

Institute for Work & Health Activity Plan 2022/23



**Institute
for Work &
Health**

Research Excellence
Safe Work
Healthy Workers



2022/23 Activity Plan

**Research
Knowledge Transfer & Exchange and Communications
Corporate Services**

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2022/23 Activity Plan

The 2022/23 Activity Plan represents the final year in the Institute's current Strategic Plan and our Scientific Research Plan. We are proud of the work we have accomplished during this period in supporting our mission to provide high-quality, actionable research that is of value to employers, workers and policy-makers.

The activities outlined for the next year will take place within the context of the Ministry of Labour, Training and Skills Development (MLTSD)'s 2021-26 Occupational Health and Safety (OHS) Strategy, *Prevention Works*. This new strategy provides a framework for Ontario's OHS system partners that aims to keep Ontario one of the healthiest and safest jurisdictions in Canada. IWH's current activities are well aligned to support the objectives of the strategy. Our research activities will contribute to building the best evidence to target OHS initiatives and measure the performance of the OHS system, will support efforts to strengthen OHS practices in Ontario workplaces, and will invest efforts to understand the needs of Ontario's small businesses. The Institute is committed to continuing to support the strategic priorities identified by the MLTSD. The projects and activities documented in the Institute's 2022/23 Activity Plan support the following key areas:

- Continue the Institute's longstanding commitment to describe the circumstances of vulnerable workers, many of whom are new, young, immigrant or older workers. We have important work in progress in this area and are actively supporting the Ministry's prevention and enforcement activities to address the needs of vulnerable workers.
- Continue research efforts to identify the hazards associated with risk of work injury and illness, as well as the most effective interventions to mitigate these hazards.
- Support the promotion of a culture of health and safety, in collaboration with the Prevention System's health and safety associations (HSAs), through the development of leading indicators of workplace OHS performance and through the development of tools to apply this knowledge.
- Strengthen our research portfolio's focus on supporting the needs of small businesses.
- Continue to build collaborative research and knowledge exchange partnerships with the HSAs, centres of research expertise (CREs), and other stakeholders through such forums as the IWH-chaired Prevention Knowledge Exchange Group, and continue our commitment to involve workplace parties directly in many of our research projects.
- Continue to contribute high-quality research evidence to support workplace practices in the prevention of work disability.

Dr. Peter Smith
President & Senior Scientist

2022/23 ACTIVITY PLAN

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INTRODUCTION

The Institute for Work & Health's goal is to protect and improve the health and safety of working people by providing useful, relevant research in two key areas: (1) preventing work-related injury and illness, and (2) promoting recovery and work functioning following injury and illness. Our work provides impartial, evidence-based guidance to government policy-makers, health and safety associations, workers and employers, occupational health and safety professionals, disability management professionals and clinicians.

The Institute's work is achieved through three programs. The Research Program focuses on the prevention of work-related injury and illness and the prevention and management of work disability. The Knowledge Transfer & Exchange (KTE) and Communications Program builds and maintains relationships with stakeholders to enable the ongoing exchange of information and research evidence and produces and disseminates a wide range of lay-friendly products (tools, guides, policy briefings, newsletter articles, videos, infographics) to ensure research findings are known to, and taken up and applied by, relevant stakeholders. The Corporate Services Program supports human resources, financial and facility management at the Institute, and also provides support to the Institute's 12-member Board of Directors. The Institute's projected staff complement for 2022/23 is 54 FTEs, which are distributed across the three programs.

The 2022/23 Activity Plan describes individual research projects to be conducted over the course of the year, outlining project objectives, staffing, stakeholder involvement and alignment to the objectives of the Ontario Prevention Office's Occupational Health and Safety Strategy, *Prevention Works*, and to its *Research Roadmap*. The work of the KTE and Communications Program and the organizational support role played by the Corporate Services Program are also described in the plan.

Research

Research plans for 2022/23 fall into two priority areas at the Institute: 1) the prevention of work-related injury and illness, and 2) the prevention and management of work disability. Research projects in the first area focus on understanding the effect of working conditions on health, understanding the distribution of hazards across the Ontario labour force, comparing the learning outcomes associated with different modes of training delivery, enhancing information on occupational health and safety among small businesses, and enhancing data capacity in primary prevention. Research projects in the second area focus on understanding modifiable factors associated with labour market and health outcomes among workers with work-related injuries, workplace practices in the area of accommodating health conditions that limit an individual's ability to work, understanding how the future of work might affect access to the labour market for people with disabilities, and increasing the accessibility and inclusiveness of the labour market so that people with disabilities have equal opportunities and choices in careers, jobs and work. In both of these two areas of research, we produce and share evidence-based information, guides and tools for use by our non-research partners.

Knowledge Transfer & Exchange and Communications

KTE and Communications at the Institute aims to put research findings into the hands of key decision-makers and other research users in a timely, accessible, and useful manner. Decision-makers include workers, employers, OHS professionals, policy-makers, clinicians, other researchers and more. Additionally, KTE and Communications aim to strengthen stakeholder relationships and to make research evidence available, understandable, and useable. The work of KTE and Communications directly advances the objectives of the *Research Roadmap* by supporting the development of research partnerships and by producing and disseminating evidence-based information products.

Corporate Services

Corporate Services provides facilities support, human resources management, and finance and accounting capacity for the Institute. It also oversees the purchase and maintenance of equipment and supplies. The administrative infrastructure and human resources functions support the diversity and complexity of work at the Institute. It also provides liaison and support to the Institute's Board of Directors.

GUIDE TO ACRONYMS, AFFILIATIONS AND STANDARD SENTENCES

In the following project pages, IWH uses two **standards sentences** in the Knowledge Translation Strategies sections to refer to a host of activities.

The sentence that reads “This project uses an integrated KTE approach” encompasses the following:

The Institute’s integrated knowledge transfer and exchange (KTE) approach involves stakeholders throughout the research process. Often acting through a stakeholder advisory committee, they help tailor the study question, interpret findings using language and contexts relevant to stakeholders, and disseminate research results to their networks.

The sentence that reads “Research findings will be tailored for lay audiences and disseminated through established IWH communication vehicles” encompasses the following:

Using the format best suited to the findings, IWH shares plain-language findings through newsletter articles, research summaries, infographics, videos, policy briefings, media releases and/or articles tailored for external stakeholder publications. Dissemination vehicles include the Institute’s monthly e-newsletter IWH News, its quarterly newsletter At Work, and its social media channels, including Twitter, LinkedIn and YouTube channel. Findings are also shared via the Institute’s IWH Speakers Series webinars and at relevant stakeholder (non-academic) events. Finally, findings are shared in peer-review journals and at academic conferences. Through these dissemination vehicles, IWH reaches a wide range of audiences, including policy-makers (especially in employment, labour, disability and workers’ compensation), employers, workers, health and safety professionals, disability management professionals, public health practitioners, clinicians, academics, research funders and more.

Throughout the following pages, **acronyms** are used to refer to organizations with which most readers in Ontario’s Prevention System are likely familiar. The acronyms are spelled out below for reference, in alphabetical order.

CCOHS – Canadian Centre for Occupational Health & Safety
CCRW – Canadian Council on Rehabilitation & Work
CIHR – Canadian Institutes of Health Research
DLSPH – Dalla Lana School of Public Health
ESDC – Employment Standards Development Canada (Government of Canada)
HSAs – Ontario’s health and safety associations
IHSA – Infrastructure Health & Safety Association
IWH – Institute for Work & Health
KTE – knowledge transfer and exchange
MLTSD – Ministry of Labour, Training and Skills Development
OCRC – Occupational Cancer Research Centre (Ontario Health)
OHCOW – Occupational Health Clinics for Ontario Workers
OHS – occupational health and safety
PHAC – Public Health Agency of Canada
PSHSA – Public Services Health & Safety Association
RTW – return to work
SSHRC – Social Sciences and Humanities Research Council
WSIB – Workplace Safety & Insurance Board
WSN – Workplace Safety North
WSPS Workplace Safety Prevention Services

Note: All research team members are **affiliated** with the Institute for Work & Health unless otherwise indicated (i.e., Name/Organization)

PREVENTION OF WORK-RELATED INJURY AND ILLNESS

In this section, we provide an overview of the Institute's research plans for 2022/23 focused on the prevention of work-related injury and illness. Our portfolio of projects addresses vulnerable workers, the effectiveness of OHS programs, and working conditions and health. We indicate, where findings warrant, the projects that may result in an evidence-based guide, tool or other resource that may be useful to our non-research partners. Note that, for many of these research projects, the Institute's KTE staff will engage with employers, organized labour, health and safety associations, OHS professionals and other partners to act as advisers on the research and to support the transfer of research evidence to policy and practice when the research is completed.

Alignment to the 2021-26 Occupational Health and Safety Strategy

The project activities described in this section align to and support the objectives of the 2021-26 Occupational Health and Safety Strategy, *Prevention Works*.

In the year ahead, we will initiate a strong portfolio of research to strengthen information on the causes of occupational injury in Ontario. This aligns to the 2021-26 strategy of building and using the best evidence to target initiatives and measure performance.

We will also continue the Institute's substantial investments in evaluating the effectiveness of OHS training services in Ontario, with a focus on understanding the strengths and limitations of virtual OHS instruction formats. Over the course of the 2022/23 activity year, the Institute's research program will seek to identify additional opportunities to engage in the evaluation of OHS prevention interventions and programs, in support of the objective of the *Research Roadmap* to build evaluation capacity in the Ontario OHS system.

In alignment with the 2021-26 Occupational Health and Safety Strategy, the Institute's research program has a strengthened focus on supporting the needs of small business. This portfolio of work includes a qualitative study of the needs and motivations of small business owners or managers when it comes to OHS, as well as quantitative studies related to the incidence of work-related injury and illness in small businesses in Ontario.

The Institute's research program will also continue to focus on workplace cannabis use, the adverse health consequences of opioid use among Ontario workers, and the duration and intensity of physical activity associated with working conditions in Ontario. Findings from this research will support strengthened workplace knowledge and practices, and support workplaces to fulfill their OHS responsibilities.

[Understanding occupational injury risks in Ontario \(1175\)](#)

Description: The Expert Advisory Panel on Occupational Health & Safety reported to the Minister of Labour in December 2010. Legislation was passed in June 2011 implementing a range of recommendations from the panel, including the establishment of a Prevention Office within the Ministry with responsibility for developing and executing an integrated occupational health and safety (OHS) strategy for the province.

