period:** Ongoing

**Introduction:** The long-term care (LTC) sector is fast-paced and demanding, putting workers at significant risk for occupational-related injuries. Among LTC workers, musculoskeletal disorders (MSDs) and slips, trips, and falls (STFs) are a major source of injuries, accounting for over half of all lost-time claims in the healthcare sector. LTC staff in Ontario facilities consists of various worker groups considered vulnerable, typically including new/immigrant workers, workers with low education and unlicensed workers operating in unclear working relationships. The Public Services Health & Safety Association has developed an organizational level participatory ergonomics program, called "Employees Participating in Change" (EPIC), to reduce the incidence of MSD and STF hazards and injuries in LTC. IWH researchers are evaluating the implementation of the EPIC program. This project builds on our ongoing collaboration with PSHSA and labour representatives (OPSEU). This project will examine the EPIC implementation process and addresses the health and safety of vulnerable workers within LTC facilities.

**Objectives:** To understand the implementation of an organizational level participatory ergonomics intervention in LTC and its effects on outcomes such as self-efficacy, norms development and hazard reduction. The study will examine if implementing the EPIC program results in a reduction of MSD or STF hazards and inform the development of tools to help guide the participatory change process.

**Researchers:** Dwayne Van Eerd (Principal Investigator), Ben Amick (Co-Principal Investigator), Teresa D'Elia, Era Mae Ferron, Sheilah Hogg-Johnson, Cameron Mustard, Lynda Robson, I Steenstra (Morneau Shepell), H Van Hulle (Public Services Health & Safety Association), R Wells (University of Waterloo)

**Collaboration and Partnerships:** AdvantAge, Ontario Personal Support Workers Association (OPSWA), Ontario Public Service Employees Union (OPSEU), Public Services Health & Safety Association (PSHSA)

**Potential Audiences and Significance:** LTC facilities and workers in Ontario, organizations interested in implementing participatory approaches to occupational health and safety

**Links to MOL Prevention Strategy:** Hazard assessment and control, preventive workplace culture

### **Project Targets for 2018:**

*First Quarter:* Ongoing program implementation and data collection  
Hazard control implementation and evaluation at intervention sites,  
OHS educational intervention at control sites, follow up data collection.

*Second Quarter:* Program and data collection completion and analysis  
Complete onsite observational assessments, interviews,  
Survey distribution follow up focus groups and program documentation.  
Analysis of project data.

*Third Quarter:* Tool development and knowledge transfer  
Development of participatory change tool guides,  
Final outcome reports and presentations,  
Site specific ergonomic consultations at control sites,  
Outcome reporting and final consultations at intervention sites.

*Fourth Quarter:* No activity

**Research grant opportunities: Public Services Health and Safety Association (2225)**

**Project Status:** Pending funding

**Introduction:** In January 2018, the Institute for Work & Health applied for research funding to the Public Services Health and Safety Association. The proposal submitted is aligned to the current MOL prevention strategy through addressing hazards in the workplace. The proposal is an evaluation of the implementation of four VARB (violence, aggression, and response behaviour) Tools designed to address violence in healthcare workplaces. The total value of requested funding is \$244,163. The Institute for Work & Health anticipates receiving notification of funding awards in the April – May 2018 period. The application has a detailed project work plan and a detailed project expenditure plan.

**Researchers:** Cameron Mustard, Peter Smith, Basak Yanar

**Collaboration and Partnerships:** Not available at this time.

**Potential Audiences and Significance:** Not available at this time.

**Links to MOL Prevention Strategy:** Hazard assessment and control, preventive workplace culture

**Project Targets for 2018:** Not available at this time.

## **The measurement and surveillance of working conditions and lost-time claims in Ontario (0417)**

**Project Period:** Ongoing

**Introduction:** The nature of an individual's employment will to a large extent determine whether they derive health benefits from employment, or if work contributes to deterioration in their physical or mental health. There are a range of characteristics of employment that are associated with risk of adverse health effects. For example, physical job demands and psychosocial work exposures are key determinants of the risk of work-related musculoskeletal disorder. Other working conditions relevant to understanding the health of the Canadian labour force include: hours of work, overtime hours, shift work, contingent or short-tenure employment and exposure to outdoor work. For more than a decade, IWH has made extensive use of health interview surveys and labour market surveys administered by Statistics Canada to describe the incidence and prevalence of work-related health disorders associated with various dimensions of working conditions. This work has served both to provide accurate surveillance information on the prevalence of different working conditions and to provide information on the risk of work-related disorders associated with different working conditions.

### **Objectives:**

- To conduct surveillance research on relationship between working conditions and work-related disorder.
- To examine differences between self-reported work-related injury information and routinely collected information (e.g. Accepted claims from workers' compensation boards).
- To document trends in working conditions and work injuries across different geographical and labour market segments over time.

**Researchers:** Peter Smith (Principal Investigator), Curtis Breslin, Cynthia Chen, Sheilah Hogg-Johnson, Cameron Mustard, Kathy Padkapayeva

**Collaboration and Partnerships:** Stakeholders at the Ontario Ministry of Labour and the Ontario Workplace Safety and Insurance Board, as well as possible stakeholders in similar positions in other provinces, will be identified.

**Potential Audiences and Significance:** Findings from this study are relevant to policy makers at the MOL and the WSIB, and worker's compensation boards in other provinces.

**Links to MOL Prevention Strategy:** Vulnerable workers, hazard assessment and control

### **Project Targets for 2018:**

- First Quarter:* Engage relevant stakeholders concerning key measures associated with the societal burden of work-related injury and illness.
- Second Quarter:* Continue conversations with relevant stakeholders concerning key measures associated with the societal burden of work-related injury and illness.
- Third Quarter:* Initiate work on an implementation strategy to estimate the societal burden associated with the health consequences of work.
- Fourth Quarter:* Complete an implementation strategy to estimate the societal burden associated with the health consequences of work.

## **Examining gender/sex differences in the relationships between work stress and disease, work injury risk, and the consequences of work injury (1310)**

**Project Period:** Ongoing

**Introduction:** Women make up nearly half of labour force participants, yet much of what we know about the relationship between working conditions and health is based on measures developed on men and frameworks tested in male-dominated workplaces. Little is known about why work-related risk factors for disease or injury may differ for men and women. In addition, gender differences in the return-to-work process and outcomes after injury are not well-understood. This research program will generate new research across three areas where there are significant gaps in knowledge concerning the work and health experiences of men and women. These are: (1) The psycho-social work environment, including job control, psychological demands and social support, and the development of hypertension and diabetes among men and women; (2) Gender and sex differences in work-related risk factors for occupational injury and disease; (3) Individual, workplace and health-care provider factors leading to differences in the return-to-work outcomes after work-related injury among men and women.

### **Objectives:**

- To create a more nuanced understanding of how sex/gender shape injury risk, the relationship between the work environment and chronic illnesses, and time off work after a work-related injury.
- To help shape the development of gender- and sex-sensitive policies and practices to improve the health of all working Canadians.

**Researchers:** Peter Smith (Principal Investigator)

**Collaboration and Partnerships:** This findings of this research project are relevant to many external audiences. In particular Workplace Safety Prevention Services and the Public Services Health and Safety Association have been active recipients of project findings.

**Potential Audiences and Significance:** The research program outlined in this proposal is supported by a well-developed capacity building and training program and a knowledge transfer and exchange program. The program of research will lead to both an increase in the momentum and capacity in gender, work and health research, and to the development of gender- and sex-sensitive policies to improve the health or working Canadian.

**Links to MOL Prevention Strategy:** Vulnerable workers, integrated planning and service delivery

### **Project Targets for 2018:**

- First Quarter:* Continue work examining methods currently used in work and health research to examine gender/sex differences. In particular methods that infer interactions between other factors and sex on risk estimates using interaction methods.
- Second Quarter:* Complete manuscript on the use of interactions in work and health as a tool to examine gender/sex differences and submit to peer-review
- Third Quarter:* Work on summarising the body of work undertaken through the 5-year award for a final end of grant presentation
- Fourth Quarter:* Plan an end of grant presentation, summarising key achievements of the gender, work and health research program.

## **Developing a gender/sex-sensitive understanding of how the psychosocial work environment is related to chronic disease (1315)**

**Project Period:** Ongoing

**Introduction:** Male and female labour force participation rates in Canada have changed dramatically over the last three decades. The percentage of female labour force participants increased from 39% to 48% between 1980 and 2011. Despite this increase in female labour market participation, our understanding of how aspects of work impact on health status is still male-centric. This is evident than in the area of psychosocial work environment and chronic disease, where much of our understanding has been generated in male-dominated samples. However, there might be important male and female differences in the assessment of work stress, the biological and behavioural reactions to work stress, and the relationship between work stress and risk of subsequent disease. Creating a need to better understand the role of sex (biological) and gender (societal and work-role) differences in generating these findings. The purpose of this project is to build an evidence base concerning male and female differences in the relationship between the psychosocial work environment and future risk of metabolic diseases.

### **Objectives:**

- To examine gender/sex differences in factor structure of dimensions of psychosocial work environment.
- To examine gender/sex differences in the association between dimensions of the psychosocial work environment and general work stress and general life stress.
- To examine gender/sex differences in the relationship between the psychosocial work environment and subsequent health behaviour and body mass index (BMI) trajectories over a 16-year period.
- To examine the relationship between the psychosocial work environment and cardiovascular disease in Ontario over a 12-year period.

**Researchers:** Peter Smith (Principal Investigator), Cameron Mustard, C Brisson (Unité de recherche en santé des populations), R Glazier (ICES)

**Collaboration and Partnerships:** Institute for Clinical Evaluative Sciences (ICES) and the Canadian Centre for Occupational Health and Safety (CCOHS).

**Potential Audiences and Significance:** Research findings will determine if more gender-sensitive measures of the psychosocial work environment are needed. This project will help develop a cross-disciplinary and jurisdictional, team of researchers for future work exploring gender and the relationships between work environment and risk of disease.

**Links to MOL Prevention Strategy:** Vulnerable workers

### **Project Targets for 2018:**

- First Quarter:* Conclude analyses using ICES data to examine the relationships between occupational exposures and various administrative health outcomes.
- Second Quarter:* Prepare a summary of the research findings, present at an open plenary
- Third Quarter:* Engage with research group on funding opportunities to extend this work
- Fourth Quarter:* Dependent upon research funding.

## Improving information on worker health protection in Ontario (1370)

**Project Period:** New

**Introduction:** The December 2010 report of the Expert Advisory Panel on Occupational Health and Safety made a number of recommendations to the Ontario Minister of Labour to improve the reliability and validity of data on the health of Ontario workers, both to improve the recognition of hazards in contemporary workplaces and to strengthen the measurement of the performance of the Ontario prevention system. This project aims to respond to these recommendations, by making use of population-based records of emergency department visits to improve the surveillance of work-related injury and illness in the province of Ontario, with a particular emphasis on vulnerable workers. This study has the broad purpose of evaluating emergency department encounter records as a source of information for monitoring work-related injury and illness in Ontario. The primary objective of the study is to conduct a formal record linkage of emergency dept. records for the treatment of work-related injury and illness (N=1,300,000) and workers' compensation claims (N=2,300,000) over the period 2004-2014. A primary interest of this study is in describing characteristics of the approximately 55% of emergency dept. records for the treatment of a work-related injury or illness that do not link to a workers' compensation claim.

### **Objectives:**

- To identify the factors associated with a divergence in the two administrative data sources following the 2009 recession in Ontario (specifically, an annual increase in emergency department visits for work-related conditions, contrasted to annual declines in the registration of lost-time and no lost-time claims)
- Improved understanding of geographic differences in trends in the nature of injury and injury events
- Enhanced detail and precision of injury nature and event information for compensation claims that only required medical care only (claims that did not require wage replacement benefits).

**Researchers:** Cameron Mustard (Principal Investigator), Avi Biswas, Victoria Landsman, Peter Smith,

**Collaboration and Partnerships:** This project will involve the agreement of the Ontario Workplace Safety & Insurance Board and the Canadian Institute for Health Information to endorse the methods of the proposed record linkage.

**Potential Audiences and Significance:** We expect that the Ontario Ministry of Labour and the Ontario Workplace Safety & Insurance Board will be primary users of the knowledge arising from this project. Additional stakeholders who may be interested in the results of this proposed research include policy-makers in provincial workers' compensation authorities, representatives of organized labour, and representatives of employer organizations in Ontario.

**Links to MOL Prevention Strategy:** Vulnerable workers, Integrated planning and service delivery

### **Project Targets for 2018:**

- First Quarter:* Briefing to data custodians on record linkage objectives and methods  
Ethics review and approval
- Second Quarter:* Obtain extracts of administrative records
- Third Quarter:* Initiate record linkage
- Fourth Quarter:* Complete record linkage; initiate analysis for Objective 1

## Measuring cannabis use in Canadian workplaces (1375)

**Project Period:** Ongoing

**Introduction:** In July 2018, non-medical cannabis will be legalized in Canada. The potential impact of legalization on workers and occupational health and safety and productivity has received little attention. Any increases in cannabis use by workers have the potential to affect a large proportion of Canadians and may have spillover effects on the workplace. However, workplace parties do not feel prepared to address the issues that may arise from legalization and have an appetite for more information. A critical first step to understanding the potential impact of legalization on the workplace is to gather knowledge on how workers use cannabis in relation to the workplace and their perceptions and attitudes towards workplace use. Yet, we know virtually nothing about the current magnitude of cannabis use in Canadian workplaces. To address this critical knowledge gap, we will collect pan-Canadian data on workplace cannabis consumption and related perceptions from a special survey of workers.