The Expert Advisory Panel included a recommendation to improve the indicators of OHS performance at both workplace and systems levels. In 2019, the Ontario Auditor-General recommended strengthening investments in research to better understand the effectiveness of measures to deter OHS violations. In responding to these recommendations, the MLTSD, as it is now called, made “to build and use the best evidence” a priority objective in its 2021-2026 OHS strategy, *Prevention Works*.

This project supports the implementation of this objective through the establishment of an Epidemiology Unit on Occupational Injury within IWH. Specific projects conducted under the auspices of the unit are described on their own pages below.

Objectives:

- Complete planning to define the scope of, and three-year workplan for, an Epidemiology Unit on Occupational Injury
- Identify sources of OHS information and labour market participation relevant to better understanding the distribution of occupational exposures leading to work-related injuries and illnesses
- Develop strategies to combine resources to create a more complete picture of OHS risks at the population level
- Initiate a range of epidemiologic studies to accomplish the Year 2 objectives in the workplan for the Epidemiology Unit on Occupational Injury

Method: Multi-method

Status: Ongoing (to be completed in 2025)

Research Team and Roles: Cameron Mustard (Principal Investigator), Avi Biswas, Victoria Landsman, Lynda Robson, Peter Smith, Faraz Vahid Shahidi (Research Team), Qing Lao (Analyst), Sabrina Imam (Coordinator), Ron Saunders (Consultant)

Collaboration and Partnerships: A project team within the MLTSD’s Prevention Office will contribute to the definition of objectives and timelines for this project.

Knowledge Transfer Strategies: Research findings will be tailored for lay audiences and disseminated through established IWH communication vehicles.

Target Audience: MLTSD, OHS policy-makers and decision-makers in Ontario, employers, workers, labour, OHS professionals

Linkage to *Prevention Works*: Objective 1: Build and use the best evidence, Objective 2: Improve OHS knowledge and practices

Funder(s): MLTSD

Project findings available in Open Access journals, platforms, or repositories (If not, please indicate if a preprint will be posted publicly): None to date

[Enhancing Ontario labour force denominator information \(1176\)](#)

Description: This project is being conducted by the Institute's Epidemiology Unit on Occupational Injury to help fulfil the MLTSD's objective to 'build and use the best evidence' as outlined in *Prevention Works*, its five-year (2021-2026) strategy for the province's OHS system.

Understanding the rate at which something occurs (e.g. per person or unit of time) is a core principle in epidemiology. Rates allow for meaningful comparisons of the risk of an event occurring (e.g. work-related injury) among different segments of the labour market. For example, rates allow risk-of-injury comparisons by gender, age, industry, and/or size of workplace.

While both emergency department and workers' compensation claims are sources of information on injury events in Ontario, only workers' compensation data includes detailed information on relevant measures such as occupation, industry and workplace size. However, the challenge with workers' compensation data as a source of injury information is that not all labour force participants in Ontario are insured with the WSIB. As such, labour force estimates have to be adjusted for differential WSIB coverage before they are combined with workers' compensation claims to produce rates of claims per worker or per hour worked. It is also important to examine rates of workers' compensation claims across different types of occupational exposures to inform prevention targets. Available sources of information on occupational exposures have to be linked to Canadian occupational coding standards to enable them to be used in estimating claim rates.

Objectives:

- Estimate rates of workers' compensation claims and emergency department visits in the Ontario labour market

Method: Quantitative

Status: New (to be completed Q4 2024)

Research Team and Roles: Peter Smith (Principal Investigator), Faraz Vahid Shahidi (Researcher), Qing Liao (Analyst)

Collaboration and Partnerships: MLTSD (Prevention Division and Data Analytics and Research Branch), WSIB (Advanced Analytics)

Knowledge Transfer Strategies: Research findings will be tailored for lay audiences and disseminated through established IWH communication vehicles.

Target Audience: MLTSD, OHS policy-makers and decision-makers in Ontario, employers, workers, labour, OHS professionals

Linkage to *Prevention Works*: Objective 1: Build and use the best evidence, Objective 2: Improve OHS knowledge and practices

Funder(s): MLTSD

Project findings available in Open Access journals, platforms, or repositories (If not, please indicate if a preprint will be posted publicly): None to date

Trends in the severity of work-related injury in Ontario (1177)

Description: This project is being conducted by the Institute's Epidemiology Unit on Occupational Injury to help fulfil the MLTSD's objective to 'build and use the best evidence' as outlined in *Prevention Works*, its five-year (2021-2026) strategy for the province's OHS system.

The project will develop a methodology to classify the severity of work-related injuries and illnesses presenting to hospital emergency departments in Ontario over the period 2004 to 2021. Analyses of changes in the incidence of severe injury over time will inform understanding of effective OHS prevention efforts over the past decade and will identify severe injury hazards for priority attention over the period 2021-2026.

Objectives:

- Acquire emergency department records for the period 2018-2021 to supplement records for the period 2004-2017 currently held by the Institute
- Complete classification of injury severity for 2,000,000 emergency department records for the treatment of work-related injury and illness
- Analyze trends over time in the incidence of severe injury, by economic sector and employer size

Method: Quantitative

Status: New

Research Team and roles: Cameron Mustard (Principal Investigator), Avi Biswas, Victoria Landsman, Peter Smith (Research Team)

Collaboration and Partnerships: MLTSD's Prevention Office

Knowledge Transfer Strategies: Research findings will be tailored for lay audiences and disseminated through established IWH communication vehicles.

Target Audience: MLTSD and WSIB policy-makers, Ministry inspectorate, large and small employers, worker representatives.

Linkage to *Prevention Works*: Objective 1: Build and use the best evidence; Objective 4. Make OHS easier for small businesses

Funders: MLTSD

Project findings available in Open Access journals, platforms, or repositories (If not, please indicate if a preprint will be posted publicly): None to date

Evaluating the relative effectiveness of distance learning in JHSC certification training (1178)

Description: This project is being conducted by the Institute's Epidemiology Unit on Occupational Injury to help fulfil the MLTSD's objective to 'build and use the best evidence' as outlined in *Prevention Works*, its five-year (2021-2026) strategy for the province's OHS system.

The project will measure the relative effectiveness of three different training modalities – in-class, distance and e-learning – by rigorously measuring learning outcomes among Ontario workers taking JHSC Certification Part 1 training delivered by three health and safety associations.

Objectives:

- Use surveys to measure the JHSC-relevant knowledge of Ontario workers before and after they take JHSC Certification Part 1 training
- Analyze survey data to determine whether in-class, distance and e-learning training differ in their impact on JHSC-relevant knowledge and other learning outcomes
- Provide evaluative evidence applicable to the continuous improvement of certification training

Method: Quantitative

Status: Ongoing (to be completed in Q4 2023)

Research Team and Roles: Lynda Robson, Cameron Mustard (Co-Principal Investigator), Avi Biswas, Victoria Landsman, Faraz Vahid Shahidi, Peter Smith (Research Team), Victoria Nadalin (Analyst)

Collaboration and Partnerships: MLTSD's Prevention Office, IHSA, PSHSA, WSPS

Knowledge Transfer Strategies: This project uses an integrated KTE approach. Research findings will be tailored for lay audiences and disseminated through established IWH communication vehicles.

Target Audience: MLTSD, HSAs, HSA-based training providers, private-sector training providers, employers, workers, JHSC members, OHS professionals

Linkage to *Prevention Works*: Objective 1: Build and use the best evidence, Objective 2: Improve OHS knowledge and practices, Objective 3: Support workplace parties to fulfil their OHS roles and responsibilities and achieve excellence

Funders: MLTSD

Project findings available in Open Access journals, platforms, or repositories (If not, please indicate if a preprint will be posted publicly): None to date

Understanding the injury experience of Ontario small businesses through workers' compensation claims data (1179)

Description: This project is being conducted by the Institute's Epidemiology Unit on Occupational Injury to help fulfil the MLTSD's objective to 'build and use the best evidence' as outlined in *Prevention Works*, its five-year (2021-2026) strategy for the province's OHS system.

The project will provide a description of the injury claim experience of Ontario small businesses, by sector and enterprise size, as well as identify indicators of higher risk for use in targeting initiatives.

Objectives:

- Analyze workers' compensation data descriptively to produce injury risk profiles by sector and workplace size (based on number of employees)
- Develop indicators of higher risk in small businesses, by sector
- Provide a better understanding, by sector, of the performance of smaller businesses in OHS relative to larger businesses
- Support the targeting of prevention initiatives by identifying sectors in which small businesses are especially at higher risk

Method: Quantitative

Status: New (to be completed Q4)

Research Team and Roles: Lynda Robson (Principal Investigator), Cameron Mustard, Peter Smith (Research Team)

Collaboration and Partnerships: MLTSD's Prevention Office

Knowledge Transfer Strategies: Research findings will be tailored for lay audiences and disseminated through established IWH communication vehicles.

Target Audience: MLTSD, WSIB, HSAs, small businesses in Ontario

Linkage to *Prevention Works*: Objective 1: Build and use the best evidence, Objective 4: Make OHS easier for small businesses

Funders: MLTSD

Project findings available in Open Access journals, platforms, or repositories (If not, please indicate if a preprint will be posted publicly): None to date

Taking 9 to 5? Examining the impact of cannabis legalization on workplace cannabis use and perceptions among Canadian workers (1376)

Description: On October 17, 2018, cannabis use for non-medical purposes was legalized in Canada. There is the potential for cannabis use to spill over to the workplace, which could have OHS consequences. We conducted a survey of 2,014 workers across Canada from a wide range of industries and occupations to better understand pre-legalization workplace use patterns and perceptions. Findings suggest some workers engage in potentially risky workplace use and demonstrate problematic perceptions of the risks of using cannabis in the workplace. Through this study, we will continue to collect information from this group and expand the sample of workers to determine whether legalization is associated with changes in workplace use and related perceptions and norms.