### Objectives:

- To estimate the magnitude of workplace cannabis consumption and impairment;
- To measure intentions to use cannabis in the workplace following legalization, current reasons for use and expectancies of effect in the workplace, knowledge of cannabis effects, perceptions of risk and consequences of workplace use, and workplace cannabis norms and perceived workplace availability;
- To examine the association between reasons for use, expectancies of effect, perceptions of risk, and workplace cannabis norms and availability and workplace cannabis consumption;
- To examine whether these constructs differ according to age, sex, labour market gender roles, province/territory, and occupational hazard exposure.

**Researchers:** Nancy Carnide (Principal Investigator), Peter Smith (Co-Principal Investigator), Andrea Furlan, K Slade (Public Services Health & Safety Association); A Porath, S Meister (Canadian Centre on Substance Use and Addiction)

**Collaboration and Partnerships:** Partners include Public Services Health & Safety Association, Canadian Centre on Substance Use and Addiction, Ontario Building Trades, Unifor, Workplace Safety North, Workplace Safety & Prevention Services, and WorkSafeBC

**Potential Audiences and Significance:** This project will lead to the development of a robust population-level dataset against which to monitor the long-term impact of cannabis legalization in Canadian workplaces. It will also provide employer and labour groups, OHS associations, and provincial and territorial policy makers the information needed to develop effective workplace policies and primary prevention initiatives to ensure lower risk cannabis use as it pertains to the workplace.

**Links to MOL Prevention Strategy:** Hazard assessment and control

### Project Targets for 2018:

- First Quarter:* Develop and finalize survey instrument.  
Conduct survey.
- Second Quarter:* Preliminary analysis of survey results; worker focus group recruitment.
- Third Quarter:* Completion of focus groups.; analysis of focus group results.
- Fourth Quarter:* Final synthesis of findings; dissemination of results.

## Evaluation of prevention strategies for reducing the future risk of cancer in the Ontario construction industry (2285)

**Project Period:** Ongoing

**Introduction:** The construction industry has long been considered a high-hazard industry. Construction workers are at increased risk of serious and fatal injuries. However, they also have an increased risk of cancer and other chronic diseases due to occupational exposures to airborne and dermal chemical and physical hazards. Construction workers are exposed to a variety of toxic substances including dusts, fibres, metals, organic chemicals and solar radiation as a result of outdoor work. In this study we will estimate attributable fractions for Ontario construction workers who are exposed to carcinogens at work based on current practices, and then estimate the effectiveness and cost-effectiveness of intervention programs to reduce exposures up to the year 2060. Different scenarios will be considered such as high labour force and low labour force growth. We will estimate the costs and benefits of efforts to reduce exposures with a focus on direct, indirect and intangible costs.

### **Objectives:**

- To estimate the number of cancer cases due to carcinogen exposure in the Ontario construction sector over the period to 2060
- To identify prevention studies that could reduce airborne/dermal chemical, and physical hazards in Ontario construction
- To evaluate prevention strategies in terms of costs and impacts on the future burden of occupational cancer in Ontario construction

**Researchers:** Emile Tompa (Principal Investigator), Young Jung, Amir Mofidi

**Collaboration and Partnerships:** The Infrastructure Health and Safety Association (IHSA), the Provincial Building and Constructions Trade Council of Ontario, and the Occupational Health Clinics of Ontario Workers (OHCOW)

**Potential Audiences and Significance:** IHSA, the Provincial Building and Constructions Trade Council of Ontario, and OHCOW (partners). The OHS Branch of the MOL and the Provincial Labour Management Health and Safety Committee of the construction industry (Section 21 committee) (knowledge users).

**Links to MOL Prevention Strategy:** Hazard assessment and control

### **Project Targets for 2018:**

- First Quarter:* Execute silica dust lung cancer prevention intervention evaluation.  
Develop skin cancer prevention intervention evaluation methods.
- Second Quarter:* Complete silica dust intervention evaluation and prepare manuscript.  
Execute skin cancer prevention intervention evaluation.  
Develop diesel lung cancer prevention evaluation methods.
- Third Quarter:* Complete skin cancer prevention intervention evaluation and prepare manuscript.  
Execute diesel lung cancer prevention evaluation methods.  
Develop asbestos cancer prevention evaluation methods.
- Fourth Quarter:* Complete diesel lung cancer prevention intervention evaluation; prepare manuscript.  
Execute asbestos cancer prevention evaluation methods.

## **Central nervous system agents and the risk of workplace injury and death: a systematic review of the literature (3200)**

**Project Period:** Ongoing

**Introduction:** Prescription drugs that act on the central nervous system (CNS) (e.g., opioids, benzodiazepines, stimulants) are associated with various adverse effects, including cognitive and psychomotor impairments, and their non-medical use is considered a public health risk for serious harms. Use of medical cannabis has also seen tremendous growth in recent years and the Canadian government has committed to legalization of non-medical cannabis in 2018. There is a need to balance the therapeutic benefits of these central nervous system (CNS) agents and a worker's personal autonomy against the potential risks these drugs pose in the workplace. Given current trends, this will remain a challenge for clinicians, employees, employers, and workers' compensation systems for the indefinite future. This systematic review will consider some of the most deleterious potential workplace outcomes of these agents: workplace injury and fatality.

### **Objectives:**

- To examine the current literature to ascertain the level and quality of evidence for an association between select CNS agents and the risk of workplace injury, re-injury, near misses, and death, including outcomes occurring affecting the worker exposed to these agents, as well as outcomes affecting co-workers and others in the immediate workplace environment
- To examine whether certain factors modify the relationship, including exposure characteristics, industry/ occupation, and demographics
- To examine whether there is evidence risk-taking behaviours are associated with this relationship

**Researchers:** Nancy Carnide (Principal Investigator), Andrea Furlan (Co-Principal Investigator), Kim Cullen, Emma Irvin, Quenby Mahood, Christopher McLeod, Dwayne Van Eerd, P Farnan (HealthQuest Occupational Health Services), G Franklin (Washington State Department of Labor and Industries), L Rieb (Orchard Recovery Centre), P Rothfels (WorkSafeBC)

**Collaboration and Partnerships:** The main partner for this project is WorkSafe BC

**Potential Audiences and Significance:** Compensation agencies, employees and employers, clinicians, and policymakers

**Links to MOL Prevention Strategy:** Hazard assessment and control

### **Project Targets for 2018:**

*First Quarter:* Review and critically appraise relevant papers.  
Extract and organize relevant data for synthesis.

*Second Quarter:* Synthesis of data for the review.  
Draft of preliminary results. Two in-person meetings with key stakeholders.  
Analyze feedback from meetings. Write up of final report.

*Third Quarter:* Write manuscript and disseminate findings

*Fourth Quarter:* No activity

## **Prevention and Management of Work Disability**

The prevention of work disability will remain a strong focus of research at the Institute for Work & Health and will address ongoing and emerging issues including optimal return to work practices that prevent work disability and a better understanding of workplace environments that meet the needs of workers with health conditions/injuries in order to sustain productivity and avoid work disability. In addition to these research activities, members of the Institute's Knowledge Transfer and Exchange (KTE) group will engage in a number of activities with our non-research partners to support the ways that research evidence is used to shape policy and practice. KTE will continue to sustain relationships with workplace parties (employers, organized labour, health and safety associations, ergonomists, clinical practitioners, as well as disability management and health and safety professionals) to ensure their early participation in formulating work disability prevention research, and to ensure we have well-established communication channels for disseminating findings.

### **The role of clinicians in preventing work disability**

Over the past 15 years the Institute has focused on research relevant to the clinical management of work-related disorders, including the measurement of diverse health outcomes, function, productivity, and psychosocial factors that may impact work disability, a better understanding of the role of clinicians in preventing work disability and research on the effectiveness of clinical interventions. In 2018, we will continue our research on optimal approaches to integrate health care providers in workplace return-to-work. The Cochrane Back and Neck Group, hosted by the Institute for Work & Health, has made major contributions towards evidence-based practice (EBP) for the most burdensome musculoskeletal conditions: low-back pain, neck pain, upper extremity conditions and chronic back pain.

### **Workplace practices for sustainable return-to-work**

The Institute for Work & Health has conducted actionable research for more than two decades that supports improvement in workplace practices to prevent disability. The Institute will continue this commitment in 2018. Institute scientists have been engaged for several years in research evaluating disability management practices in the workplace. In 2018, Institute scientists will continue their work partnering with Ontario municipalities to work on strengthening disability management through audits and benchmarks of disability management practices. Moreover, we will continue work on studies that look at sustainable work participation, including workplace communication and accommodation from the perspective of various workers and those with episodic and chronic health conditions.

### **The economic impact of work disability**

Institute scientific staff have conducted important research over the past decade on the adequacy of workers' compensation benefits and the economic impact of work disability on individuals and households. The Institute will continue a strong portfolio of research work on this theme in 2018, including the work of the Centre for Research on Work Disability Policy (CRWDP), a 7-year trans-disciplinary initiative into the future of work disability policy and labour-market engagement in Canada. New in 2018, we will commence a project of tracking long-term outcomes of injured workers to better understand the factors associated with good and poor labour market and earnings outcomes of claimants, both over the short- and long-term.

### **Measuring health and function**

The Institute for Work & Health has a long tradition of research on the recovery and return-to-work of workers with musculoskeletal disorders. The measurement of health and function in recovery from a work-related injury will continue to be a focus of Institute research.

## **B. Prevention and Management of Work Disability**

### Clinical Treatment

Cochrane back and neck review group: systematic reviews of the scientific literature on spinal disorders (0440) .....	22
Predicting successful return to work in workers on disability due to low back pain (2210) .....	23

### Return-to-Work Practices

Disability Accommodation and Return to Work Practices in the Ontario Public Service (1175) .....	24
Examining the role of job accommodations and communication practices in supporting the employment participation of Canadians living with disabilities (2255) .....	25
Strengthening disability management in the Ontario municipal sector (2275) .....	26
Conceal or reveal? Facilitators and barriers to older workers' communication of accommodation (2280) .....	27
Sustainable work participation: work disability prevention and improvement of employment outcomes among those with chronic, episodic health conditions (2270).....	28
Work disability prevention for Millennial young adults with rheumatic disease (2310) .....	29

### Compensation and Benefits

Benefits adequacy for workers compensation claimants, 1999-2005 (2150) .....	30
Analysis of disability-related administrative employers' data held by the Canadian Council of Rehabilitation and Work (2195A) .....	31
Scoping review of work disability prevention management systems (2195B).....	32
Assessment of the human and economic burden of workplace cancer (2205) .....	33
Estimation of the costs of work-related injuries illnesses and deaths for at least 5 countries out of the EU28 + Norway and Iceland, using national OSH and economic data (2290) .....	34
Financial incentives to promote employment of people with disabilities: when and how do they work best? (2295) .....	35
Tracking long-term outcomes of injured workers in Ontario to better target supports (2305) .....	36
Extended working life and its interaction with health, wellbeing and beyond (2260).....	37
The cost of exclusion of persons with disability in Canada (2265) .....	38

### Measuring Health and Function

Supporting the employment participation of Canadian disabled young adults: a systematic review (3210) .....	39
Measurement methodology studies (0925) .....	40

Employment needs and experiences of workers with arthritis and diabetes: keeping the boomers in the labour market (2230) ..... 41

Evidence Guides and Tools

Development and testing of the DASH outcome measure: DASH instrument (0425) ..... 42

## **Cochrane back and neck review group: systematic reviews of the scientific literature on spinal disorders (0440)**

**Project Period:** Ongoing

**Introduction:** Cochrane is an international network of individuals and institutions committed to preparing, maintaining, and disseminating systematic reviews of the scientific literature on the effects of health care. The Institute hosts the Cochrane Back and Neck (CBN) Group (formerly the Cochrane Back Review Group), one of over 50 international Review Groups. CBN coordinates the publication of literature reviews of diagnosis, primary and secondary prevention and treatment of back and neck pain and other spinal disorders, excluding inflammatory diseases and fractures. The editorial and central coordinating activities associated with the CBN are described here. The activities associated with Institute researchers who are conducting Cochrane reviews are described in project 670. The work of the CBN remains closely aligned with the IWH systematic review program, which in turn has close relations with the Cochrane Work group. We apprise stakeholders of our activities via our website, news bulletins, and social media (Twitter and Facebook).

### **Objectives:**

- To prepare and disseminate systematic reviews of scientific literature on back and neck pain and spinal disorders.
- To maintain a specialized database of trials on back and neck pain and spinal disorders for literature searches, and to help identify gaps in the literature and suggest areas for further study.
- To communicate regularly with our CBN stakeholders.

**Researchers:** Andrea Furlan (Institute Coordinator), Claire Bombardier, Shireen Harbin, Emma Irvin, J Hayden (Dalhousie University), R Chou (Oregon Health and Science University)

**Collaboration and Partnerships:** Clinical stakeholders who are involved in this project participate in Cochrane activities at their own level of interest and expertise. This varies by individual, but may involve attending a systematic review workshop, conducting a review or helping with strategies to make Cochrane reviews more accessible to clinical colleagues, students and the general public.; Cochrane and non-Cochrane systematic reviews form the evidence basis of clinical practice guidelines worldwide and of evidence-based clinical tools for practitioners

**Potential Audiences and Significance:** Patients, health care professionals, policy-makers and payers. Updated systematic reviews of the literature provide the most current information on the effectiveness of treatment modalities and therapies, thereby assisting evidence-based treatment and payment decisions.