Objectives:

- Estimate the magnitude of workplace cannabis consumption and impairment in Canada
- Evaluate the impact of cannabis legalization in Canada on cross-sectional and longitudinal patterns of workplace cannabis consumption, perceptions of risk and impact, workplace cannabis norms, and perceived availability in the workplace
- Examine whether trends in these patterns, perceptions and norms differ according to age, sex, labour market gender roles, occupational groups, and geographic location
- Examine the reciprocal relationship between potentially modifiable factors (perceptions of risk, workplace cannabis norms, perceived cannabis availability in the workplace) and workplace cannabis use over time
- Understand the short-term effects of legalization on workplaces, thus informing the development of policies, practices and prevention initiatives to ensure lower risk use among Canadian workers

Method: Quantitative

Status: Ongoing (to be completed in Q4)

Research Team and Roles: Nancy Carnide, Peter Smith (Principal Investigators), Andrea Furlan, Victoria Landsman, Michael Frone/University at Buffalo, Amy Porath//Canadian Centre on Substance Use and Addiction, Shawna Meister/Canadian Centre on Substance Use and Addiction (Research Team), Hyunmi Lee (Analyst), Sara Macdonald (KTE Lead)

Collaboration and Partnerships: Health Canada, ESDC, PSHSA, Canadian Centre on Substance Use and Addiction, CCOHS, MLTSD, Ontario Building Trades, Unifor, WSN, WSPS, WorkSafeBC, Nova Scotia Trucking Safety Association, and Federally Regulated Employers – Transportation and Communications

Knowledge Transfer Strategies: This project uses an integrated KTE approach. Research findings will be tailored for lay audiences and disseminated through established IWH communication vehicles.

Target Audience Employers, worker representatives, HSAs, OHS professionals and policy-makers

Linkage to *Prevention Works*: Objective 1: Build and use the best evidence, Objective 2: Improve OHS knowledge and practices.

Funders: MLTSD, Canadian Institutes of Health Research (CIHR)

Project findings available in Open Access journals, platforms, or repositories (If not, please indicate if a preprint will be posted publicly): None to date

How much movement do workers need to be healthy? Understanding the activity patterns of Canadians at work and outside of work, and their association with overall health (1395)

Description: An increasingly sedentary society has necessitated efforts to promote physical activity, and the workplace provides an ideal setting for activity promotion since more than 15 million Canadians spend half their days at work. However, activity at work might not confer the same health benefits as activity outside work. Many people might not find it possible to follow activity recommendations at work because of demanding work schedules, an inability to make work-related decisions, and unsupportive workplace environments. Furthermore, the activity patterns of men and women can be influenced by biological and social factors even when working in similar jobs. A better understanding of real-world workers' movement patterns can inform health recommendations that workers can feasibly undertake at work. This study provides an opportunity to examine movement behaviours both during work and outside of work among a large sample of workers to gain insight into variations in risk of developing cardiovascular and metabolic diseases, including Type 2 diabetes and metabolic syndrome.

Objectives:

- Describe the movement patterns of Canadian workers at work and outside of work using accelerometer-based among a large sample of workers
- Explore differences in patterns between older and younger workers, between men and women
- Identify which patterns are associated with optimal cardiometabolic health profiles
- Inform workers of movement patterns that are both feasible and beneficial
- Inform public health recommendations on whether certain movement patterns at work offer protective cardiometabolic benefits

Method: Quantitative

Status: Ongoing (to be completed in Q3 2023)

Research Team and Roles: Aviroop Biswas (Principal Investigator), Cameron Mustard, Peter Smith, Stephanie Prince Ware/PHAC (Research Team)

Collaboration and Partnerships: PHAC

Knowledge Transfer Strategies: Research findings will be tailored for lay audiences and disseminated through established IWH communication vehicles.

Target Audience Public health, employers, workers, public at large

Linkage to *Prevention Works*: Objective 1: Build and use the best evidence

Funders: MLTSD, CIHR

Project findings available in Open Access journals, platforms, or repositories (If not, please indicate if a preprint will be posted publicly): None to date

Understanding cannabis use and associated long-term recovery and return-to-work outcomes among Ontario workers following a work-related injury or illness (1410)

Description: Interest is growing in the role of medical cannabis for the treatment of work-related health conditions. However, little is known about how workers with work-related conditions use cannabis and how their use may relate to recovery. In this study, workers' compensation claimants who participated in the Ontario Life After Work Injury Study (OLAWIS; 2320) are being re-interviewed 18 months after their first interview (about three years after filing their workers' compensation claim). The aim is to better understand their experiences with using cannabis for their work-related condition, as well as their experiences seeking medical authorization and workers' compensation reimbursement for this use. Subsequent qualitative interviews with select workers from the survey sample will provide important context to these issues.

Objectives:

- Survey workers' compensation claimants who participated in the first phase of OLAWIS
- Conduct more in-depth interviews with select workers from the survey sample
- Do cross-sectional and longitudinal analyses between condition-related use and recovery outcomes, using workers' compensation claims data
- Describe condition-related cannabis use patterns, changes in use from 18 months to 36 months post-claim, and the factors considered by workers when deciding whether to use cannabis for their work-related condition
- Describe patterns of medical authorization and workers' compensation reimbursement for condition-related use and the factors considered by workers when deciding whether to request medical authorization and reimbursement
- Evaluate the cross-sectional and longitudinal association between condition-related use and recovery outcomes
- Inform programs, policies and practices around cannabis use among injured workers, including identifying the worker subgroups most likely to benefit from guidance around use

Method: Multi-method

Status: Ongoing; scheduled to be completed in Q2/2024

Research Team and Roles: Nancy Carnide, Peter Smith (Principal Investigators), Andrea Furlan, Cameron Mustard, Stephanie Premji/McMaster University (Research Team), Colette Severin (Project Coordinator), Sara Macdonald (KTE Lead)

Collaboration and Partnerships: WSIB, Canadian Centre on Substance Use and Addiction, Prevention Link (Ontario Federation of Labour), Injured Workers Community Legal Clinic, WSPS, Canadian Injured Workers Alliance, Gratton Consulting

Knowledge Transfer Strategies: This project uses an integrated KTE approach. Research findings will be tailored for lay audiences and disseminated through established IWH communication vehicles.

Target Audience: Health-care providers, injured worker advocates, workers' compensation authorities.

Linkage to *Prevention Works*: Objective 1: Build and use the best evidence

Funders: MLTSD, CIHR

Project findings available in Open Access journals, platforms, or repositories (If not, please indicate if a preprint will be posted publicly): None to date

Opioid-related harms among Ontario workers: leveraging the Occupational Disease Surveillance System as a surveillance tool for working populations (1425)

Description: Canada continues to face an unprecedented opioid crisis that has resulted in profound consequences for many Canadians. Current surveillance systems in Canada, aimed at monitoring opioid use and harms across the population, typically have no or incomplete information on employment-related characteristics. A collaboration between IWH and OCRC aims to fill this gap.

OCRC has developed a unique surveillance program called the Occupational Disease Surveillance System (ODSS), originally designed to detect and monitor risks of work-related disease in Ontario workers. The study aims to adapt the ODSS and establish a surveillance program to monitor opioid-related harms among injured workers and the Ontario workforce more broadly. By updating the ODSS and linking data from recent compensation claims to health-care data, the ODSS will be able to capture current trends in opioid-related hospitalizations and emergency department visits among Ontario workers.

Objectives:

- Adapt and expand the ODSS to examine opioid-related adverse health events
- Monitor and describe temporal trends of opioid-related hospitalizations and emergency department visits among Ontario workers since 2006
- Identify the demographic, nature of injury, and occupational characteristics associated with opioid-related hospitalizations and emergency department visits
- Compare incident rates of opioid-related harms in the ODSS to those in the general population of Ontario
- Develop a surveillance program that identifies and monitors opioid-related harms in the Ontario working population
- Inform targeted prevention and harm-reduction activities by understanding whether rates of opioid-related harms in particular worker subgroups are changing over time

Method: Quantitative

Status: Ongoing (to be completed in Q4)

Research Team and Roles: Nancy Carnide, Paul Demers/OCRC (Principal Investigators), Andrea Furlan, Nathan Debono/OCRC, Jeavana Sritharan/OCRC, Jill MacLeod/OCRC, Chaojie (Daniel) Song/OCRC (Research Team), Sara Macdonald (KTE Lead)

Collaboration and Partnerships: WSIB, MLTSD, Public Health Ontario, Ontario Building Trades, International Brotherhood of Boilermakers.

Knowledge Transfer Strategies: Research findings will be tailored for lay audiences and disseminated through established IWH communication vehicles.

Target Audience: Health-care providers, injured worker advocates, workers' compensation organizations, employers, OHS and public health policy-makers

Linkage to *Prevention Works*: Objective 1: Build and use the best evidence

Funders: MLTSD, PHAC

Project findings available in Open Access journals, platforms, or repositories (If not, please indicate if a preprint will be posted publicly): None to date

Understanding OHS motivations and needs in small business (1430)

Description: The WSIB launched the Health and Safety Excellence Program (HSEP) in late 2019. The program aims to enrol a minimum of 4,000 Ontario employers to participate in the adoption of up to 40 health and safety best practice elements that align to the ISO45001 *Occupational Health and Safety Management System*. The participation of smaller firms in the HSEP is substantially less than the proportion of all firms registered with the WSIB. While employees of smaller firms represent 26% of the WSIB's covered workforce, half of traumatic fatalities and 45% of critical injuries occur in smaller businesses. To improve the participation of smaller businesses, the HSEP has adjusted several program features, with the broad objective of increasing the enrollment and participation of smaller businesses in HSEP. This project will fulfil the commitment of WSIB and MLTSD to undertake a study of small business engagement.

Objectives:

- Understand the needs, motivations and experiences of small businesses in the Health and Safety Excellence Program
- Understand effective approaches to the delivery of OHS services to small businesses and ways to help small businesses improve health and safety and build strong health and safety cultures

Method: Qualitative

Status: New (to be completed Q4)

Research Team and roles: Cameron Mustard, Basak Yanar (Principal Investigators) (Research Team)

Collaboration and Partnerships: IHSA, PSHSA, WSN, WSPS

Knowledge Transfer Strategies: This project uses an integrated KTE approach. Research findings will be tailored for lay audiences and disseminated through established IWH communication vehicles.

Target Audience: WSIB, MLTSD, HSAs, small businesses in Ontario

Linkage to *Prevention Works*: Objective 1: Build and use the best evidence, Objective 4: Make OHS easier for small businesses

Funders: MLTSD

Project findings available in Open Access journals, platforms, or repositories (If not, please indicate if a preprint will be posted publicly): None to date

Building disability confidence in the Canada's financial sector (3235)

Description: Using an evidence-informed intersectional approach, this project aims to develop and launch an online toolkit specifically designed for the Canadian financial sector, featuring products, guidance and services designed to fulfil employer responsibilities under the *Accessible Canada Act* while also meeting the talent needs of the sector. This toolkit will aid managers and staff across all departments to define and understand 'disability confidence,' and what it means to be confident and not just compliant in all areas pertaining to disability. A secondary objective of our project is to bring the community of disability-focused organizations together to collectively support the development of the toolkit, while ensuring that all organizations' unique viewpoints are captured and incorporated within the final product.

Objectives:

- Develop and launch an online toolkit specifically designed for the Canadian financial sector, featuring products, guidance and services that fulfil employer responsibilities under the *Accessible Canada Act* while also meeting the talent needs of the sector
- Lead the development of two modules in the toolkit and develop two evidence-based resources: one focused on performance management, and the other on determining the level of and fostering engagement among workers with disabilities
- Bring the community of disability-focused organizations together to collectively support the development of the toolkit and ensure their viewpoints are incorporated into toolkit

Method: Qualitative

Status: Ongoing (to be completed in Q3)

Research Team and roles: Emile Tompa (Principal Investigator), Alexis Buettgen, Emma Irvin (Research Team), Sara Lacarte (Student)

Collaboration and Partnerships: CCRW, Business Disability International, Alliance for Equality of Blind Canadians, Autism Speaks Canada, Barrier Free Saskatchewan, BC Aboriginal Network on Disability Society, Inclusion Canada, Canadian Autism Spectrum Disorder Alliance, Canadian Cultural Society of the Deaf, Canadian Council of the Blind, Canadian Hard of Hearing Association, Canadian Mental Health Association, Canadian National Institute for the Blind, Council of Canadians with Disabilities, Disabled Women's Network of Canada, Every Canadian Counts Coalition, Eviance, Institute for Research and Development on Inclusion and Society, Manitoba League of Persons with Disabilities, March of Dimes, Millions Missing Canada, Muscular Dystrophy Canada, National Education Association of Disabled Students, National ME/FM Action Network, Spinal Cord Injury Canada

Knowledge Transfer Strategies: Research findings will be tailored for lay audiences and disseminated through established IWH communication vehicles.

Target Audience: Canadian financial sector employers (including managers and human resources professionals), employment service providers who work with job-seekers with disabilities, policy-makers focused on employment services for persons with disabilities, and disability community representatives

Linkage to *Prevention Works*: Objective 1. Build and use the best evidence, and Objective 3: Support workplace parties to fulfil their OHS roles and responsibilities and achieve excellence

Funders: MLTSD, CCRW

Project findings available in Open Access journals, platforms, or repositories (If not, please indicate if a preprint will be posted publicly): None to date

Evidence-informed workplace policies and practices for the prevention of PTSD work disability (3240)

Description: The prevalence of post-traumatic stress injuries (PTSDs) among first responders is high and often leads to work disability. Recent studies have shown that organizational policies and practices have an important impact on PTSDs; however, the scientific evidence about the effectiveness of PTSD interventions is limited. Regardless of the state of the scientific evidence, first responder organizations must develop ways to protect workers. This project will engage with Alberta first responder stakeholders to co-develop an evidence summary on current, best and effective interventions to manage and prevent PTSDs, to ensure the findings are relevant, and to increase the uptake of this knowledge in Alberta.

Objectives:

- Conduct an environmental scan of international first responder organizations to look for current approaches to PTSD and work disability prevention
- Conduct a review of reviews of the scientific literature
- Conduct interviews and focus groups with Alberta first responder stakeholders to gather current PTSD work disability prevention policies, programs and practices
- Explore and better understand the workplace and organizational policies and practices for preventing and managing PTSDs among first responders
- Synthesize the evidence and from an international environmental scan on PTSDs among first responders
- Improve guidance on workplace policies and practices on preventing and managing PTSDs among first responders, with the ultimate aim of reducing PTSD-related work disability

Method: Multi-method

Status: Ongoing (to be completed in Q2)

Research Team and Roles: Dwayne Van Eerd, Emile Tompa (Principal Investigators), Emma Irvin, Doug Gross/University of Alberta, Charl Els/University of Alberta, Sebastian Straube/University of Alberta, Suzette Bremault-Phillips/University of Alberta, Nick Carleton/University of Regina (Research Team), Akshay Mohan (Student), Joann Varickanickal (Project Coordinator)

Collaboration and Partnerships: Megan McElheran/WGM Psychological Services Ltd.

Knowledge Transfer Strategies: This project uses an integrated KTE approach. Research findings will be tailored for lay audiences and disseminated through established IWH communication vehicles.

Target Audience: First responders (police, firefighters, paramedics) in Alberta and beyond

Linkage to *Prevention Works*: Objective 1: Build and use the best evidence, Objective 3: Support workplace parties to fulfil their OHS roles and responsibilities and achieve excellence

Funders: MLTSD, Government of Alberta

Project findings available in Open Access journals, platforms, or repositories (If not, please indicate if a preprint will be posted publicly): None to date

Using decision-tree machine learning to identify worker movement typologies (3245)

Description: Although physical activity has important health benefits, a minority of Canadians are regularly physically active. There are many barriers to physical activity, and these barriers are complex operating at both individual and environmental levels. Work factors, such as job demands and social and physical working conditions, are also barriers to physical activity for many of the 18.5 million employed Canadians who spend most of their days at work.

Yet, many interventions to increase physical activity focus on specific factors. Few studies have explored the complexity of interrelated and, potentially, synergistic relationships. These include relationships among factors related to socioeconomics, health status, gender, social responsibilities, physical environment and work. This study aims to fill this gap.

Objectives:

- Use Classifying and Regression Trees (CART), a form of supervised decision-tree machine learning, to determine worker characteristics associated with movement patterns at work and outside of work
- Compare CART findings to those obtained through traditional, regression-based statistical methods
- Understand whether supervised decision-tree machine learning offers a complimentary perspective to understanding complex worker characteristics (i.e., typologies) associated with movement patterns at work and outside of work and
- Build a 'proof-of-concept' for the use of decision-tree-based machine learning involving large-scale information (via data linkages) to identify typologies of work- and non-work-related physical activity
- Understand how to more clearly collect information on upstream determinants of health related to correlates that affect individuals, working lives and society
- Develop a baseline comparator for future, post-pandemic typology work classifications, allowing for assessments of how physical activity characteristics might have changed due to COVID-19 resulting in more work being done from home

Method: Quantitative

Status: Ongoing (to be completed in Q4)

Research Team and Roles: Aviroop Biswas (Principal Investigator), Kathleen Dobson, Faraz Vahid Shahidi, Peter Smith, Stephanie Prince/PHAC, Daniel Fuller/Memorial University (Research Team)

Collaboration and Partnerships: PHAC, Memorial University

Knowledge Transfer Strategies: Research findings will be tailored for lay audiences and disseminated through established IWH communication vehicles.

Target Audience: Public health, employers, workers, public at large, public health academics and policy-makers

Linkage to *Prevention Works*: Objective 1: Build and use the best evidence

Funders: MLTSD, DLSPH

Project findings available in Open Access journals, platforms, or repositories (If not, please indicate if a preprint will be posted publicly): None to date

Examining sex/gender differences in exposures to workplace-acquired communicable disease: A systematic review (3405)

Description: In 2019, Canadian women 15 years and older represented nearly half (47.4%) of the labour force, compared to 37.6% in 1976—a percentage increase of over 15%. Yet much of our understanding of work exposures are still male-centric. Social (gender) and biological (sex) differences can affect the health of men and women in different ways.

This is particularly true in the case of workplace-acquired communicable diseases (i.e., illnesses caused by an infectious agent). Social factors such as the types of jobs and industries in which men and women work can influence their exposure to communicable diseases. For example, men are more likely to work in outdoor environments (e.g., forestry and farm work) and are more likely to be exposed to tick-borne infections. In the case of the ongoing COVID-19 pandemic, the gendered nature of the frontline and essential workforce can also lead to different infection transmission/exposures in men and women. Biological factors from differences in immunity to infections also can affect how likely men and women are exposed to communicable diseases in their workplaces.

While gender/sex considerations are increasingly included in work and health research, it is not often the focus of studies reporting patterns of workplace-acquired communicable disease exposure.

Objectives:

- Review the literature to examine whether men and women within the same occupations have different exposures to workplace-acquired communicable diseases
- Identify the occupations and industries in which gender/sex inequalities in work-related communicable disease exposure exist
- Inform primary prevention approaches to ensure men and women are equally protected from workplace-acquired communicable diseases

Method: Systematic Review

Status: Ongoing, (to be completed in 2023/24)

Research Team and roles: Aviroop Biswas (Principal Investigator), Mieke Koehoorn/University of British Columbia (UBC), Peter Smith, Heather Johnston, Emma Irvin, Annalee Yassi/UBC (Research Team)

Collaboration and Partnerships: AgSafe, Women in Occupational Health & Safety Society, BC Nurses Union, BC Federation of Labour, BC General Employees' Union, WorkSafeBC, Manufacturing Safety Alliance of BC

Knowledge Transfer Strategies: This project uses an integrated KTE approach. Research findings will be tailored for lay audiences and disseminated through established IWH communication vehicles .

Target Audience: Primary prevention policy-makers and stakeholders in sectors and industries where vulnerability to disease transmission has been exposed by the COVID-19 pandemic, such as health care, agriculture, education, and food supply; groups with an interest in gender and sex issues

Linkage to *Prevention Works*: Objective 1: Build and use the best evidence

Funders: MLTSD, WorkSafeBC

Project findings available in Open Access journals, platforms, or repositories (If not, please indicate if a preprint will be posted publicly): None to date

PREVENTION AND MANAGEMENT OF WORK DISABILITY

The prevention of work disability remains a strong research focus at the Institute for Work & Health, and will continue to address ongoing and emerging issues, including optimal return-to-work (RTW) practices to prevent work disability and workplace environments that meet the needs of workers with health conditions/injuries in order to sustain productivity and prevent work disability. As is the case with our injury prevention research, KTE staff will engage non-research partners—including employers, workers, clinical practitioners, ergonomists, disability managers, RTW coordinators, OHS professionals and more—in many of these research projects to support the ways that research evidence is relevant and used to shape policy and practice.

IWH has conducted actionable research for more than two decades to support improvements in workplace practices to prevent disability. The Institute will continue this commitment in 2022/23. We will continue to focus on workplace accommodations and communications that affect workers across all ages and with a range of conditions, from occupational injuries and illnesses to non-occupational episodic and chronic health conditions. In 2022/23, the Institute will begin a large, multi-year research program to increase the capacity and confidence of employers to sustainably employ persons with disabilities.

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 to build this strong portfolio of research in 2022/23. For example, several studies describe the long-term outcomes of people with work-related injuries or illnesses after they are no longer engaged with Ontario workers' compensation system.