### **Project Targets for 2018:**

*First Quarter:* Post updated QuickDecks to CBN website; biannual editorial board meeting; one Coordinating Editor (Roger) to attend Cochrane Co-Ed meeting in March; Attend Cochrane Long Term Care and Aging 2 network group meeting

*Second Quarter:* Continue with prioritization activities; support the updating of reviews; continue to update the trials register

*Third Quarter:* Support the updating of reviews; continue to update the trials register continue to build relationships with Long Term Care and Aging 2 network

*Fourth Quarter:* Bi-annual editorial board meeting; continue to support the updating of reviews and trials register

## Predicting successful return to work in workers on disability due to low back pain (2210)

**Project Status:** Ongoing

**Introduction:** Low back pain costs in Canada are estimated at 11 to 23 billion dollars. Most costs are caused by productivity losses and compensation. Some of the costs and suffering can be diminished by identifying those at high risk. Workers that are at low risk will most likely return to function and work with limited assistance. Those at high risk might benefit from early or more intensive intervention. In this study, we will examine which combination of factors best predicts important outcomes for injured workers that enter a rehabilitation program aimed at improving function and return to work. We will review information routinely collected at the Ontario Workplace Safety and Insurance Board (WSIB). Next, we will add data collected by the healthcare provider (CBI Health) and data on outcomes like function and successful return to work specifically collected for this study. We will use well established (but currently underused) statistical approaches to build predictive rules. The final product will be an easy to use prediction tool. The tool will provide projections of different injured worker outcomes such as return to productivity, function, job satisfaction, successful return to work and recurrences.

### Objectives:

- To determine what combination of factors measured at the start of rehabilitation predicts successful work re-entry in the two years follow-up.
- To determine what combination of factors best predicts the length of the first episode of LBP until successful work re-entry in the two years follow-up.
- To determine what combination of factors best predicts successful work retention in two years follow-up.
- To determine what combination of factors measured at the start of rehabilitation best predicts successful career advancement in the two year follow up.
- To identify prognostic factors needed to develop prediction tools (also known as clinical decision rules) for clinicians and work disability prevention professionals.

**Researchers:** Sheilah Hogg-Johnson (Principal Investigator), Ben Amick, Teresa D'Elia, Andrea Furlan, G McIntosh (CBI Health Group), I Steenstra (Morneau Schepell)

**Collaboration and Partnerships:** CBI Health Group (Greg McIntosh)

**Potential Audiences and Significance:** The tool will be of interest to injured workers, workers' compensation board professionals, rehabilitation professionals, employers and researchers. We will reach these communities through specific audience briefings, presentations and by the publication of papers in trade and scientific journals.

### Project Targets for 2018:

*First Quarter:* Complete analysis

*Second Quarter:* Prepare manuscripts for publication and presentation at conferences

*Third Quarter:* No activity

*Fourth Quarter:* No activity

## **Disability Accommodation and Return to Work Practices in the Ontario Public Service (1175)**

**Project Status:** Ongoing

**Introduction:** In the late spring of 2017, the Ministry Employee Relations Committee (MERC) of the Ontario Ministry of Labour (MOL) partnered with the Institute for Work & Health to carry out a survey on the perceptions of staff and managers related to the implementation of Ontario Public Service (OPS) Disability Accommodation and Return to Work processes and practices. The MOL is currently making a number of changes to the implementation of OPS policies related to disability accommodation and return to work practices, including the designation of Subject Matter Advisors who will be available to consult with staff and managers related to disability management. The survey is part of a benchmarking and evaluation process that the MOL is undertaking to monitor changes made to the ways they implement OPS disability management policies. This survey is a component of a collaboration between the MOL and IWH as part of a CIHR-SSHRC Partnership Development Grant, "Sustainable work participation: work disability prevention" (Project 2270). The initial survey was conducted between November and December 2017; follow-up surveys are planned after 12 months and 18 months.

**Objectives:**

- To describe MOL employee awareness of, perceived fairness, implementation issues, and use of and/or experiences with the application of OPS disability accommodation and return-to-work policies.

**Researchers:** Monique Gignac

**Collaboration and Partnerships:** The "Disability Accommodation and Return to Work Survey" was developed in collaboration with the members of the Joint Disability Accommodation and Return to Work Steering Committee, a sub-committee of the Ministry Employee Relations Committee (MERC) of the Ontario Ministry of Labour. Following the administration of the survey, IWH and the MERC will continue this collaboration through the Institute's analysis of the survey findings.

**Potential Audiences and Significance:** In addition to Ontario Ministry of Labour, results from this work may be of interest to other Ministries and agencies within the Ontario Public Service.

**Project Targets for 2018:**

*First Quarter:* Complete analyses of Time 1 survey.

*Second Quarter:* Presentation of initial findings to the Joint Disability Accommodation and Return to Work Steering Committee, a sub-committee of the Ministry Employee Relations Committee (MERC) of the Ontario Ministry of Labour. Design of follow-up survey (Time 2).

*Third Quarter:* Ethics approval for Time 2 survey

*Fourth Quarter:* Data collection for Time 2 survey

## **Examining the role of job accommodations and communication practices in supporting the employment participation of Canadians living with disabilities (2255)**

**Project Period:** Ongoing

**Introduction:** Studies of working-aged Canadians indicate that people living with disabilities are more likely to experience difficulties finding and sustaining employment and report work productivity loss (i.e., absenteeism and presenteeism) and job disruptions (e.g., arriving late to work or taking frequent breaks) when compared to their peers not living with a disability. Research on the relationship between job accommodations and communication practices and employment participation is required in a larger sample of Canadians living with different disabling conditions. Absent from existing research are insights into: 1) the relationships between communication/disclosure of disability and accommodations; 2) life course differences in accommodation needs and use among individuals of different ages and career stages; 3) a more in-depth understanding of work context factors and their relationship with communication and accommodation use (e.g., job sector; contract or part-time work; unionized employment; job type; managerial responsibilities; job control); and 4) experiences of workers without a disability, but who work with a disabled individual who requires accommodations.

### **Objectives:**

- To examine the role of formal job accommodations and informal work modifications in the employment participation of Canadians living with disabilities.
- To examine the role of workplace communication practices in the employment participation of Canadians living with disabilities and their association with perceived availability and utilization of job accommodations and work modifications.
- To examine the reported availability, perceived need for and use of formal job accommodations and informal work modifications, practices among Canadians who do not live with a disability, and their perceptions of accommodation and communication policies, including the use of accommodations by others with a disability.

**Researchers:** Monique Gignac, Julie Bowring, Arif Jetha

**Collaboration and Partnerships:** Canadian Disability Participation Project, UBC, McMaster, March of Dimes, Canadian Centre for Rehabilitation and Work, Neil Squire Society

**Potential Audiences and Significance:** Findings will offer a specific set of recommendations that employers and policy makers can use to support the work participation of Canadians living with disabilities. Audiences include policymakers, work disability managers, rehabilitation professionals, and human resource managers.

### **Project Targets for 2018:**

*First Quarter:* Design survey

*Second Quarter:* Recruit participants and administer survey via EKOS research firm

*Third Quarter:* Recruit participants and administer survey via EKOS research firm. Begin data analysis.

*Fourth Quarter:* Data analysis, manuscript development, KTE

## **Strengthening disability management in the Ontario municipal sector (2275)**

**Project Period:** Ongoing

**Introduction:** This initiative partners six Ontario municipalities and the Institute for Work & Health to identify and implement innovative practices that have the potential to reduce the incidence of avoidable disability days. Avoidable disability days are defined as days of work absence that are due to delays in return-to-work planning and implementation and delays in establishing suitable accommodations and modified work. This project completed a first phase of work in 2017. The proposed workplan has four components: 1) an evaluation of the costs and the benefits of expedited access to 'work-linked' cognitive behavioral therapy among municipal employees on short term disability leave for a mental health condition, 2) the implantation of a brief interactive curriculum for front-line managers and supervisors to strengthen knowledge and skill in supervising and supporting a work accommodation and 3) the identification of opportunities to integrate information technology applications to support the work of ability management. The workplan also includes the completion of two baseline measurement activities in 2018.

### **Objectives:**

- To support the implementation of quality improvement initiatives in six partner municipalities
- To measure reductions in the incidence of avoidable disability days arising from the quality improvement initiatives

**Researchers:** Cameron Mustard (Principal Investigator), Arif Jetha, Agnieszka Kosny, Morgan Lay, Christopher McLeod, Lynda Robson, Emile Tompa, Basak Yanar

**Collaboration and Partnerships:** IWH is working with leading human resource professionals in six Ontario municipalities (employs 25,000+). Partnership includes non-profit professional service organizations (NIDMAR and PSHSA) and Morneau Shepell.

**Potential Audiences and Significance:** We expect that municipal employers and unions representing the municipal labour force across Canada will be the primary users of the knowledge arising from this research project. Additional groups who may be interested in the results of this research initiative include policy-makers in provincial workers' compensation authorities, disability benefit trusts and private sector disability insurance plans and representatives of organized labour in the public sector.

### **Project Targets for 2018:**

- First Quarter:* Initiate baseline measurement of disability episode incidence and duration and baseline measurement of employees' perceptions of the disability management process in six partner municipalities
- Second Quarter:* Commence planning for implementation of Component 1  
Complete manuscript on qualitative study of perceptions of barriers and challenges in disability management in the Ontario municipal sector
- Third Quarter:* If Phase 2 funding is awarded, initiate implementation of Component 1, and planning for Components 2 & 3
- Fourth Quarter:* Complete analysis of baseline measures of disability episode incidence and duration and baseline measures of employees' perceptions of the disability management process in six partner municipalities

## **Conceal or reveal? Facilitators and barriers to older workers' communication of accommodation (2280)**

**Project Period:** Ongoing

**Introduction:** The unprecedented size of the baby boom generation (born 1946-1964) has created concerns about the greying of the workforce. One strategy to sustain labour force growth and personal financial security is to help individuals work longer. Yet apprehensions about older workers have been raised, including whether there are age-related changes in motivation to learn new skills (e.g., new technology), life course changes in responsibilities (e.g., caregiving), and changes in physical capacity (e.g., fatigue, physically demanding work). The extent to which these are problematic is unclear. Some studies find negative aging stereotypes are not supported by workplace data. But, whether due to negative stereotypes or actual work-personal life changes, emerging research suggests that older workers can be concerned about communicating their needs to others. This raises alarms that communication is a significant barrier to receiving supports, accommodations and training that could sustain work productivity and high job satisfaction. Ultimately, the absence of supports may impact work outcomes like absenteeism, productivity or even forgoing employment, which in turn, may fuel continued negative perceptions of older workers. Currently, there is little data examining how older workers make decisions about whether, to whom, what to say, and when to communicate their job needs. By understanding processes related to communication, we can inform workplace practices and policies and help older workers to sustain employment and take advantage of the financial, personal and social benefits of work.

### **Objectives:**

- Understand reasons older workers choose to communicate or not communicate personal needs for accommodation, support or training/development,
- Examine factors that relate to the content of communications, their timing and goals, and
- Examine the relationships between facets of communication (e.g., reasons; timing; recipients of disclosure), support and employment outcomes.

**Researchers:** Monique Gignac (Principal Investigator), Arif Jetha, Agnieszka Kosny, Vicki Kristman, J Cameron (University of Toronto)

**Collaboration and Partnerships:** Not Applicable

**Potential Audiences and Significance:** Results of the research will be relevant to older workers, employers (e.g., supervisors, HR professionals), disability managers, occupational health professionals, insurers, government, and community organizations focused on aging, employment, disability or caregiving.

### **Project Targets for 2018:**

<i>First Quarter:</i>	Run additional focus groups to enhance data collection Develop coding scheme and begin qualitative data analysis Refine communication model
<i>Second Quarter:</i>	Continue coding of qualitative data
<i>Third Quarter:</i>	Design of quantitative survey
<i>Fourth Quarter:</i>	Quantitative survey launch and data collection

## **Sustainable work participation: work disability prevention and improvement of employment outcomes among those with chronic, episodic health conditions (2270)**

**Project Period:** Ongoing

**Introduction:** Many chronic physical and mental health diseases cause episodic disability and not continuous problems. This includes periods of well managed disease punctuated by more severe disease activity. Privacy legislation has shifted disability management away from disease diagnoses (which workers are not obligated to disclose) to a focus on activity limitations and restrictions as the means of guiding accommodations. For episodic conditions where symptoms fluctuate, are often unpredictable and invisible to others, needs for accommodations are difficult to assess. A better understanding of similarities and differences across physical and mental health episodic disabilities and the processes whereby accommodations are communicated, delivered, utilized and changed is critical. Working with partners, we aim to reduce at-work disability and improve productivity and the employment sustainability of Canadian workers with episodic disabilities.

### **Objectives:**

- To enhance partnerships related to managing episodic physical and mental health conditions;
- To increase understanding of the impact of episodic disabilities on workers and workplaces;
- To better understand workplace planning and provision of accommodations over time, and their impact and effectiveness on worker and workplace outcomes;
- To illuminate communication processes and needs related to disclosure of episodic disabilities
- To begin development of a toolkit to help employers and workers to better communicate and implement accommodations

**Researchers:** Monique Gignac (Principal Investigator), Dorcas Beaton, Curtis Breslin, Sheilah Hogg-Johnson, Emma Irvin, Arif Jetha, Ron Saunders, Peter Smith, Emile Tompa, Dwayne Van Eerd, RL Franche (Simon Fraser University), J MacDermid (University of Western Ontario), W Shaw (Liberty Mutual Research Institute for Safety)

**Collaboration and Partnerships:** Partners include The Arthritis Society, the Canadian Mental Health Association, Crohn's & Colitis Canada, the Great-West Life Centre for Mental Health in the Workplace, Mindful Employer Canada, the Multiple Sclerosis Society of Canada, the Ontario Ministry of Labour, Realize Canada (formerly the Canadian Working Group on HIV and Rehabilitation), as secretariat to the Episodic Disabilities Network/Forum (EDN/EDF), and the University of Toronto.