In 2022/23, we will continue our work in measuring health and function as it relates to employment needs and supports. More specifically, our research is addressing the employment participation of young Canadian adults with disabilities, as well as examining how to best future-proof young Canadians with disabilities for the changing labour market. We are also continuing our work on a multi-stakeholder pilot project aimed at developing, implementing and evaluating the first occupational and environmental medicine tele-mentoring program network of its kind.

Centre for Research on Work Disability Policy (CRWDP): Envisioning the future of disability policy in Canada (2195)

Description: Illness and disability touch most people at some point over their lifetime, affecting their ability to participate in the Canadian workforce. Yet the policy governing work disability tends to be piecemeal and uncoordinated and attempts to revamp Canadian work disability policy systems have failed to address core changes to workplaces and labour markets.

This eight-year initiative, a transdisciplinary enquiry into the future of work disability policy and labour-market engagement, aims to identify how people, when disabled, can be better retained and integrated into the Canadian labour market.

When referring to work disability policy, the project means policy related to any federal, provincial or territorial program in Canada that shapes income security and labour-market engagement for work-disabled individuals. The project also includes employers in the disability policy system because they play an important role in shaping opportunities for work-disabled individuals and also have specific obligations under some programs and laws.

Objectives:

- Provide a forum for within- and cross-provincial and national dialogue on challenges and opportunities for improving the work disability policy system for working age individuals
- Identify problems and challenges associated with program coordination and complexity
- Identify relevant and favourable alternative approaches to system design or service provision
- Mobilize knowledge developed within and outside of the initiative in order to inform policy
- To build capacity for research and knowledge mobilization on the topic of work disability policy

Method: Multi-method

Status: Ongoing, scheduled to be completed in Q1

Research Team and roles: Emile Tompa (Principal Investigator), Arif Jetha, Ron Saunders, plus over 60 academics and over 60 partners from across the country (Research Team), Sabrina Imam (Project Coordinator), Kathy Padkapayeva (Research Assistant)

Collaboration and Partnerships: Over 60 disability communities and program provider representatives

Knowledge Transfer Strategies: This project uses an integrated KTE approach. Research findings will be tailored for lay audiences and disseminated through established IWH communication vehicles.

Target Audience: Canadian work disability policy system stakeholders, including injured worker/ disability community representatives, employers, policy-makers, disability program administrators and service providers.

Linkage to *Prevention Works*: Objective 1: Build and use the best evidence

Funders: MLTSD, SSHRC

Project findings available in Open Access journals, platforms, or repositories (If not, please indicate if a preprint will be posted publicly): <https://www.crwdp.ca/en/home>

Accommodating and Communicating about Episodic Disabilities (ACED): A partnership to deliver workplace tools and resources to sustain the employment of people with chronic, episodic conditions (2271)

Description: Many chronic physical and mental health diseases cause episodic disability and not continuous problems. People may have periods of well-managed health punctuated by periods of more severe symptoms that limit activities, often unpredictable and invisible to others. As such, there may be misperceptions or stigma about a worker's abilities or motivation. 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. This partnership aims to enhance the work sustainability of Canadians with chronic, episodic conditions through the development of easily accessed, evidence-based tools, resources and training that protects privacy and facilitates communication and accommodation planning among workers, supervisors and others in the workplace.

Objectives:

- Consolidate and enhance existing evidence for toolkit development.
- Develop new evidence-informed resources, including communication tools, job analysis and accommodation planning tools, and skills training for supervisors and HR/disability managers.
- Pilot test and evaluate the toolkit in diverse workplaces, including conducting cost analyses.
- Expand the evidence base to include greater attention to sex/gender, age/life course, diverse employment contexts and episodic conditions.
- Develop new researcher capacity in disability studies and build new workplace partnerships.

Method: Multi-method

Status: Ongoing, (to be completed in Q1 2025)

Research Team and Roles: Monique Gignac (Principal Investigator), Dorcas Beaton, Curtis Breslin, Emma Irvin, Arif Jetha, Lahmea Navaratnerajah, Ron Saunders, Peter Smith, Emile Tompa, Dwayne Van Eerd, Renee-Louise Franche/WorkSafeBC, Joy MacDermid/University of Western Ontario, Aaron Thompson/University of Toronto, William Shaw/University of Connecticut Health Center (Research Team), Julie Bowring (Project Coordinator), Sabrina Tonima (Knowledge Exchange Associate)

Collaboration and Partnerships: Arthritis Society, Canada Life's Workplace Strategies for Mental Health, Canadian Mental Health Association, Crohn's & Colitis Canada, Mindful Employer Canada, Multiple Sclerosis Society of Canada, MLTSD, Realize Canada, University of Toronto

Knowledge Transfer Strategies: This project uses an integrated KTE approach. Research findings will be tailored for lay audiences and disseminated through established IWH communication vehicles.

Target Audience: Workers with episodic conditions, supervisors, disability managers, organizations serving people with episodic conditions

Linkage to *Prevention Works*: Objective 1. Build and use the best evidence, Objective 3: Support workplace parties to fulfil their OHS roles and responsibilities and achieve excellence

Funders: MLTSD, CIHR

Project findings available in Open Access journals, platforms, or repositories (If not, please indicate if a preprint will be posted publicly): Gignac MAM, Jetha A, Ginis KAM, Ibrahim S. Does it matter what your reasons are when deciding to disclose (or not disclose) a disability at work? The association of workers' approach and avoidance goals with perceived positive and negative workplace outcomes. *J Occup Rehabil.* 2021;31(3):638-51

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

Description: 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 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). Currently, there is little data examining how older workers (50-plus years) make decisions about whether or not to communicate their job accommodation needs and, if they do decide to, to whom, when and how. This study seeks to understand the processes related to older workers' communication of accommodation and other needs, including the barriers and facilitators.

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, timing and goals of communicating these needs
- Examine the relationships among facets of communication (e.g., reasons, timing, recipients of disclosure), workplace support offered and employment outcomes
- Inform workplace practices and policies and help older workers sustain employment and take advantage of the financial, personal and social benefits of work

Method: Qualitative

Status: Ongoing (to be completed in Q4)

Research Team and Roles: Monique Gignac (Principal Investigator), Arif Jetha, Faraz Vahid Shahidi, Joy Cameron/University of Toronto, Vicki Kristman/Lakehead University (Research Team), Julie Bowring (Project Coordinator)

Collaboration and Partnerships: Not applicable

Knowledge Transfer Strategies: This project uses an integrated KTE approach. Research findings will be tailored for lay audiences and disseminated through established IWH communication vehicles.

Target Audience: Workers, especially older workers, employers (e.g., supervisors, HR professionals), disability managers, occupational health professionals, insurers, labour force experts and policy-makers, community organizations focused on aging, employment, disability or caregiving

Linkage to *Prevention Works*: Objective 1: Build and use the best evidence

Funders: MLTSD, SSHRC

Project findings available in Open Access journals, platforms, or repositories (If not, please indicate if a preprint will be posted publicly): None to date

Financial incentives to promote employment of people with disabilities: when and how do they work best? (2297)

Description: Financial incentives (FIs) for employers to recruit, retain and promote persons with disabilities take many forms. They are used in Canada and elsewhere to address low rates of employment among people with disabilities.

In Canada, the federal government directly operates programs in this domain and supports other initiatives through transfer payments to the provinces. The funds allocated to employment support activities are substantial. However, little research has been done examining how and when financial incentives work to improve employment opportunities for people with disabilities.

Objectives:

- Develop a map of the Canadian FIs policy arena and the key stakeholders who engage in it with details of the characteristics of program offerings and funds allocated
- Undertake an international environmental scan of good practices in the use of FIs
- Develop case studies using qualitative and quantitative methods that contextualize how and when FIs work well or do not work well and why
- Develop contextualized, evidence-informed resources for stakeholders (including government and employer representatives) on best practices in the use of FIs

Method: Multi-method

Status: Ongoing (to be completed in Q4)

Research Team and Roles: Emile Tompa, Rebecca Gewurtz/McMaster University (Principal Investigators), Emma Irvin, Heather Johnston, Cindy Moser, Dan Samosh (Research Team), Kathy Padkapayeva (Project Coordinator)

Collaboration and Partnerships: Maureen Haan/CCRW, Abdou Saouab/ESDC, Michael MacDonald/Jazz Aviation

Knowledge Transfer Strategies: This project uses an integrated KTE approach. Research findings will be tailored for lay audiences and disseminated through established IWH communication vehicles.

Target Audience: Federal and provincial/territorial governments and policy-makers, service providers who provide job development, matching and support services for workers with disabilities and employers.

Linkage to *Prevention Works*: Objective 1: Build and use the best evidence, Objective 3: Support workplace parties to fulfil their OHS roles and responsibilities and achieve excellence

Funders: MLTSD, SSHRC

Project findings available in Open Access journals, platforms, or repositories (If not, please indicate if a preprint will be posted publicly): None to date

Preventing work disability among millennial young adults with rheumatic disease (2310)

Description: Despite advances in clinical care, millennial young adults (born 1982-1999) with rheumatic disease (e.g., arthritis) continue to report difficulties finding employment and staying productive at work. Previous research suggests that workplace policies and practices play an important role in supporting the employment of people with rheumatic disease, but because this research tended to focus on older adults with rheumatic disease, it is unclear if millennial young adults with rheumatic disease who are just beginning their career have the same needs or access workplace support. This study is one of the first to examine the needs of millennials with rheumatic disease within the workplace.

Objectives:

- Conduct a longitudinal survey of 365-plus millennials with rheumatic disease
- Identify the workplace supports needed by millennial young adults with rheumatic disease and the extent to which these supports are available and used
- Examine characteristics of millennial young adults with rheumatic disease and how their work conditions relate to unmet workplace support needs
- Assess if those who report greater unmet workplace support needs are more likely to indicate difficulties with employment
- Examine whether work conditions affect the relationship between unmet workplace support needs and difficulties with employment
- Offer concrete messages and strategies that workplaces can use to encourage the employment participation of millennial young adults with rheumatic disease
- Offer information to service providers to help them provide recommendations to adolescents with rheumatic disease who are preparing to enter the labour market

Method: Qualitative

Status: Ongoing (to be completed in Q3)

Research Team and Roles: Arif Jetha (Principal Investigator), Monique Gignac, Catherine Backman/ University of British Columbia (UBC), Vicki Kristman/Lakehead University, Laurie Proulx/Canadian Arthritis Patient Alliance, Lori Tucker/UBC (Research Team), Julie Bowring (Project Coordinator)

Collaboration and Partnerships: Canadian Arthritis Patient Alliance, The Arthritis Society, Cassie + Friends Society

Knowledge Transfer Strategies: This project uses an integrated KTE approach. Research findings will be tailored for lay audiences and disseminated through established IWH communication vehicles.