**Potential Audiences and Significance:** evidence-informed episodic disabilities toolkit that will help workers, supervisors, and disability managers prevent at-work disability and sustain employment.

### **Project Targets for 2018:**

<i>First Quarter:</i>	Continuing data collection (key informant interviews) Continue resources coding and ensure no new resources
<i>Second Quarter:</i>	Analyses of qualitative data and refining of conceptual model Complete resource scan and begin drafting resources report and paper
<i>Third Quarter:</i>	Preparation for paper based on qualitative data using key informant interviews
<i>Fourth Quarter:</i>	Complete key informant papers and prepare for peer-review. Discuss with team additional analyses and KT messages

## **Work disability prevention for Millennial young adults with rheumatic disease (2310)**

**Project Period:** New

**Introduction:** Despite advances in clinical care, rheumatic disease (RD) remains one of the most commonly reported causes of work disability, which includes difficulties finding employment and remaining productive at work. Millennial young adults (born 1982-1999) represent a growing share of the workforce. When compared to previous generations, Millennials report greater levels of education but are less likely to find full-time work. Millennial young adults with RD may have added challenges as they transition into employment, and greater workplace support needs. A small amount of research suggests that workplace policies and practices play an important role in supporting the employment of people with RD, even after accounting for disease management. Existing studies have been primarily conducted on older adults with RD and indicate that formal accommodations (e.g., modified hours), work modifications (e.g., rearranging tasks), or extended health benefits (e.g., access to drug benefits) are effective strategies for the prevention and management of work disability. It is unclear if Millennial young adults, beginning their career with RD, have workplace support needs that differ from their older counterparts. Our study is one of the first to examine the needs of Millennials with RD within the workplace.

**Objectives:** Our study will address the following questions:

- What are the workplace supports needed by Millennial young adults with RD, and to what extent are they available and used?
- How do characteristics of Millennial young adults with RD and their work conditions relate to unmet workplace support needs?
- Are Millennial young adults with RD, who report greater unmet workplace support need, more likely to indicate difficulties with employment?
- Do characteristics of Millennial young adults with RD and their work conditions impact the relationship between unmet workplace support needs and difficulties with employment?

**Researchers:** Arif Jetha, Julie Bowring

**Collaboration and Partnerships:** Canadian Arthritis Patient Alliance, The Arthritis Society, University of British Columbia (Catherine Backman and Lori Tucker), Lakehead University (Vicki Kristman)

**Potential Audiences and Significance:** We will offer concrete messages and strategies that can be used by workplaces to encourage the employment participation of Millennial young adults with RD. Findings will also inform recommendations delivered to adolescents with RD who are preparing to enter the labour market. Interventions that support early involvement in employment not only promote economic activity but will also benefit the health and quality of life of Millennials with RD. Audiences include Millennials with RD, employers, clinicians and rehabilitation professionals

### **Project Targets for 2018:**

*First Quarter:* Research coordinator hired, Advisory panel recruited

*Second Quarter:* Initial survey designed

*Third Quarter:* Survey evaluated, and pilot tested, recruitment protocol finalized

*Fourth Quarter:* Annual report, REB submission, Advisory panel meeting

)

## **Benefits adequacy for workers compensation claimants, 1999-2005 (2150)**

**Project Period:** Ongoing

**Introduction:** The purpose of this study is to describe post-injury earnings and benefits of workers' compensation beneficiaries in Ontario since the changes in the program that came into effect in 1998. The enactment of Bill 99 in 1998 introduced a number of changes to the workers' compensation system in Ontario, including the following: benefits are based on a rate of 85% of pre-injury post-tax earnings (changed from 90%), benefits are adjusted annually for inflation, at a rate of ½ of the increase in the Consumer Price Index (CPI), minus one percentage point, to a maximum of 4 percent a year, and vocational rehabilitation services that had been delivered by the Workers' Compensation Board were replaced by a Labour Market Re-entry program with third-party delivery of rehabilitation services.

**Objectives:**

- To provide a comprehensive summary of earning losses and earnings replacement rates for a cohort of workers' compensation beneficiaries who experience a work injury in the period 1998-2006.

**Researchers:** Emile Tompa (Principal Investigator), Qing Liao, Cameron Mustard, Ron Saunders.

**Collaboration and Partnerships:** In August 2010, Institute staff briefed senior management of the WSIB on the results of studies examining the adequacy of benefits in the pre-1990 Ontario program and in the program that was in place during the period 1990-1997. At this briefing, the President of the WSIB requested that the Institute proceed to update these studies to describe more recent cohorts of beneficiaries.

**Potential Audiences and Significance:** A key knowledge transfer and exchange activity for this study will be frequent consultations with WSIB policymakers and worker representatives to ensure that the analyses undertaken and results obtained are framed appropriately and address relevant issues.

**Project Targets for 2018:**

*First Quarter:* Complete regression modeling of labour-market earnings.  
Submit manuscript on benefits adequacy across three Ontario programs.

*Second Quarter:* Submit manuscript on regression modelling of labour-market earnings.

*Third Quarter:* Revisions of manuscripts as per peer review.

*Fourth Quarter:* No activity.

## **Analysis of disability-related administrative employers' data held by the Canadian Council of Rehabilitation and Work (2195A)**

**Project Period:** New

**Introduction:** Improving the participation of persons with disabilities in the labour market is one of Government of Canada's priorities. Consistent low participation rates of this group over the past two decades continue to raise concerns among policymakers, employers and leaders of the disability communities in Canada. This low-cost project will allow ESDC to gain insights from a unique and historic administrative dataset of how employers recruit, accommodate and maintain workers with disabilities. Only the Centre for Research on Work Disability Policy has access to this dataset through a memorandum of understanding with its steward, the Canadian Council on Rehabilitation and Work (CCRW).

### **Objectives:**

- To describe the experience of workers with disabilities from the point of entry into the employment support system onwards, in order to identify the services received, employment outcomes, and critical points within the employment support process.
- Undertake analyses of administrative data to identified key contextual factors that influence outcomes.

**Researchers:** Emile Tompa (Principal Investigator), Dan Samosh.

**Collaboration and Partnerships:** Employment and Social Development Canada (ESDC) and the Canadian Council on Rehabilitation and Work (CCRW).

**Potential Audiences and Significance:** stakeholders in the Canadian work disability policy system, which includes persons with disabilities, employers, policymakers, disability program administrators, and service providers.

### **Project Targets for 2018:**

- First Quarter:* Develop detailed analytical plan.  
Submit project for ethics approval.  
Undertake analysis and prepare a report.
- Second Quarter:* Prepare manuscript for submission to a journal.
- Third Quarter:* Revisions of manuscripts as per peer review.
- Fourth Quarter:* No activity.

## Scoping review of work disability prevention management systems (2195B)

**Project Period:** New

**Introduction:** The prevention and management of workplace disability is a significant challenge for workplaces. The annual cost of work disability is estimated at between \$1-2 trillion worldwide and in Canada alone is estimated to be more than \$30 billion. The true economic burden is likely substantially higher, given that many working age adults with disabilities who can and want to work are not connected to workplaces and are often not counted as part of the labour force. Every year, tens of thousands of Canadians become disabled and are unable to work, excluded them from the numerous health advantages of workforce participation. In June 2016, the CSA Group, the Centre of Research Expertise for the Prevention of Musculoskeletal Disorders (CRE-MSD) and the Centre for Research on Work Disability Policy (CRWDP) co-hosted a webinar to inform stakeholders about plans to go forward with the development of a Canadian Standard for a Work Disability Prevention Management Systems (WDP-MS). The proposed Standard will specify the requirements for Work Disability Prevention Management Systems (WDP-MS) that can be used by organizations to systematically manage their work disability prevention management activities. The Standard will include a framework for the prevention and management of work disability at the organizational level, and for hiring and retaining workers with disabilities. It will integrate current research evidence and the viewpoints and successful practices of multiple stakeholders: employers, workers and worker representatives, injured workers and persons with disabilities, clinicians, service providers, Workers' Compensation Boards, insurers, policy makers, and researchers. An implementation guideline will be developed to complement the Standard.

**Objective:**

- To gather and synthesize evidence from the peer-reviewed (e.g., academic journals) and grey (e.g., reports, policy documents, best practice guidelines available on the web and elsewhere) literature on best practices for work disability prevention management systems.

**Researchers:** Emile Tompa (Principal Investigator), Emma Irvin, Quenby Mahood, A Yazdani (Conestoga College).

**Collaboration and Partnerships:** The CSA group is spearheading the development of the standard that will be informed by this scoping review as well as an environmental scan of good practice good practices in the field (e.g., interviews with representatives of exemplary organizations, policymakers, and program providers).

**Potential Audiences and Significance:** This work is of interest to stakeholders in the work disability prevention arena, including employers, workers and worker representatives, injured workers and persons with a disability, clinicians, workers' compensation agencies, insurance companies, policy maker and researchers.

**Project Targets for 2018:**

- First Quarter:* Frame the scoping review search strategy for the peer-reviewed and grey literatures. Execute the search strategy.
- Second Quarter:* Complete the study selection and synthesis.
- Third Quarter:* Develop a manuscript and submit it for peer review
- Fourth Quarter:* No activity.

## Assessment of the human and economic burden of workplace cancer (2205)

**Project Period:** Ongoing

**Introduction:** There is an increasing awareness of how occupational exposures can give rise to cancer, despite long latency that has historically prevented attribution of the cancer to work. In particular, there is a growing interest in better understanding the extent of occupational cancers and their economic burden to society. Yet assessing the economic burden of occupational cancer has rarely been performed. One of the challenges is methodological. There is little standardization of methods and some uncertainty related to conceptual issues. Data availability is another challenge. It is difficult to identify sources with the range of data needs. The objective of this study is to estimate the economic burden of occupational cancer in Canada. Morbidity and mortality burden will be estimated separately before aggregation. Both types of cases will include lifetime costs associated with medical expenses, market productivity losses, and losses in health related quality of life.

**Objectives:**

- To estimate the direct costs of hospitalization, physician care, treatment costs.
- To estimate the indirect and health-related quality-of-life costs such as lost output in the paid labour force, activity loss in non-paid roles, and the intrinsic value of health.

**Researchers:** Emile Tompa (Principal Investigator), Amir Mofidi, Young Jung, M Lebeau (IRSST), C McLeod (University of British Columbia) .

**Collaboration and Partnerships:** We will communicate findings by: integrating the Canadian Cancer Society (CCS) as a research partner; engaging in multiple communication strategies with CCS's collaboration; and having a knowledge broker from CCS who will help the team build relationships with stakeholders, especially policymakers, who can use the findings to help inform policy change. CAREX Canada will also disseminate study findings via their communications program.

**Potential Audiences and Significance:** Information on the economic burden is extremely useful for government and industry decision making on the benefits of investing in prevention-related efforts. Key audiences are policy makers, workers, employers and physicians.

**Project Targets for 2018:**

- First Quarter:* Complete analysis of breast cancer.  
Begin methods manuscript based on multi-exposure work-related lung cancer.
- Second Quarter:* Present study at an international conference.  
Submit breast cancer and methods manuscripts.
- Third Quarter:* Revisions of manuscripts as per peer review.
- Fourth Quarter:* Revisions of manuscripts as per peer review.

## **Estimation of the costs of work-related injuries illnesses and deaths for at least 5 countries out of the EU28 + Norway and Iceland, using national OSH and economic data (2290)**

**Project Period:** New

**Introduction:** The European Agency for Safety and Health at Work (EU-OSHA) would like to improve information on costs and benefits in occupational safety and health (OSH) to help policy makers to set priorities in European and national prevention strategies and to allocate resources most efficiently and to raise awareness of costs of non-OSH among policy makers outside the field of OSH. With these aims in mind, the objective of this study is to estimate the costs of work-related injuries, illnesses and deaths for at least five countries out of EU28 + Norway and Iceland. In the estimation of costs, the following aspects will be considered: i) apart from pure financial costs, it is important to value life and health impacts; ii) the methodology should be fully transparent and reproducible; iii) different cost bearers should be distinguished: employers, workers and their families, government and society at large.

### **Objectives:**

- To develop a cost calculation model to estimate the costs of work-related injuries, illnesses and deaths.
- To apply the model to the data from five EU countries to estimate the economic burden of work injury and illness in those countries for reference year 2015.

**Researchers:** Emile Tompa (Principal Investigator), Amir Mofidi, Young Jung.

**Collaboration and Partnerships:** This project is funded by the EU-OSH and involves a partnership of IWH, TNO in the Netherlands (the Project Lead) and VVA in Italy.

**Potential Audiences and Significance:** This study is of relevance to the European Union member states, including government policy makers, industry and labour. The findings and methods will also be of interests to a broader, international audience as similar work has only been undertaken in a handful of countries (United States, Australia and Singapore). The methods will be of interest to occupational health and safety researchers, economists specializing in economic burden measurement.

### **Project Targets for 2018:**

<i>First Quarter:</i>	Complete burden estimate for Germany. Begin burden estimate for The Netherlands.
<i>Second Quarter:</i>	Complete burden estimate for The Netherlands. Begin burden estimates for Italy and Poland.
<i>Third Quarter:</i>	Complete burden estimate for Italy and Poland. Begin burden estimate for Slovakia.
<i>Fourth Quarter:</i>	Complete burden estimate for Slovakia. Complete final report.