Target Audience: Millennials with rheumatic disease, employers and human resources professionals, clinicians, rehabilitation professionals, community agencies serving people with arthritis

Linkage to *Prevention Works*: Objective 1: Build and use the best evidence, Objective 3: Support workplace parties to fulfil their OHS roles and responsibilities and achieve excellence

Funders: MLTSD, Arthritis Society

Project findings available in Open Access journals, platforms, or repositories (If not, please indicate if a preprint will be posted publicly): None to date

Ontario Life After Injury Study I: Understanding the long-term recovery and labour market outcomes of injured workers in Ontario (2320)

Description: What are the long-term outcomes for people with work-related injuries or illnesses after they are no longer engaged with the Ontario workers' compensation system? This study aims to find out.

The study compares health and labour market outcomes 18 months following a work-related injury or illness among three groups of claimants: those with relatively quick resolution of their claim, those whose claim took a longer time to resolve, and those with prolonged claim activity. It then compares the health and labour market outcomes of the three groups of workers' compensation lost-time claimants to two similar groups of injured workers (a historic one from Ontario and a newer one from another jurisdiction), as well as to a group of Ontario workers with similar occupational and demographic characteristics who have not recently experienced a work-related injury or illness.

Objectives:

- Develop an interviewer-administered questionnaire to collect information in the following domains: RTW and labour market status; sources of income; function, recovery and other health outcomes; perceptions of fairness in the claim and RTW processes; interactions between the claimant, their workplace and their health-care providers; and pre-injury information on occupation, earnings, industry and workplace size, as well as basic socio-demographic characteristics
- Recruit three groups of 400 lost-time claim beneficiaries to participate in the survey
- Link survey responses to WSIB administrative records
- Conduct descriptive and regression analyses to identify the modifiable and non-modifiable factors within the OLAWIS cohort that are associated with health, recovery and labour market outcomes at 18 months
- Identify factors associated with positive and negative labour market and health recovery outcomes among injured workers
- Determine if there are particular groups of injured workers who are at most risk for poor labour market and health recovery outcomes
- Inform and improve the design and administration of WSIB benefits and claimant services

Method: Multi-method

Status: Ongoing (to be completed in Q2)

Research Team and roles: Cameron Mustard (Principal Investigator), Nancy Carnide, Peter Smith, Emile Tompa (Research Team), Colette Severin (Project Coordinator).

Collaboration and Partnerships: WSIB

Knowledge Transfer Strategies: Research findings will be tailored for lay audiences and disseminated through established IWH communication vehicles.

Target Audience: WSIB decision-makers, representatives of injured workers, administrators of other work disability insurance programs in Canada

Linkage to *Prevention Works*: Objective 1: Build and use the best evidence

Funders: MLTSD, WSIB

Project findings available in Open Access journals, platforms, or repositories (If not, please indicate if a preprint will be posted publicly): None to date

Ontario Life After Work Injury Study II: Understanding the long-term recovery and labour market outcomes of injured workers in the shadow of COVID-19 (2321)

Description: This study builds upon the original OLAWIS, which set out to determine the long-term health, recovery and labour market outcomes for people with work-related injuries or illnesses after they are no longer engaged with the Ontario workers' compensation system. This study is looking at the experiences and outcomes of lost-time claimants who experienced a disabling work-related injury or illness in January or February 2020 and, as a result, were recovering and, potentially, returning to work in the shadow cast by the COVID-19 emergency.

Objectives:

- Recruit 700 lost-time claim beneficiaries who experienced a work-related injury or illness in January or February 2020 to participate in an interviewer-administered survey
- Administer a questionnaire to collect information on: RTW and labour market status; sources of income; function, recovery and other health outcomes; perceptions of the fairness of the claim and RTW process; interactions between the claimant, their workplace and their health-care providers; and pre-injury information on occupation, earnings, industry and workplace size, as well as basic socio-demographic characteristics
- Link survey responses to WSIB administrative records
- Conduct descriptive and regression analyses to identify the modifiable and non-modifiable factors within the cohort that are associated with poor health and recovery outcomes at 18 months and that are associated with better or worse labour market outcomes at 18 months
- Compare results with those from OLAWIS I (2320), whose recovery and RTW occurred before the onset of the pandemic
- Compare the health and labour market outcomes at 18 months post injury or illness of workers' compensation claimants whose recovery and RTW occurred before the COVID-19 emergency to those whose recovery and RTW occurred after the onset of the pandemic
- Inform and improve the design and administration of WSIB benefits and claimant services

Method: Quantitative

Status: New (to be completed Q2 2024)

Research Team and roles: Cameron Mustard (Principal Investigator), Nancy Carnide, Peter Smith, Emile Tompa (Research Team), Colette Severin (Project Coordinator).

Collaboration and Partnerships: WSIB

Knowledge Transfer Strategies: Research findings will be tailored for lay audiences and disseminated through established IWH communication vehicles.

Target Audience: WSIB decision-makers, representatives of injured workers, administrators of other work disability insurance programs in Canada

Linkage to *Prevention Works*: Objective 1: Build and use the best evidence

Funders: MLTSD, WSIB

Project findings available in Open Access journals, platforms, or repositories (If not, please indicate if a preprint will be posted publicly): None to date

Future-proofing young Canadians with disabilities for the changing labour market (2330)

Description: In industrialized countries the future of work is characterized by rising automation and digitization of jobs, increased exposure to precarious work, growing employment in the gig and sharing economies, and ecological and sociopolitical changes. The future of work has the potential to create new challenges that disproportionality affects vulnerable labour market subgroups including young workers and people living with disabilities. In this study, we apply strategic foresight methodologies to systematically examine the future of work as it relates to young people with disabilities. Findings will inform the design of future-proofed policies and programs for young people with disabilities, that can be implemented in the present, to address the anticipated shocks and stresses of the future of work. Designing strategies that anticipate changes in work and labour market conditions represents an important direction in social and public health policy that can shape pathways to better health for the working population.

Objectives:

- Using a Delphi technique, administer two survey rounds to young people with disability, policy-makers, disability employment counselors, labour market experts and futurists to reach agreement on the best strategies to ensure success of young people with disabilities in the future of work
- Construct medium-to-long-term views of the future of work as it relates to young people with disabilities
- Inform the design of future-proofing policies and programs that can be implemented now to address the anticipated shocks and stresses of the future of work for young people with disabilities.

Method: Multi-method

Status: Ongoing (to be completed in Q4)

Research Team and Roles: Arif Jetha (Principal Investigator), Monique Gignac, Peter Smith, Emile Tompa, (Research Team), Ali Shamaee (Project Coordinator)

Collaboration and Partnerships: ESDC, CCRW, City of Toronto's Civic Innovation Office, Education at Work Ontario

Knowledge Transfer Strategies: This project uses an integrated KTE approach. Research findings will be tailored for lay audiences and disseminated through established IWH communication vehicles.

Target Audience: Policy-makers, people with disabilities, employers, social innovation groups, employment service providers

Linkage to *Prevention Works*: Objective 1: Build and use the best evidence

Funders: MLTSD, New Frontiers in Research Fund

Project findings available in Open Access journals, platforms, or repositories (If not, please indicate if a preprint will be posted publicly): None to date

ECHO OEM: Piloting a telementoring program in occupational and environmental medicine (2335)

Description: Primary health-care practitioners in Ontario play an important role in the recovery, return to work and disability management of injured workers. However, they receive little training related to occupational medicine, work functioning or workers' compensation systems, and they complain of frustration with complex cases and the burden of dealing with the WSIB. In 2014, Dr. Andrea Furlan implemented the first Project Extensions for Community Healthcare Outcomes (ECHO) in Canada. ECHO is a telementoring program that involves a multidisciplinary team leading virtual clinics with physicians and nurses in rural and remote areas to share best practices and reduce variation in care. The aim of this pilot project is to develop, implement and evaluate the first ECHO in occupational and environmental medicine (OEM) in the world.

Objectives:

- Develop, implement and pilot an ECHO OEM in Ontario
- Evaluate the performance of ECHO OEM in increasing capacity of health-care providers in primary care settings to manage patients with work-related injuries or diseases or environmental exposures
- Improve engagement of physicians with WSIB regarding patient care
- Increase the capacity of health-care providers in remote and rural areas of Ontario to deal with complex work-related injuries and illnesses

Method: Multi-method

Status: New (to be completed in Q3)

Research Team and roles: Andrea Furlan, Anil Adisesh/University of New Brunswick(Principal Investigators), Emma Irvin, Nancy Carnide, Peter Smith, Behdin Nowrouzi-Kia/University of Toronto (Research Team), Sara Macdonald (Knowledge Exchange Lead), Shireen Harbin (Administrator), Colette Severin (Project Manager)

Collaboration and Partnerships: ECHO Ontario Superhub, ECHO Institute at the University of New Mexico, University of Toronto, Association of Family Health Teams of Ontario, Nurse Practitioners' Association of Ontario, Lakehead University, OCRC, St. Michael's Hospital, Occupational Medicine Specialists of Canada, OHCOW, WSIB

Knowledge Transfer Strategies: This project uses an integrated KTE approach. Research findings will be tailored for lay audiences and disseminated through established IWH communication vehicles.

Target Audience: Primary care health-care providers, injured workers, occupational health professionals, WSIB decision-makers

Linkage to *Prevention Works*: Objective 1: Build and use the best evidence, Objective 2: Improve OHS knowledge and practices

Funders: MLTSD, WSIB

Project findings available in Open Access journals, platforms, or repositories (If not, please indicate if a preprint will be posted publicly): None to date

Future-focused job accommodation practices for the school-to-work transition (2340)

Description: The future of work is characterized by diverse social, technological, economic, environmental and political changes (e.g., artificial intelligence and the automation of jobs, an aging workforce, climate change) that are expected to disrupt every industry, transforming working conditions, and affecting the types and availability of jobs. Young people with disabilities who are transitioning from school to work are especially vulnerable to the complex barriers posed by a rapidly changing labour market. Studies indicate that the school-to-work transition is particularly challenging for the two million young people (aged 18-35 years of age) living with a disability in Canada. Job accommodations are essential for young people with disabilities to find and sustain employment and career advancement during the school-to-work transition. However, a recent survey of young people with disabilities in Canada found that most perceived a number of barriers to accessing job accommodations. Difficulties faced by young people during the school-to-work transition can have a lasting effect and contribute to adverse labour market outcomes (e.g., underemployment, lost productivity) that extend across one's working life. The future of work may create the need for innovative job accommodations and workplace supports.

Objectives:

- Better understand specific job accommodations that can enhance the school-to-work transition
- Better understand the emerging barriers that young people with disabilities could face in accessing needed job accommodations within the changing world of work
- Generate future-oriented and proactive evidence regarding the school-to-work transition of young people with disabilities and advance knowledge of job accommodation practices

Method: Qualitative

Status: Ongoing (to be completed in 2023/24)

Research Team and roles: Arif Jetha (Principal investigator), Monique Gignac, Emile Tompa, Dwayne Van Eerd; Kathleen Martin Ginis/University of British Columbia (Research Team), Kay Nasir (Project Coordinator), Sara MacDonald (Knowledge Exchange Lead)

Collaboration and Partnerships: Abilities Centre, CCRW, National Educational Association for Disabled Students

Knowledge Transfer Strategies: This project uses an integrated KTE approach. Research findings will be tailored for lay audiences and disseminated through established IWH communication vehicles.

Target Audience: Employers, educators, employment service providers, policy-makers, young adults with disabilities and their families

Linkage to *Prevention Works*: Objective 1: Build and use the best evidence, Objective 3: Support workplace parties to fulfil their OHS roles and responsibilities and achieve excellence

Funders: MLTSD, Accessibility Standards Canada

Project findings available in Open Access journals, platforms, or repositories (If not, please indicate if a preprint will be posted publicly): None to date

Developing a framework for measuring culture change related to accessibility and inclusion of persons with disabilities (2345)

Description: Research shows people with disabilities are often not permitted to, and/or are prevented from, participating in various activities in society, including employment. This exclusion can be partly attributed to various barriers and forms of discrimination described as institutional, environmental and attitudinal. These forms of discrimination work to exclude people through institutions' day-to-day interactions, lack of accessibility, and prevailing attitudes. There is a need for culture change to make a substantive and sustainable change. However, without clear and robust measures to track culture change and outcomes, it is difficult to see the impact of efforts related to advancing social inclusion and accessibility. Therefore, there is an urgent need to develop a comprehensive list of indicators of culture change that can be used to measure progress in achieving targets set out in the *Accessible Canada Act* and gauge improvements in accessibility and inclusion of persons with disability in all facets of society.

Objectives:

- Conduct a scoping review involving a rapid review of peer-reviewed and grey literatures
- Conduct an environmental scan in the form of discussions with stakeholders in Canada and experts in other jurisdictions
- Develop a conceptual framework and measurement protocol for culture change relevant to accessibility and inclusion of persons with disability, with a focus on the priority domains in the *Accessible Canada Act*, including "employment"—one of the domains
- Document gaps in data sources and develop strategies to fill them

Method: Multi-method

Status: Ongoing (to be completed in Q3)

Research Team and roles: Emile Tompa (Principal Investigator) Emma Irvin, Amir Mofidi, Rebecca Gewurtz/McMaster University (Research Team), Sabrina Imam (Project Coordinator), Basil Southey (Student)

Collaboration and Partnerships: ESDC

Knowledge Transfer Strategies: Research findings will be tailored for lay audiences and disseminated through established IWH communication vehicles.

Target Audience: Federal, provincial/territorial, and municipal governments and policy-makers, employers, educators, health-care and other services providers, public at large

Linkage to *Prevention Works*: Objective 1: Build and use the best evidence, Objective 3: Support workplace parties to fulfil their OHS roles and responsibilities and achieve excellence

Funders: MLTSD, Employment and Social Development Canada (ESDC)

Project findings available in Open Access journals, platforms, or repositories (If not, please indicate if a preprint will be posted publicly): None to date

Transitioning to the future of work: An intersectional study of vulnerable youth and young adults (2400)

Description: Recent research shows that the growing adoption of digital technologies, sociodemographic shifts, globalization and ecological changes are driving forces that characterize the future of work. In Canada and other industrialized countries, the emerging challenges of transitioning to the future of work can be pronounced for vulnerable groups of young people, including women, visible minorities, immigrants, LGBTQ2+, and those with low socioeconomic status.

In this project, we are applying an intersectional theoretical framework to explore the impact of the future of work on the transitional work experiences of vulnerable young people and uncover the overlapping structures that contribute to labour market inequities for different groups. Designing future-oriented strategies are an important step in ensuring that young people are able to meet the challenges of a changing labour market and take advantage of potential opportunities. In examining in-depth work-related perspectives and experiences of a diverse group of young people, our study takes an important direction in social and public health policy to promote the inclusion of all young people within the future of work.

Objectives:

- Uncover dimensions of the future of work that will be most likely to affect the transition to work of young people
- Identify the specific groups of young people who are most vulnerable to inequities within the changing labour market and would benefit from additional support
- Inform the development of policies and programs that support the transition to work of young people in a changing labour market and address labour market inequities at the early career stage and across the life course

Method: Qualitative

Status: Ongoing (to be completed in Q4)

Research Team and roles: Arif Jetha (Principal Investigator), Monique Gignac, Ali Shamaee, Peter Smith; Yani Hamdani/University of Toronto, Vicki Kristman/Lakehead University (Research Team), Sara Macdonald (Knowledge Exchange Lead), Kay Nasir (Project Coordinator)

Collaboration and Partnerships: None (other than external Research Team members listed above)

Knowledge Transfer Strategies: This project uses an integrated KTE approach. Research findings will be tailored for lay audiences and disseminated through established IWH communication vehicles.

Target Audience: Educators, employers, youth-based community organizations, policy-makers

Linkage to *Prevention Works*: Objective 1: Build and use the best evidence, Objective 3: Support workplace parties to fulfil their OHS roles and responsibilities and achieve excellence

Funders: MLTSD, SSHRC

Project findings available in Open Access journals, platforms, or repositories (If not, please indicate if a preprint will be posted publicly): None to date

Inclusive Design for Employment Access (IDEA): A social innovation lab to increase demand-side capacity to employ persons with disabilities in Canada (2405)

Description: Talented people are all too often excluded from equal opportunities and choices in careers, jobs and work because they are 'different.' That is frequently the case for the 20% of the Canadian population who are persons with disabilities (PWDs), who have disproportionately poorer employment outcomes, even with appropriate qualifications and work readiness. Despite efforts to improve their employment levels by governments and other stakeholders, labour-force participation rates of PWDs in Canada remain substantially lower than persons without disabilities—59% compared to 80%. Among those working, many remain stuck in entry-level, low paying, precarious employment—experiences that give rise to instability, lack of protection, insecurity, and social and economic vulnerability. These challenges are compounded for PWDs from marginalized groups, who face additional systemic barriers to secure employment, based on their gender, sexual orientation, and/or racial identity.

Traditionally, programs and research on employment of PWDs in Canada and internationally have focused on preparing individuals for employment. However, little attention has been given to employer attitudes towards, interest in, and capacity for hiring and accommodating PWDs. Without attention to employer needs and improving the literacy of workplace stakeholders on inclusive practices, the fundamental context of the workplace will remain unchanged, and barriers and assumptions unchallenged.

In this project, we are proposing a new framework for a holistic, interdisciplinary approach to applied research in work disability policy and practice in the form of a social innovation laboratory we are calling Inclusive Design for Employment Access (IDEA), which will focus on building capacity for sustainable and rewarding employment opportunities for PWDs. By drawing on knowledge from rehabilitation science, disability and social policy, design and technology, management, economics, and program evaluation, we are better poised to tackle the complex challenges of this arena.

Objectives:

- Expand demand-side capacity across the Canadian economy so employers can capitalize on the diverse talents of PWDs;
- Increase accessibility and inclusiveness of Canadian labour markets such that PWDs have equal opportunities and choices in careers, jobs, and work as persons without disabilities; and
- Establish a best-practice methodology and capacity for co-designing solutions in the work disability policy arena.

Method: Multi-method

Status: New (to be completed 2027)

Research Team and Roles: Emile Tompa, Rebecca Gewrutz/McMaster University (Principal Investigators), Alexis Buettgen, Emma Irvin, Arif Jetha, Sara Lacarte, Amir Mofidi, Dan Samosh, Dwayne Van Eerd, Bruce Bonyhady, Susanne Bruyere, Peter Coppin, Marie-France Coutu, Robert Fleisig, Raphael Gomez, Karen Harlos, Takeo Kondo, Vicki Kristman, Marie Laberge, Jordana Maisel, Carrie Anne Marshall, Sandra Moll, Firat Sayin, Jennifer Smith-Merry, Mahadeo Sukhai, H  l  ne Sultan-Taieb, Jutta Treviranus, Angelika Veres, Catherine Wyndham-West.(Research Team), Basil Southey (Student).

Collaboration and Partnerships: Flavio Volpe (Automotive Parts Manufacturers' Association), Collinda Joseph (Accessibility Standards Canada), Maria Ash (CNIB), David Brown (CIBC), Wendy Cukier (Diversity Institute), Joseph Giulione (L'Arrimage), Carmine Tiano (Provincial Building & Construction Trades Council of Ontario), Cindy Moser (IWH), Sari Sairanen (Unifor), Boris Vukovic (Carleton Technology and Training Centre), Steven Tobin (Labour Market Information Council), Drew Sousa

(Ontario Occupational Health Nurses Association), Krista Carr (Inclusions Canada), Michael MacDonald (Jazz Aviation), Abdou Saouab (ESDC), Frank Smith (National Educational Association of Disabled Students), Don Gallant (Ready, Willing and Able), Victoria Smallman (Canadian Labour Congress), Francis Fung (March of Dimes), Emmanuelle Lopez-Bastos (United Food and Commercial Workers), Maureen Haan (CCRW), Leah Nord (Canadian Chamber of Commerce), Ian Graham (Ottawa Hospital Research Institute).

Knowledge Transfer Strategies: This project uses an integrated KTE approach. Research findings will be tailored for lay audiences and disseminated through established IWH communication vehicles.