## **Financial incentives to promote employment of people with disabilities: when and how do they work best? (2295)**

**Project Period:** New

**Introduction:** Financial incentives are widely used to support employers to hire/retain workers with health conditions and disabilities. Financial incentives can take different forms, including providing a wage subsidy, and covering some or all the costs of accommodation. Stakeholders (including employers, disability advocates, people with disabilities, and service providers) have opposing perspectives on the merits of financial incentives for the recruitment and retention of workers with disabilities. The issue is not about whether wage subsidies work, but under what conditions they work well or do not work. Therefore, a greater understanding of the impact of financial incentives for workers with disabilities is needed to develop guidelines for their use. The issue of financial incentives such as wage subsidies is particularly relevant for people with disabilities and employers in Ontario. Ontario is the largest Canadian province with a diverse labour market and a vibrant community of people with disabilities. Specifically, we will take stock of existing knowledge and evidence, explore the perspectives of key stakeholders, and develop case examples showcasing opportunities, challenges, risks and benefits of financial incentives to encourage hiring and retaining workers with disabilities. This project will respond to an urgent need to understand the effectiveness of financial incentives, and outline guidelines for how they should or should not be used to increase employment opportunities for people with disabilities.

**Objectives:** To conduct a scoping review to determine what is known in the published literature about the use of financial incentives that are designed to encourage or motivate employers to hire and provide accommodation to workers disabilities.

**Researchers:** Emma Irvin (Principal Investigator), Quenby Mahood, Kathy Padkapayeva, Emile Tompa, M Haan (Canadian Council on Rehabilitation and Work), R Gewurtz (McMaster University).

**Collaboration and Partnerships:** We will be draw on relationships we have established in various policy circles to help guide the development of the scoping review parameters. Individuals to be contacted include representatives from Employment and Social Development Canada.

**Potential Audiences and Significance:** This study is of relevance to injured worker and disability communities, employers, policymakers, disability program administrators, and service providers.

### **Project Targets for 2018:**

<i>First Quarter:</i>	Complete title and abstract search, Extract and organize relevant data for synthesis; Synthesize data for the review; Draft preliminary results; Host meetings with advisory committee; Incorporate feedback from advisory committee; Write and submit final report
<i>Second Quarter:</i>	Write peer reviewed paper
<i>Third Quarter:</i>	No activity
<i>Fourth Quarter:</i>	No activity

## Tracking long-term outcomes of injured workers in Ontario to better target supports (2305)

**Project Period:** New

**Introduction:** Little is known about the specific factors contributing to injured workers' poor outcomes and the possible reasons for their increase. One explanation might be that key changes in labour-market contracting practices have made it more difficult for injured workers and people with disabilities to maintain paid employment. Another possibility is that changes in the legislative and policy context have eroded the support structures that facilitate labour-market re-entry and/or have reduced access to benefits. For example, in Ontario the current benefits system is based on loss-of-earnings capacity (Bill 99, LOE program introduced in 1998) with only a subset of individuals with permanent impairments receiving long-term disability benefits. Other changes introduced with Bill 99 include a reduction in wage-replacement rates from 90% to 85%, and an approach of self-reliance that encourages employers and workers to work together to facilitate return to work. Key policy domains have also changed during the LOE time period. For example, vocational rehabilitation services were farmed out to external providers during the early years of the program but were brought in-house with the introduction of the New Service Delivery Model in 2008-2009. There have also been changes in the determination of permanent impairments, around 2010, particularly with regards to the treatment of pre-existing conditions. Some researchers have also pointed to the eroding social safety net for injured workers and people with disabilities in Canada. This study aims to better understand the factors associated with good and poor labour-market and earnings outcomes of claimants, both over the short- and long-term.

### **Objectives:**

- To identify the factors associated with labour-market and earnings outcomes over the short- and long term of Ontario workers' compensation claimants.
- To evaluate how labour-market and earning outcomes have changed with claimant cohorts

**Researchers:** Emile Tompa (Principal Investigator), Qing Liao, Cameron Mustard, Ron Saunders.

**Collaboration and Partnerships:** NA

**Potential Audiences and Significance:** Frequent consultations with WSIB policymakers and worker representatives to ensure that the analyses undertaken and results obtained are framed appropriately and address relevant issues.

### **Project Targets for 2018:**

- First Quarter:* Hold team meeting to finalize the analysis plan and finalize Advisory Committee Submit ethics; prepare data sharing agreements between the WSIB and IWH and between WSIB and Statistics Canada.
- Second Quarter:* Retrieve WSIB administrative data; prepare sample frames and related data Construct variables and related codes for matching claimants identified in the Longitudinal Administrative Databank (LAD); Test matching algorithms
- Third Quarter:* Same as Q2 + preparation of descriptive analyses
- Fourth Quarter:* Same as Q3 + development and fine tuning of regression models of key outcomes.

## **Extended working life and its interaction with health, wellbeing and beyond (2260)**

**Project Period:** Ongoing

**Introduction:** In Europe and Canada, policymakers are facing particular challenges related to rising life expectancy, an aging workforce and the consequent increase in the prevalence of chronic illness and disability. But these increases in life expectancy are not experienced. Less skilled workers, for example, have a shorter life expectancy, earlier onset of chronic illness and disability, are more likely to suffer multi-morbidities as they get older and enjoy fewer years of life after retirement. Policymakers in Europe and Canada face a dual challenge of extending health, quality of life and wellbeing into old age for all groups, whilst finding more effective and equitable ways of ensuring that older people are fairly treated in strategies and policies to extend working life. This project will conduct transnational research that advances understanding of the impacts of health inequalities on the opportunity to work later in life and of strategies and policies for extending working life that take these health inequalities into consideration.

### **Objectives:**

- To examine how the pattern of different physical and mental health conditions vary over working life by socioeconomic status and gender in different country contexts.
- To determine what the employment consequences of these changing patterns of morbidity, co-morbidity, and caring responsibilities at older ages are.
- To find policy approaches that have been taken in the study countries to extend the working lives of people with chronic illness.

**Researchers:** Cameron Mustard (Principal Investigator), Arif Jetha, Qing Lao, Emile Tompa,

**Collaboration and Partnerships:** Dr Whitehead from the University of Liverpool, UK, and includes partners from the University of Copenhagen, Denmark and the Karolinska Institute, Sweden. Our partners and research users will be invited to be members of a Consortium Advisory Group (CAG), which will advise on and challenge our research at each stage of the programme.

**Potential Audiences and Significance:** This project brings together a coherent group of study countries - UK, Canada, Sweden and Denmark - which are addressing similar policy problems but have been experimenting with a variety of strategies to tackle the problems. We will take an innovative approach that integrates comparative quantitative analysis of population datasets in each country with the knowledge generated through policy analysis and systematic reviews of qualitative and quantitative intervention studies.

### **Project Targets for 2018:**

- First Quarter:* Continue Canada-specific analysis to meet specifications of cross-country comparative analysis (WorkPackage 1)  
Complete manuscript on UK/Canada employment of older adults with health impairments (THRIVE Paper 6)
- Second Quarter:* Attend THRIVE consortium meeting, Denmark
- Third Quarter:* Complete systematic review manuscript of employment supports for older adults with health impairments (THRIVE review paper 2)
- Fourth Quarter:* Complete systematic review manuscript of disability income benefits for older adults with health impairments (THRIVE review paper 1)

## The cost of exclusion of persons with disability in Canada (2265)

**Project Status:** Ongoing

**Introduction:** Exclusion of people with disabilities from paid work is widely documented in the literature but has not been quantified in monetary terms. In Canada it is estimated that 795,000 people with disabilities are unemployed despite being able and willing to work. Many different barriers prevent these people from working, including discrimination and bias, employers' concerns about cost and productivity, and a lack of knowledge on how to appropriately accommodate different abilities. Not counted are the underemployed—individuals with skill levels higher than their job demands who are unable to secure appropriate work due to their disability. This study will develop a conceptual framework and methods for costing the exclusion of people with disabilities and apply it to the Canadian context. It will draw on the cost of illness/ economic burden methodology and extend it into the sociological domain based on concepts of the disablement process.

### **Objectives:**

- To develop a counterfactual framework of a more inclusive society for application in Canada context.
- To synthesize theoretical and methodological literature on a more inclusive counterfactual scenario.
- To develop a grounded counterfactual scenario for application in a cost of exclusion study based on the literature synthesis and to identify measures available to operationalize the scenario.
- To estimate the magnitude of key components of exclusion, e.g., labour-market output/ productivity costs, exclusion from social role engagement, expenses for support provision by social programs.
- To identify the distribution of costs of exclusion across stakeholders

**Researchers:** Emile Tompa (Principal Investigator), Young Jung, Kathy Padkapayeva

**Collaboration and Partnerships:** We will be draw on relationships we have established in various policy circles to help guide the development of methods and their execution in the Canadian context. Individuals to be contacted include representatives from Employment and Social Development Canada, the Public Health Agency of Canada, the World Health Organization and the International Labour Organization.

**Potential Audiences and Significance:** This study is of relevance to injured worker and disability communities, employers, policymakers, disability program administrators, and service providers. The methodology to be developed for this study will be of interest to international stakeholders in work disability arena, including the World Health Organization and the International Labour Organization.

### **Project Targets for 2018:**

- First Quarter:* Ongoing analysis of cost of exclusion in Canada.  
Connect with researchers to identify contributions for special issue journal.  
Develop a conceptual piece on cost of exclusion.
- Second Quarter:* Complete methodology plan on cost of exclusion.  
Continue work on conceptual piece on cost of exclusion.  
Virtual meeting with international researchers to discuss special issue journal edition.
- Third Quarter:* Prepare manuscript on cost of exclusion in Canada.  
Prepare manuscript on conceptual issues related to cost of exclusion.
- Fourth Quarter:* Continued work on special issue of a journal.

## **Supporting the employment participation of Canadian disabled young adults: a systematic review (3210)**

**Project Period:** New

**Introduction:** Employment experiences during the young adult life phase are critical to determining a person's career trajectory. During this life phase, young adults report a number of vocational transitions including graduating from school and finding and sustaining paid work. Challenges with employment during young adulthood can have long-term consequences including the risk of future unemployment or underemployment, reduced earnings, or a deterioration of skills. To-date, a majority of research on the employment of disabled young adults has focused on the impact of health factors (e.g., disability type, disease severity, and activity limitations), demographic characteristics (e.g., education, gender) and psychosocial perceptions (e.g., perceived social support, autonomy). It is unclear to what extent studies have examined the role of organizational conditions (e.g., availability of workplace accommodations, modifications, and supports), training needs (e.g., skills building, vocational readiness), disability services (e.g., vocational rehabilitation) and policy-level factors (e.g., incentives to hire disabled young adults, enforcement of duty to accommodate legislation) that may be influential in facilitating the employment participation of young adults living with disabilities.

**Objectives:** To examine the *work-focused* policies and programs that support the transition into labour market of young adults living with disabling health conditions in OECD countries.

**Researchers:** Arif Jetha

**Collaboration and Partnerships:** Canadian Disability Participation Project, University of British Columbia Okanagan, Queens University ,Guelph University Disability Services

**Potential Audiences and Significance:** Employers, young adults with disabilities and their families, clinicians and rehabilitation professional, policy makers

Findings from this study will enable provide an evidence-base on policies and practices that support the labour market engagement of young adults with disabilities and inform the design of policies and programs.

### **Project Targets for 2018:**

- First Quarter:* Level 2 screening completed
- Second Quarter:* Quality appraisal and synthesis
- Third Quarter:* Manuscript development
- Fourth Quarter:* Manuscript submission

## Measurement methodology studies (0925)

**Project Period:** Ongoing

**Introduction:** This is a group of studies with a primary focus on measurement issues in the development and use of measurement instruments as indicators and outcomes of health and safety efforts. The data for much of this work comes from projects initiated for other research objectives within this theme but in this particular application are focusing on the measurement issues.

### Objectives:

- To determine/advance best methods for cross cultural adaptation of self-report outcome measures
- To evaluate approaches used to determine the validity and reliability of different indicators/measures and generate best evidence syntheses processes.
- To produce models of recovery based on qualitative and quantitative findings.
- To advance evidence-based approaches to selection of outcome measurement instruments

**Researchers:** Dorcas Beaton (Institute Coordinator), Claire Bombardier, Cynthia Chen, Kim Cullen, Sheilah Hogg-Johnson, Emma Irvin, Peter Smith, Michael Swift, Dwayne Van Eerd, R Buchbinder (Monash University, Australia), F Guillemin (University of Nancy, France), J Katz (Brigham and Women's Hospital, Harvard University), M Kita (University of Toronto), Z Touma (University of Toronto), P Tugwell (University of Ottawa), G Wells (Ottawa Hospital Research Foundation).

**Collaboration and Partnerships:** Partners in this project include clinicians, researchers, trainees, and students, as well as organizations collaborating in our activities, including OMERACT, COSMIN, COMET, IMMPACT, and EnRICH.

**Potential Audiences and Significance:** The results of this project will be relevant to users of indicators and measures in health and work research. Researchers in measurement sciences, epidemiologists, health and safety organizations, clinical community at large will also be interested in this work.

### Project Targets for 2018:

- First Quarter:* Submit paper on review and relationships between quality appraisal systems for measurement studies.  
Prepare for OMERACT meeting (May 2018) and workshop on methods (domain and instrument selection for core outcome sets)  
Teach in measurement courses University of Toronto: Clinical epidemiology and the Advanced Care Practice course.  
Explore collaborations to examine health outcomes in different cultural contexts.
- Second Quarter:* Submit abstracts to ISOQOL, ACR on methodological approaches to instrument selection  
Support graduate trainee in concept of recovery (Pinsker) aiming to defend in 2018  
Attend OMERACT meeting, present on methods determining thresholds of meaning for instruments quantifying work productivity
- Third Quarter:* Attend ACR and ISOQOL Meetings for setting standards in instrument selection.  
Create modules for teaching instrument selection, pilot at IWH internally, gain feedback for external use.
- Fourth Quarter:* Promote model of recovery from Pinsker thesis and literature, create dissemination plan and implications for measuring health outcomes

## **Employment needs and experiences of workers with arthritis and diabetes: keeping the boomers in the labour market (2230)**

**Project Period:** Ongoing

**Introduction:** The large size of the Canadian baby boomer generation (born 1946 to 1964) has created concerns for older workers. A loss of skills in the labour market as older workers retire has meant the need for strategies to keep individuals working and delay retirement. To date, we don't have information about how characteristics of many chronic health conditions that arise with age may create unique challenges for workers, including conditions like arthritis and diabetes that do not have a continuous impact but result in episodes of disability, unpredictable symptoms, and stress related to working and disclosing health problems to colleagues. This proposal focuses on women and men 50-67 years of age who work with arthritis and/or diabetes compared to workers with no disabling health conditions. This study forms an important step in understanding the interplay of health and work and will provide information to help sustain employment.

### **Objectives:**

- To describe extent to which remaining employed is a priority among baby boomers as they age
- To examine the experiences and perceived impact of working with an episodic health condition, as well as factors that act as barriers or facilitate working
- To examine characteristics of episodic health conditions (e.g., symptom unpredictability, invisibility) and their association with work outcomes (e.g., job disruptions, absenteeism)

**Researchers:** Monique Gignac (Principal Investigator), Dorcas Beaton, Vicki Kristman, Cameron Mustard, Peter Smith, E Badley (Toronto Western Research Institute)

**Collaboration and Partnerships:** IWH's network of educationally influential practitioners in ergonomics, occupational therapy and physiotherapy, as well as disability management professionals.

**Potential Audiences and Significance:** Data from this research will provide insight into the experiences, needs, and expectations of working baby boomers. It will enable a comparison of healthy baby boomers and those who may experience difficulties working related to a chronic disease. It can also provide concrete information and potential strategies to inform and enhance policies, practices and interventions to help older workers sustain their employment. Results of this research will be relevant for older workers and especially those living with chronic. It will also be relevant to employers, disability managers, human resource professionals, occupational health professionals, insurers, and consumer/patient organizations.

### **Project Targets for 2018:**

- First Quarter:* Topic area identified and analysis underway for potential fourth paper with V. Kristman taking the lead  
Revise three papers currently under review
- Second Quarter:* Discuss with team additional analyses and KT messages  
Discuss availability of data for students/trainees and additional analyses  
Continue with preparation for potential fourth paper
- Third Quarter:* Complete analysis on fourth paper and submit for peer-review
- Fourth Quarter:* Discuss additional presentations/papers with team. Work will continue with KTE

## Development and testing of the DASH outcome measure: DASH instrument (0425)

**Project Period:** Ongoing

**Introduction:** This multi-year project involves the development and ongoing testing of the DASH, a 30-item self completed questionnaire designed to measure disability and symptoms in any or multiple disorders of the upper limb. The DASH Outcome Measure was jointly developed by the Institute for Work & Health (IWH) and the American Academy of Orthopaedic Surgeons (AAOS). It is internationally used having been completed on 32 language translations and 16 languages currently in progress. In 2003, the 11-item QuickDASH was released. In 2011, we published a paper that outlined benchmarking scores for the DASH. In 2012, the 3rd edition of the DASH/QuickDASH User's Manual was loaded onto our website. Several tools to assist users with the calculation of DASH/QuickDASH scores have been developed within the Institute (e.g., QuickDASH scoring e-tool, DASH Outcome Measure app). In 2012, we developed the DASH Outcome Measure application for use on the iPad (allows for real-time administration, scoring and longitudinal tracking of DASH outcomes) available from the Apple App Store. Ongoing work with the DASH includes creating new evidence and standards as well as creating ways to make the growing body of evidence on the DASH accessible to our key stakeholders.

### Objectives:

- To continue work with the DASH and review of measurement properties
- To revise the scoring system for the DASH based on the findings of repeated factor analysis.
- To pro-actively address issues related to the DASH – ie, the debate over the need for joint specific measures over the DASH (region), response to articles in literature

**Researchers:** Dorcas Beaton (Institute Coordinator), Claire Bombardier, Kim Cullen, Sheilah Hogg-Johnson, Selahadin Ibrahim, Quenby Mahood, Michael Swift, C Kennedy-Yee (Health Quality Ontario).

**Collaboration and Partnerships:** Consultation with clients, clinicians, educators, professional organizations, regulatory bodies and other researchers have and will continue to occur throughout the development and fulfillment of these projects.

**Potential Audiences and Significance:** Professional organizations such as the Canadian Physiotherapy Association (CPA), American Academy of Orthopaedic Surgeons (AAOS) and regulatory colleges have demonstrated their support through use of the DASH, as has the Workplace Safety & Insurance Board (the QuickDASH is the outcome used in the shoulder program of care).

### Project Targets for 2018:

- First Quarter:* Review of evidence of the DASH for thumb, shoulder and wrist disorders.  
Submit paper on 20 years with the DASH  
Continue to explore use of DASH in injured workers – validating
- Second Quarter:* Present history of the DASH at the Canadian Society of Hand Therapists  
Prepare whiteboard narrative based on the history of the DASH Outcome Measure  
Finalize reviews of measurement properties, update database.  
Begin process of co-calibration of the DASH with the PROMIS database's UE Function instrument with group from Oxford (funding being sought)
- Third Quarter:* Review training opportunities using the DASH data.  
Conduct review of the performance of the QuickDASH in shoulder fracture patients  
Workshop on instrument selection using the DASH as model
- Fourth Quarter:* KT activities to promote best use of the DASH Outcome Measure.

## Foundation Programs

The Institute's Foundation program is composed of several activities within the Research Program whose scope of activities may cross cut all the research we undertake at the Institute. These activities include Data and Information Systems, Measurement of Health and Function and Systematic Reviews. These programs provide expertise to all relevant research projects in the Institute, hence the term foundation programs.

One of the foundation programs at the Institute is Data and Information Systems. The success of Institute research, including the productivity of our scientists, rests to no small extent on expertise provided by the staff of this program. This team of statisticians and programmers/analysts provides statistical consulting and information technology solutions to all the other research programs.

Our data sources include current administrative data from the Workplace Safety and Insurance Board (WSIB). Data and Information Systems staff are constantly refining the Institute's ability to use this resource to its maximum capacity. They also develop and maintain our repository of historical WSIB databases as a potential resource for future research projects. Our access to WSIB administrative data provides scientists with some unique opportunities.

Data and Information Systems Program staff are very responsive to the needs of other Institute researchers, and as a result, is highly regarded by our scientists and staff. Besides being a source of methodological expertise and data management, program staff have also taken the lead in other areas. These include the exploration, development and implementation of research methodologies, along with new approaches to accessing, collecting, analyzing, interpreting, storing and maintaining the security of our data.

This team also provides continuity and training across the organization in maintaining issues of privacy, confidentiality and data security. Projects listed below are a small part of the portfolio of this group as program staff are primarily involved in support of projects described elsewhere.

The Scientists in the Measurement of Health and Function foundation program focus on providing reliable measurement methods and rigorous analytic approaches which are vital to research excellence. Among other things, they help scientists clarify the relationship between exposures and outcomes in epidemiologic studies.

Another foundation program at the Institute is the systematic review program. Systematic reviews provide an overview of the evidence from higher quality studies on a specific research question. IWH has developed in-house expertise in systematic reviews of work-health research. Institute researchers and scientists are now conducting reviews of research into economic and other non-clinical aspects of occupational health and safety, especially in the area of prevention. This program which encompasses all types of reviews, encourages cross-disciplinary collaboration and the consistent use of systematic review methods across the Institute.

This program was initiated in part as a response to a growing demand among stakeholders for usable, evidence-based information regarding the prevention of workplace injury and illnesses.

### **C. Foundation Programs**

Workplace safety & insurance board data routine statistics (0307/0845).....	45
Methodological developments in systematic reviews (0951) .....	46
System-based return-to-work disability management/support interventions: A systematic review (3205) .....	47

## **Workplace safety & insurance board data routine statistics (0307/0845)**

**Project Period:** Ongoing

**Introduction:** The Ontario Workplace Safety and Insurance Board (WSIB) routinely collects claims-based data for administrative and reporting purposes. Through a special research agreement with the WSIB, the Institute for Work & Health can access and use much of the WSIB routinely collected data for research purposes.

### **Objectives:**

- To continually develop and maintain expertise in the data holdings of the WSIB.
- To aid Institute researchers by providing information on the data holdings and their potential use for research projects.
- To respond to ad hoc requests for data extractions required for project planning purposes, etc.
- To develop internal capacity to use WSIB data and maintain three staff who can extract data.
- To develop set of core competencies regarding WSIB data.
- To position IWH to provide assistance to external researchers.

**Researchers:** Cynthia Chen (Institute Coordinator), Hyunmi Lee

**Collaboration and Partnerships:** Partners involved in this project include the WSIB through our research and master agreements, external researchers from universities, and the Centres of Research Excellence.

**Potential Audiences and Significance:** This IWH research activity is largely of interest to internal Institute colleagues but has potential interest to WSIB stakeholders also. Data extractions will be conducted solely for Institute researchers as per our research agreement with the WSIB.

### **Project Targets for 2018:**

<i>First Quarter:</i>	Respond to ad hoc requests for WSIB data as required Complete research agreements for feasibility studies prior to ad hoc requests Seek opportunities to expand knowledge of different WSIB resources
<i>Second Quarter:</i>	Respond to ad hoc requests for WSIB data as required Complete research agreements for feasibility studies prior to ad hoc requests Seek opportunities to expand knowledge of different WSIB resources
<i>Third Quarter:</i>	Respond to ad hoc requests for WSIB data as required Complete research agreements for feasibility studies prior to ad hoc requests Seek opportunities to expand knowledge of different WSIB resources
<i>Fourth Quarter:</i>	Respond to ad hoc requests for WSIB data as required Complete research agreements for feasibility studies prior to ad hoc requests Seek opportunities to expand knowledge of different WSIB resources

## Methodological developments in systematic reviews (0951)

**Project Period:** Ongoing

**Introduction:** IWH is committed to continuously improving the field of systematic review methodology. In 2018, we propose to initiate, undertake, and advance the following methods projects:

- A. Update one Cochrane review: Multidisciplinary interventions for neck and shoulder pain.
- B. Advance Review Methods: 1) Comparison of Cochrane vs. non-Cochrane reviews; 2) Comparison of Evidence synthesis methods; 3) Realist and Rapid Review project; 4) Review classification project; and 5) Reviews of Complications.
- C. Publish exemplar paper for prognosis reviews.

### **Objectives:**

- To update Cochrane reviews and develop a database of prognosis reviews.
- To write a paper on adapting the established SR methodology to non-clinical literature.
- To develop a process for conducting realist and rapid reviews and classifying review typologies.
- To recommend a methodology for conducting reviews of complications.

**Researchers:** Emma Irvin (Institute Coordinator), Dwayne Van Eerd (Institute Coordinator), Ben Amick, Nancy Carnide, Kim Cullen, Andrea Furlan, Joanna Liu, Quenby Mahood, J Hayden (Dalhousie University), J Jordan (Keele University), R Parker (Dalhousie University), M Van Tulder (VU, Amsterdam), G Wells (University of Ottawa)

**Collaboration and Partnerships:** Partners in this project include external researchers, the Ontario Workplace Safety and Insurance Board, clinicians, and policy-makers.

**Potential Audiences and Significance:** The results of this project will be relevant to methods groups of the Cochrane Colloquium and other researchers conducting systematic reviews, and those interested in incorporating stakeholders in the process.

### **Project Targets for 2018:**

- First Quarter:** Run UofT course on Systematic Review methods; Complete Quality Appraisal descriptive paper; Initiate PICO descriptive paper
- Second Quarter:** Run UofT course on Systematic Reviews; Update Cochrane paper, Initiate update of Irvin 2010 methods piece; Initiate methods paper comparing ROB and best evidence synthesis
- Third Quarter:** Complete update of Cochrane review; Initiate updating of SR stakeholders paper;
- Fourth Quarter:** Complete Irvin 2010 methods paper and paper comparing ROB and best evidence synthesis

## **System-based return-to-work disability management/support interventions: A systematic review (3205)**

**Project Period:** New

**Introduction:** The burden associated with managing work-related disability is extensive. While the frequency of work-related injuries and illnesses has gone down in most high-income countries over the last ten years, comparable improvements in return-to-work (RTW) outcomes have not kept pace. Economic analyses have shown that the costs of lost productivity associated with work-related injury and illness far exceed the costs of resources used to treat these episodes. Over the last decade, the Institute for Work & Health (IWH) has produced a series of systematic reviews synthesizing the best available research evidence on what workplace-based policies, practices and approaches support return-to-work (RTW), reduce productivity losses and facilitate recovery for injured and/or ill workers. However, there are important information gaps that remain regarding the cooperative effect of regulatory, system-based strategies focused on disability management (DM) and how they can help reduce the burden of work-relevant disability. We define system-based strategies as those that are directed at a group of workers and/or their representatives, employers, insurers or other stakeholders; such as changes in the activities of claims adjudicators, or policies initiated through a compensation authority. The proposed project will seek to directly address this knowledge gap by conducting a systematic review (SR) of the literature. We will then take this summarized research evidence on system-based strategies and create a practical and innovative guide for OHS practitioners on the best DM strategies to support RTW and recovery for injured or ill workers and to reduce the extensive burden associated with work disability.

### **Objectives:**

- To conduct a SR of research evidence on systems-based RTW and DM interventions;
- To create an evidence-informed practical guide to support RTW and recovery for MSK-, pain-related and mental health conditions based on the findings from this systematic review (system-based strategies) and from our previous work (workplace-based strategies)

**Researchers:** Kimberley Cullen (Principal Investigator); Emma Irvin (Co-Principal Investigator) Benjamin Amick, Siobhan Cardoso, Quenby Mahood, Dwayne Van Eerd, J Geary, U Gensby (Team WorkingLife ApS).

**Collaboration and Partnerships:** Our knowledge users, specifically stakeholders at the National Institute of Disability Management and Research (NIDMAR) and the Centre for Research on Work Disability Policy (CRWDP)

**Potential Audiences and Significance:** Workplace parties (employers and organized labour), Workers, Clinicians, Policy makers, Compensation authorities, OHS practitioners, Disability management professionals and Researchers

### **Project Targets for 2018:**

*First Quarter:* Review and critically appraise relevant papers; Extract and organize relevant data for synthesis; Synthesis of data for the review

*Second Quarter:* Draft of preliminary results; In-person meetings with stakeholder advisory panel; Analyze feedback from panel; Write up of final report and guide

*Third Quarter:* No activity

*Fourth Quarter:* No activity

## Knowledge Transfer & Exchange

The Institute considers Knowledge Transfer & Exchange (KTE) to be a process by which relevant research information is made available and accessible through interactive engagement with stakeholders for practice, planning and policy-making. KTE at IWH is integrated into the research process.

Stakeholders are involved in helping us to identify research priorities and frame research questions. They also help us communicate findings in ways and through channels that are useful for policy and practice. The target audiences for the Institute's research include policy-makers (provincial and federal ministries, workers' compensation agencies such as the Workplace Safety and Insurance Board), health and safety associations (HSAs), workplace parties (labour and employers), clinicians and other occupational health and safety and disability management professionals

The KTE process is supported by a corporate communications strategy that enhances the Institute's ability to communicate effectively with its stakeholders. The communication tools include our quarterly newsletter and monthly e-bulletin, the IWH website, social media, media relations, special events and the marketing of specific products such as evidence guides and workshops. In addition, KTE actively works to build capacity in our audiences to understand and use research evidence.

The work of IWH's KTE department falls into three goals:

1. **Relationships:** Strengthen stakeholder networks and relationships to enhance the applicability and uptake of IWH research. KTE creates formal and informal networks of stakeholders and works with intermediary organizations (health and safety associations, professional organizations, employer associations and labour groups) to allow us to link with stakeholders over time with different research messages. All the KTE projects are also listed in this KTE section of the plan.

2. **Reach:** Expand our audiences and support their access to and use of research evidence. KTE continues to explore creative and effective ways to expand evidence dissemination and facilitate knowledge exchange using new and current technologies and techniques. The website continues as a major source of outreach along with the publication of our quarterly newsletter *At Work* and our monthly e-bulletin, *IWH News*. In 2018 we will be launching a newly designed website to improve access to project details and publications. We will continue to pursue coverage in trade media and we are using social media both as another dissemination vehicle and to follow issues raised by our stakeholders. We will continue to provide tailored workshops and briefings focused on understanding research evidence and its application. The Institute website houses a searchable research module that lists all the research articles published by IWH researchers. Also, when a visitor to our website searches for information on an IWH researcher, the most recently published articles by that researcher appear in the search.

3. **Products:** Develop evidence-based guides, tools and information products to support efforts to improve the safety and health of working people. KTE works with our scientists and stakeholders to develop products (tools, guides, Issue Briefings, newsletter articles, videos) to communicate and apply research findings.

## **D. Knowledge Transfer & Exchange**

### Stakeholder/Audience Relationships and Exchanges

Issue briefings (0611) .....	50
Educationally influential networks (0617) .....	51
Tracking KTE and evaluation (0629).....	52
Disability managers and OHS professional networks (0638).....	53
Prevention partners networks (0640).....	54
Outreach (0650) .....	55

### Capacity Building

Workshops (0643).....	56
-----------------------	----

### Developing New Guides, tools, Communication, Technologies and Techniques

Tool development and dissemination (0636) .....	57
Corporate communications (0690).....	58

## Issue briefings (0611)

**Introduction:** Research findings of the Institute for Work & Health often have implications for decision makers in government, the WSIB, and the HSAs, and for employers, labour groups, and clinicians. In this project, Institute researchers identify findings that ought to be of interest to policy-makers in government and at the WSIB and prepare brief documents that outline the research findings and their implications, in plain language.

**Audience:** The main target audience is policy officials at ministries of labour and workers' compensation boards in Canada. The topics of Issue Briefings will often be of interest to the wider stakeholder community, such as labour groups, employer associations, injured worker organizations, and OHS professionals.

### Objectives:

- To briefly summarize, in plain language, research findings on topics of interest to the policy community.
- To identify implications of this research for decision-makers.
- To help foster a continuing conversation on the issues examined.
- To publish one Issue Briefing each quarter, to consult key stakeholders on future topics.
- To broaden the distribution of notices about newly published Issue Briefings.

**Team:** Monica Bienefeld (Project Leader), Kristina Buccat, Cindy Moser, Cameron Mustard

**Collaboration and Partnerships:** Issue Briefings are sent out in two stages. First, an Issue Briefing goes as an attachment to deputy ministers of labour, chairs and CEOs of workers' compensation boards, and to the policy and OHS committees of the Canadian Association of Administrators of Labour Legislation. About two weeks later, we post the Issue Briefing on our website and send a notice with a link to all who have subscribed to the Issue Briefing series. Recipients are invited to post the link to Issue Briefings on their organizations' websites and bulletins.

### Project Targets for 2018:

*First Quarter:* Finalize and publish Issue Briefing on use of IWH leading indicators

*Second Quarter:* Identify topic for subsequent Issue Briefing.

*Third Quarter:* Begin work on second Issue Briefing.  
Identify possible topics for 2019.

*Fourth Quarter:* Complete and publish second Issue Briefing.

## **Educationally influential networks (0617)**

**Introduction:** Many health practitioner groups deliver care to populations of interest to IWH (e.g. workers with musculoskeletal disorders). We have targeted five specific groups as potential audiences for Institute research messages, as providers who may also work within, or in close association with, workplaces (in primary/secondary prevention roles and/or in return to work, delivering treatment and/or disability management). These groups are: physiotherapists (PT), kinesiologists (Kin), occupational therapists (OT), chiropractors (Chiro) and ergonomists (Ergo). Many IWH research messages are relevant to these groups (management of back pain, disability management and RTW) and equally, these groups possess a practice expertise and knowledge that is useful and relevant to IWH. Fundamental to this project are partnerships developed with professional bodies who represent or regulate these disciplines. These partners have assisted in identifying those individuals across the province who are informal opinion leaders—i.e. individuals who are identified by their peers as “educationally influential” (EI). Each of the EI networks has been convened to seek their cooperation in an ongoing role as “knowledge broker”. It is a two-way exchange: stakeholder information and opinion into IWH (to improve our research and knowledge transfer efforts); and research knowledge out to EIs and, via EIs, to their peers to ultimately assist evidence-based practice. We also sometimes look to EIs to participate in research projects as advisors. In 2015, we began surveying EI groups (Ergos and Chiros) on their use and dissemination of research and their reach. We will continue our yearly surveying of EI groups in 2018. In 2016, we held our inaugural EI summit to facilitate cross-disciplinary networking. We held our second annual meeting in 2017 and will continue using the summit format in place of discipline-specific meetings in 2018.

**Audience:** Physiotherapists, kinesiologists, occupational therapists, chiropractors and ergonomists. Relevant findings will be disseminated to appropriate EI groups. It is anticipated that members of these groups will then further disseminate these findings within their own networks. EIs may also be involved with specific research projects, included as either a partner or co-investigator or assisting with study recruitment. Individual partner organizations may also promote IWH through their own events or websites.

### **Objectives:**

- To plan and implement annual face-to-face contact in a cross-group summit.
- To plan and implement projects to bring EIs into IWH's research and activities.
- To disseminate relevant 1-item research alerts “IWH news for sharing” to all EI groups.
- To remain active contributors to association trade publications.

**Team:** Monica Bienefeld (Project Leader), Siobhan Cardoso (Co-Lead), Kim Cullen (Co-Lead), Sara Macdonald (Co-Lead), Kristina Buccat, Cindy Moser, Uyen Vu

**Collaboration and Partnerships:** Clinicians/practitioners, professional bodies (Associations/Regulatory Colleges)

### **Project Targets for 2018:**

*First Quarter:* Discuss EI summit format for 2018.  
Review renewal and recruitment strategies.  
Continue development of communication strategies and engagement opportunities.

*Second Quarter:* Begin planning EI summit (determine summit objectives and goals).  
Continue implementing communication strategies and engagement opportunities, including dissemination of at least one research alert.

*Third Quarter:* Continue planning EI summit (create agenda, recruit scientist presentations and cross-network discussion topics for the roundtable).

*Fourth Quarter:* Host and evaluate EI summit, including survey of EI groups.

## Tracking KTE and evaluation (0629)

**Introduction:** Consistent with the IWH Five Year Strategic Plan, KTE has identified activities and indicators to be measured. In 2018, KTE will continue to track stakeholder engagement in IWH projects. We will continue to populate revised and updated templates that have been developed for tracking KTE activities associated with each research project and tools resulting from those projects. We will complete five new case studies of the impact of IWH research. In addition, we will continue to focus on how our KTE tracking can be integrated with other Institute tracking systems in order to streamline the process across the organization.

**Audience:** IWH staff, IWH Board of Directors, external stakeholders, and KTE researchers.

### Objectives:

- To track KTE indicators that are part of the Five Year Strategic Plan.
- To track stakeholder engagement and other KTE activities in projects and systematic reviews.
- To document indicators of research use, e.g., downloads, media mentions, testimonials of research use.
- To document research impact through case studies (at least five to be completed in 2018).

**Team:** Monica Bienefeld (Project Leader), Siobhan Cardoso (Co-Lead), Kim Cullen (Co-Lead), Sara Macdonald (Co-Lead), Cindy Moser (Co-Lead), Kristina Buccat, Emma Irvin, Dwayne Van Eerd

**Collaboration and Partnerships:** KTE systematic review stakeholders, project stakeholders, senior policy officials.

### Project Targets for 2018:

- First Quarter:* Track stakeholder engagement, e.g. participation in advisory meetings, dissemination of research results and uptake of findings, e.g. downloads and testimonials.  
Record uptake of tools.  
Identify candidates for new case studies.  
Begin work on new case studies.  
Assess current tracking methods and how they can be improved
- Second Quarter:* Track stakeholder engagement and IWH product uptake as above.  
Record uptake of IWH products.  
Continue work on case studies and identify candidates for new case studies.  
Discuss current methods for tracking, seeking input from Institute staff on new methods
- Third Quarter:* Track stakeholder engagement and IWH product uptake.  
Continue work on case studies.  
Assess how new tracking methods may be implemented
- Fourth Quarter:* Track stakeholder engagement and IWH product uptake.  
Finalize work on case studies and identify candidates for new case studies for following year.

## Disability managers and OHS professional networks (0638)

**Introduction:** IWH established a new network of disability management (DM) professionals in 2012 and a network of OHS professionals in 2015. The groups are currently composed of 55 and 60 members, respectively. Meetings are held annually at the IWH for knowledge exchange: Network members provide information and opinion to IWH (to improve our research and knowledge exchange efforts); and IWH shares research findings with the members who are encouraged to share with their peers. LinkedIn groups for the networks were created at the request of members. Approximately 30 members have joined the online groups. The platform and email exchanges are used to disseminate relevant research findings, generate discussion, and provide networking opportunities. All members also receive the monthly IWH News and quarterly At Work via email. Members are also often approached for interest in participating in research projects and in study participant recruitment.

**Audience:** Members of the network include professionals from workplaces, insurers, and clinical care settings/organizations.

### Objectives:

- To facilitate knowledge exchange among IWH researchers and individuals who are involved in the practice of disability management and OHS in Ontario.
- To facilitate the dissemination of research findings to the community of disability management and OHS practitioners in Ontario.
- To facilitate participation in IWH research projects or IWH events (e.g. workshops, seminars).
- To provide KTE support for research projects with messages for RTW and prevention audiences.

**Team:** Sara Macdonald (Project Leader), Monica Bienefeld, Kristina Buccat, Siobhan Cardoso, Kim Cullen

**Collaboration and Partnerships:** HSA consultants, workplace parties, disability managers, health care and nursing organizations, labour unions, workplace OHS professionals (coordinators, managers and directors), and OHS consultants within HSAs.

### Project Targets for 2018:

- First Quarter:* Plan DM annual event.  
Continue reaching out to members to participate in research as opportunities arise.  
Review DM membership renewal results and welcome new members
- Second Quarter:* Host joint DM-OHS professionals' annual event
- Third Quarter:* Continue reaching out to members to participate in research as opportunities arise.  
Send single item research alerts "IWH news for sharing" as relevant topics are published.
- Fourth Quarter:* Continue reaching out to members to participate in research as opportunities arise.

## Prevention partners networks (0640)

**Introduction:** KTE will continue to build relationships with the prevention partner community through vehicles like the Prevention Knowledge Exchange Group (PKEG). Organizations participating in PKEG include: the six Ontario health and safety associations, the three Centres of Research Excellence (CREs), the Prevention Office and the Policy and Operations divisions of the Ontario Ministry of Labour (MOL), and the Workplace Safety and Insurance Board (WSIB). Capacity building in the use of evidence in programming and planning will continue through the review of evidence from the research organizations and key projects of the other participants. PKEG is also a vehicle for dialogue about how to improve knowledge exchange, both among the members of the committee, their organizations and with workplace parties. IWH is participating as a member of a prevention system communications group and the Ergonomist Integrated Planning Action Committee (EIPAC) with other prevention partners. IWH also participates in the annual Partners in Prevention conference.

**Audience:** For PKEG and EIPAC: Health and safety associations (HSAs), Ministry of Labour, (MOL) Centres for Research Expertise (CREs) and Workplace Safety and Insurance Board (WSIB). For the Partners in Prevention Conference: workplace parties and OHS professionals are also among the audience.

### Objectives:

- To continue to build relationships with prevention partners to take research evidence to Ontario workplaces and to explore new research ideas.
- To continue to develop opportunities for our prevention partners to participate in the research process and review their experience with this participation.
- To foster dialogue and prevention system networks for strengthening knowledge exchange.
- To coordinate IWH input into Prevention Partners Conference and assist with research posters.

**Team:** Monica Bienefeld (Project Leader), Kim Cullen (Co-lead), Kristina Buccat, Siobhan Cardoso, Sara Macdonald, Cindy Moser and Uyen Vu

**Collaboration and Partnerships:** HSA Community (6 HSAs), MOL, WSIB, OCRC, CRE-MSD, CRE-OD, IWH researchers.

### Project Targets for 2018:

- First Quarter:* Host quarterly PKEG meeting.  
Host learning day for prevention system ergonomists  
Participate in EIPAC and prevention system communications meetings.  
Participate in Ergonomists Knowledge Exchange Day (hosted by EIPAC)  
Plan booth and poster submissions for the Partners in Prevention conference.
- Second Quarter:* Host quarterly PKEG meeting.  
Participate in EIPAC and prevention system communications meetings.  
Coordinate activities for Partners in Prevention Conference and Trade Show, i.e., IWH corporate booth, panels' content and display materials.
- Third Quarter:* Host quarterly PKEG meeting.  
Participate in EIPAC and prevention system communications meetings.  
Submit presentation abstracts for Partners in Prevention Conference 2018.  
Assist in planning of IWH activities related to global ergonomics month.
- Fourth Quarter:* Host quarterly PKEG meeting.  
Participate in EIPAC and prevention system communications meetings.  
Participate in global ergonomics month.

## Outreach (0650)

**Introduction:** The Institute continues to engage in opportunities and activities to increase its visibility provincially, nationally and internationally. Throughout the year, the Institute participates in key events and conferences where targeted information can be made available to stakeholder groups to raise the awareness and profile of IWH. In addition, the Institute uses these opportunities to market its products to stakeholders. As workplace parties are priority audiences for IWH research, this project also explores ways to reach employers and organized labour. In 2013, we launched knowledge exchange forums with leaders from the employer and labour communities. Since then, we continue to meet with these parties at least once a year. In 2018, we are planning on hosting a joint meeting with both groups towards the end of the year. We also reach workers and employers through intermediaries (organizations with members or subscribers with an interest in work and health) and direct communication. In 2013, the KTE program also began to identify and interview “influential knowledge users (IKUs)”, many of whom work for one of Ontario’s health and safety associations, about ways to improve knowledge exchange. A formal IKU network was launched in 2015. Bi-annual meetings with this network will continue in 2018. In 2016, we developed an academic outreach plan to reach instructors and students. Yearly efforts to review how we can engage and connect more students with our research and products/tools will continue in 2018.

**Audience:** All stakeholder groups, with particular attention to workers, unions, employers, employer associations, and academics (instructors and students).

### Objectives:

- To continue knowledge exchange with leaders from the employer and labour communities and with influential knowledge users.
- To continue to work with intermediaries to reach their members/clients.
- To continue to implement an academic outreach plan.
- To continue to develop themed displays to meet targeted audiences, profiling key research initiatives where appropriate.
- To use these opportunities to profile the Institute as a credible resource of evidenced-based information and tools for improving the health of workers.
- To assist IWH researchers in linking with workplace parties.

**Team:** Monica Bienefeld (Project Leader), Kristina Buccat, Siobhan Cardoso, Kim Cullen, Sara Macdonald, Cindy Moser

**Collaboration and Partnerships:** Employer associations, unions, health and safety associations

### Project Targets for 2018:

- First Quarter:* Seek opportunities to present research to intermediary and other stakeholders. Develop and plan for Partners in Prevention conference. Explore opportunities for establishing regular, annual contact with key individuals with organizations where IWH has had productive, ad-hoc engagements/partnerships.
- Second Quarter:* Seek opportunities to present research to intermediary and other stakeholders. Host meeting of Influential Knowledge Users network. Host Labour, Employer forum meetings. Host IWH booth at Partners in Prevention conference.
- Third Quarter:* Seek opportunities to present research to intermediary and other stakeholders. Update and implement academic outreach plan to share IWH tools and resources with students.
- Fourth Quarter:* Seek opportunities to present research to intermediary and other stakeholders. Host meeting of Influential Knowledge Users network. Host joint meeting of Labour and Employer forums.

## Workshops (0643)

**Introduction:** IWH has considerable expertise in conducting systematic reviews to support evidence-based practice. Many researchers and students at the Institute are involved with the Cochrane Collaboration and the Institute's Systematic Review Program. The Institute has many requests to share its expertise and to contribute to the education and training of educators, researchers, clinicians and students. Institute personnel and colleagues have been offering a series of Systematic Review workshops that range from two hours to two-days since 2001 with plans to continue through 2018. We are moving our workshop online. The Systematic Review workshop is designed to provide participants with tools and knowledge to identify measures that can provide the best estimate of a given concept in their clinical work or research.

**Audience:** The Systematic Review workshop is of particular interest to health care professionals, students, educators, clinicians, researchers, insurers and policy makers.

**Objectives:**

- To build capacity in our audiences to understand, use and conduct research.
- To evaluate and determine lessons learned.

**Team:** Emma Irvin (Project Leader), Monica Bienefeld, Siobhan Cardoso, Kim Cullen, Andrea Furlan, Sheilah Hogg-Johnson, Sara Macdonald, Quenby Mahood, Lyudmila Mansurova, Dwayne Van Eerd

**Collaboration and Partnerships:** Participants in the workshops will provide an evaluation which will be used for further development of the existing systematic review workshop. In addition, some of our prevention partners may be interviewed so that we can develop a workshop to suit their unique requirements.

**Project Targets for 2018:**

- First Quarter:* Prepare for spring Systematic Review Workshop.
- Second Quarter:* Hold Systematic Review Workshop in Toronto (May 14-15)  
Evaluate workshop and consider fine-tuning the design.
- Third Quarter:* Prepare for fall Systematic Review Workshop.
- Fourth Quarter:* Hold Systematic Review Workshop in Toronto (November)

## Tool development and dissemination (0636)

**Introduction:** Research in knowledge transfer has shown the advantages of having evidence-based tools. IWH has developed several tools and guides to assist stakeholders to incorporate research evidence into their occupational health and safety (OHS), return-to-work, rehabilitation and treatment programs, e.g., Disabilities of the Arm, Shoulder and Hand (DASH) Outcome Measure, eOfficeErgo, the Prevention is the Best Medicine toolkit, the Participatory Ergonomics (PE) Guide, Red Flags/Green Lights Return to Work (RTW) Guide, the Health & Safety Smart Planner, and the Seven Principles of Return to Work. In 2017, we developed 3 new tools: an operational handbook for putting evidence in context for use in OHS; a guide to support people in managing depression in the workplace; and a process guide for addressing essential skills gaps within an existing OHS training program. In 2018, we will work on disseminating these tools to a wider audience and developing new resources from any new IWH research results appropriate for this use.

**Audience:** All IWH stakeholders.

### Objectives:

- To create new, practical tools, guides or other resources from IWH research to assist workplace parties, prevention partners and health professionals in efforts to improve worker health & safety.
- To work with IWH Scientists to plan tool development in research funding applications,
- To engage stakeholders in the planning, development and testing of tools.
- To disseminate tools to stakeholders and monitor uptake
- To renew tools with new IWH research findings, as appropriate.
- To administer and coordinate all procedures related to translations of the DASH and QuickDASH, and maintain related database
- To monitor and maintain database of requests for commercial and non-commercial use of DASH.

**Team:** Siobhan Cardoso (Project Leader), Kim Cullen (Co-Lead), Jocelyn Dollack (Co-Lead), Sara Macdonald (Co-Lead), Monica Bienefeld, Kristina Buccat, Jan Dvorak, Cindy Moser,

**Collaboration and Partnerships:** Partners involved in this project include the health and safety and disability prevention community, workplace parties, clinicians, labour and workplace parties from Ontario and other provinces, and other stakeholders, as appropriate.

### Project Targets for 2018:

- First quarter:* Finalize, post and disseminate new tools developed in 2017.  
Prepare Winter/Spring DASH e-Bulletin; Present 'DASH, the first 20 years' at CSHT.
- Second Quarter:* Continue to monitor uptake of tools and guides.  
Finalize and distribute Winter/Spring DASH e-Bulletin.  
Finalize and post French translation of eOfficeErgo.
- Third Quarter:* Begin review of all current tools for their accuracy, applicability and design.  
Begin preparing content for next edition of DASH e-bulletin.  
Promote reviews of DASH measurement properties.
- Fourth Quarter:* Continue review of all current tools for their accuracy, applicability and design.  
Finalize and distribute DASH e-bulletin.

## Corporate communications (0690)

**Introduction:** Corporate Communications works with IWH's scientists and KTE professionals to raise the visibility and credibility of the Institute, and to "push" IWH research so that stakeholders know about, consider and use evidence-based practices that protect workers from injury, illness and disability, as well as take part in research studies, where applicable. It seeks to reach these audiences more broadly by preparing materials in plain language and using mass communication tools and tactics – such as videos, newsletters, websites, media releases, articles and mentions in trade and general media, social media and external events. Corporate Communications also aims to keep Institute staff informed of the research, projects and events going on within IWH in order to improve working relationships and camaraderie, and to assist in meeting our corporate goal of "being a model of a healthy workplace."

**Audience:** External audiences include workplace parties, worker and employer representatives, policy-makers, occupational health and safety professionals, disability management professionals, researchers, funders and the intermediaries of all the above. Internal audiences include all IWH staff.

### Objectives:

- To extend reach/audience for IWH research through website, e-mail, social media, slidecasts, videos and print products, as well as through external media and stakeholder events/publications.
- To ensure IWH information remains relevant and accessible to external stakeholders in order to help them protect the health and safety of workers.
- To ensure IWH comes to mind among people looking for best evidence in OHS and return to work.
- To support the building and maintenance of strong and active stakeholder relationships
- To support organizational excellence through strong internal communications.

**Team:** Cindy Moser (Project Leader), Monica Bienefeld, Kristina Buccat, Siobhan Cardoso, Kim Cullen, Jan Dvorak, Lyudmila Mansurova, Sara Macdonald, Uyen Vu

**Collaboration and Partnerships:** As required.

### Project Targets for 2018:

*All Quarters:* Write lay out, e-mail and post *At Work* quarterly and IWH News monthly  
Write and post Research Highlights of new and previous research  
Keep website content current  
Write research-based media releases as relevant research findings are published  
Write articles for stakeholder publications and The Conversation Canada  
Tweet daily, post weekly on LinkedIn and populate YouTube channel, as needed  
Produce and post plenary slidecasts  
Produce and disseminate video cards or videos  
Write and post case studies  
Develop and disseminate tools as needed (project-specific)  
Edit, oversee design, publish and distribute 2017 annual report  
Publicize and support hosting of Nachemson lecture  
Exhibit at and attend stakeholder conferences, as required  
On a weekly basis, produce, distribute and post internal newsletter *thisweek@iwh*  
Keep IWH wiki-based intranet communications content current and encourage its use  
Continue to increase number of e-alert sign-ups  
Support researchers as needed (e.g. editing, writing, disseminating research findings)  
Attend H&S Partners Communication Forum to build relations with system partners  
Track communications metrics through quarterly reports to the Board of Directors

## **Corporate Services**

Corporate Services plays a crucial role in providing facilities, human resources management, finance and accounting capacity and oversees the purchase and maintenance of equipment and supplies. The administrative infrastructure and human resource function supports the diversity and complexity of Institute work. It also provides liaison and support to the Institute's Board of Directors.

In 2018, the department will continue work on our human resources policies, including the alignment of compensation practices with the expenditure constraint provisions contained in Bill 16. Corporate Services will also ensure compliance with the Ontario government directive concerning travel, meal and hospitality expenses.

Work continues to ensure that staff are aware of new and revised policies as a result of the work done by the Policy Review Committee, including an annual review of the Policy and Procedures Manual.

The Joint Health & Safety Committee (JHSC) will work with members of the executive committee to address recommendations on health and wellness based on staff suggestions. The committee will continue to align their activities to reflect recommendations that emerged from the most recent staff survey (conducted in November 2016). This survey is conducted on a bi-annual basis to measure staff wellness and identify problems areas. It is used to assist the Institute in creating a healthy workplace and optimal working conditions. The staff survey will be administered to staff, once again, in 2018. The results provide useful input to Institute management and are shared with staff and our Board of Directors.