Target Audience: Canadian work disability policy system stakeholders, including injured worker/ disability community representatives, employers, policy-makers, disability program administrators, educators and service providers

Linkage to *Prevention Works*: Objective 1: Build and use the best evidence, Objective 3; Support workplace parties to fulfil their OHS roles and responsibilities and achieve excellence

Funders: MLTSD, New Frontiers in Research Fund (a Tri-Council initiative among CIHR, SSHRC and Natural Sciences and Engineering Research Council)

Project findings available in Open Access journals, platforms, or repositories (If not, please indicate if a preprint will be posted publicly): None to date

Return to work in policing: synthesizing current practices and implementation guidance (3390)

Description: Return to work (RTW) after injury in the policing sector can be challenging for the returning officer or other police worker, the police service involved and the workers' compensation system. This can be the case regardless of the type of injury, whether it's physical, psychological or a combination of both. A growing scientific literature, including a number of recent systematic reviews, is examining the most effective RTW interventions for workplaces. However, a knowledge gap exists regarding the practical aspects of RTW for police and first responders. This study aims to fill this gap.

Objectives:

- Describe and synthesize the best available research evidence on RTW programs and practices.
- Conduct interviews with OHS practitioners, managers/supervisors and workers within Ontario police forces to gather detailed information about current RTW practices in the province's police services.
- Describe the facilitators and barriers to implementing RTW programs/practices to create an evidence-based, practical guide to support the implementation of innovative, effective RTW programs in Ontario police services

Method: Multi-method

Status: Ongoing (to be completed in Q3 2023)

Research Team and roles: Dwayne Van Eerd (Principal Investigator), Emma Irvin, Monique Gignac, Arif Jetha, Emile Tompa, Basak Yanar, Tanya Morose/PSHSA (Research Team), Siobhan Cardoso (Knowledge Exchange Associate), Morgane Le Pouésard (Project Coordinator)

Collaboration and Partnerships: PSHSA, Police Association of Ontario, Ontario Association of Chiefs of Police, Ontario Provincial Police Association, Ontario Police Health and Safety Association

Knowledge Transfer Strategies: This project uses an integrated KTE approach. Research findings will be tailored for lay audiences and disseminated through established IWH communication vehicles.

Target Audience: Police services in Ontario, WSIB

Linkage to *Prevention Works*: Objective 1: Build and use the best evidence, Objective 3: Supporting workplaces to fulfill responsibilities

Funders: MLTSD, WSIB

Project findings available in Open Access journals, platforms, or repositories (If not, please indicate if a preprint will be posted publicly): None to date

Developing a Canadian work disability standard for paramedics with PTSI (3400)

Description: The prevention and management of workplace disability is a significant challenge for paramedic services, especially when it involves post-traumatic stress injury (PTSI). Designed to address several recommendations from a House of Commons discussion in October 2016 on supporting public safety officers, this project will develop, promote and disseminate a Canadian standard and related tools to prevent and manage work disability associated with PTSI among paramedics, prevent psychological harm from workplace exposures, and build the capacity of paramedic services to address the psychological health and well-being of paramedics.

Objectives:

- Synthesize the evidence on work disability management systems in the peer-reviewed and grey literatures
- Undertake a needs assessment of paramedic organization in the area of work disability management and prevention of PTSI and other mental health conditions
- Develop, promote and disseminate a nationally applicable Canadian standard for paramedics on work disability prevention, with a focus on helping prevent and manage PTSI-related work disability, helping prevent psychological harm from workplace exposures, and building the capacity of paramedic services to address the psychological health and wellbeing of paramedics.
- Develop guidance and tools to facilitate uptake of the standard in paramedic organizations across Canada

Method: Multi-method

Status: Ongoing (to be completed in Q3)

Research Team and roles: Emile Tompa, Amin Yazdani/Conestoga College (Principal Investigators), Emma Irvin, Dwayne Van Eerd, Nicki Islic/CSA Group, Ron Meyers/CSA Group (Research Team), Sabrina Imam (Project Coordinator)

Collaboration and Partnerships: Conestoga College, CSA Group, Country of Renfrew Paramedic Services, Paramedic Chiefs of Canada, Paramedic Association of Canada

Knowledge Transfer Strategies: This project uses an integrated KTE approach. Research findings will be tailored for lay audiences and disseminated through established IWH communication vehicles.

Target Audience: Paramedics and paramedic organizations across Canada and other first responders such as police, firefighters and military personnel

Linkage to *Prevention Works*: Objective 1: Build and use the best evidence, Objective 3: Support workplace parties to fulfil their OHS roles and responsibilities and achieve excellence

Funders: MLTSD, Corporation of the County of Frontenac

Project findings available in Open Access journals, platforms, or repositories (If not, please indicate if a preprint will be posted publicly): None to date

Addressing knowledge gaps about skills of persons with disabilities (3410)

Description: There is currently little to no information on the foundational and transferable skill levels of persons with disabilities (PWDs). This project aims to fill this knowledge gap.

Objectives:

- Determine what we do and do not know about the foundational and transferable skill levels and employment outcomes for PWDs and recommend ways to fill the knowledge gaps
- Conduct a literature review of existing research contained in demographic profiles developed by the Office of Skills for Success
- Determine the main barriers faced by PWDs in increasing their skill levels and further integrating into the labour market
- Determine if women with disabilities face additional barriers and, if so, what these barriers are
- Find proven or promising practices or avenues to increase skill levels of PWS and to reduce the barriers they face in doing so
- Understand how the COVID-19 pandemic has affected the skill development and labour market barriers of PWDs including the long-term implications of the pandemic on the future of PWDs and their skill development and labour market barriers

Method: Multi-method

Status: Ongoing (to be completed in Q2)

Research Team and roles: Emile Tompa (Principal Investigator), Alexis Buettgen, Emma Irvin, Amir Mofidi, Rebecca Gewurtz/McMaster University (Research Team), Basil Southey (Student).

Collaboration and Partnerships: ESDC

Knowledge Transfer Strategies: Research findings will be tailored for lay audiences and disseminated through established IWH communication vehicles.

Target Audience: Canadian work disability policy system stakeholders, including injured worker/ disability community representatives, employers, policy-makers, disability program administrators, service providers and educators.

Linkage to *Prevention Works*: Objective 1: Build and use the best evidence

Funders: MLTSD, ESDC

Project findings available in Open Access journals, platforms, or repositories (If not, please indicate if a preprint will be posted publicly): None to date

KNOWLEDGE TRANSFER & EXCHANGE (KTE) & COMMUNICATIONS

At the Institute for Work & Health, KTE is a process by which research information is made available and accessible through interactive engagement with stakeholders for awareness, practice, planning and policy-making. KTE at IWH is integrated into the research process. Stakeholders are involved in helping us identify research priorities and frame research questions. They help us communicate findings in ways and through channels that are useful for policy and practice.

In conjunction with KTE processes is a corporate communications strategy that ensures the Institute brand is seen as a trusted and reliable source of evidence-based information. Communications strategies ensure our projects, findings, resources and events are known to, understood by and applicable to a growing number of stakeholders in the workplace health, safety and disability prevention arenas.

KTE and communications activities also actively work to build capacity in our audiences to understand and use research evidence.

The target audiences for the Institute's research include policy-makers (provincial and federal labour ministries, workers' compensation agencies), health and safety associations, workplace parties (labour and employers), occupational health, safety and disability management professionals, and health practitioners.

2022/23 KTE and communications activities that are tied to specific projects are reported with those projects in the previous section. Listed in this section are system- and organization-wide KTE and communications activities that are not project-specific.

In alignment with the objectives of the *Research Roadmap*, the work of IWH's KTE and Communications program is focused on strategic goals of building and maintaining excellence in three areas:

- 1. Relationships:** *Strengthening 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 build and sustain stakeholder engagement and interest in research findings for use in practice and policy. We attend a variety of conferences and events to present IWH research messages and to raise awareness about IWH, developing new connections with a wide variety of professionals who can use IWH in policy and practice.
- 2. Reach:** *Expanding our audiences and supporting 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 our key conduit for reaching our audiences along with the publication of our quarterly newsletter *At Work* and our monthly e-bulletin, *IWH News*. We will continue to pursue coverage in trade media and are using social media as a dissemination vehicle and to follow issues important to our stakeholders. We will continue to provide tailored workshops and briefings focused on understanding research evidence and its application.
- 3. Products:** *Developing evidence-based information products including guides, tools and lay-friendly communications that support efforts to improve the safety and health of working people.* Communications works with our scientists and stakeholders to develop a wide range of products (tools, guides, policy briefings, newsletter articles, videos) to communicate and apply research findings.

Stakeholder Networks

Introduction: The Institute has established several formal networks representing stakeholders from a wide range of audiences concerned with occupational health and safety (OHS) and disability prevention and management. These include five health practitioner networks whose members are nominated by peers as “educationally influential” in their fields: chiropractors, ergonomists, kinesiologists, occupational therapists and physiotherapists; a network of disability management professionals, and a health and safety professionals network. Meetings are held with each group to facilitate knowledge exchange: IWH scientists share research findings and members share practice experience to inform our research and KTE activities. Members are encouraged to disseminate relevant findings to their own networks. They receive IWH newsletters (IWH News and At Work) as well as single-topic targeted research alerts. Members are often approached to participate in research projects or for assistance with study participant recruitment. IWH also connects with employers and organized labour in informal networks.

As part of its stakeholder networks, IWH hosts a network of Ontario prevention partner organizations, the Prevention Knowledge Exchange Group (PKEG) to foster dialogue and strengthen knowledge exchange and collaboration in the prevention system. The network comprises the six Ontario health and safety associations (HSAs), four other Ontario research centres, the Prevention Office and the Policy and Operations divisions of the Ontario Ministry of Labour, Training Skills and Development (MLTSD), and the Workplace Safety and Insurance Board (WSIB). IWH also participates in other Ontario prevention system forums such as the System Ergonomics Committee.

Audience: Occupational health and safety and other injury prevention practitioners, disability management professionals, health-care professionals, insurers, policy makers and researchers.

Objectives:

- Facilitate and support knowledge exchange among IWH researchers and network members to enhance existing research and future studies at IWH
- Disseminate research findings and the uptake of research to the community of practitioners in work-related primary/secondary prevention, RTW, and/or disability management roles.
- Increase participation in IWH research projects and IWH events
- Collaborate with prevention partners to harmonize research activities and knowledge exchange opportunities for supporting the application of research evidence in Ontario workplaces

Team: Siobhan Cardoso, Monique Gignac, Sara Macdonald, Peter Smith, Sabrina Tonima (Co-leaders)

Collaboration and Partnerships: Professional bodies (associations/regulatory colleges), Health & Safety Associations, MLTSD, WSIB, Ontario Prevention System Research Centres

Project Targets for 2022/23:

First Quarter:

Continue review of IWH stakeholder networks and their strategic fit with IWH research activities
Complete assessment of current networks and network development needs
Develop new network or revised network structure, as needed
Consult with existing network members regarding networks’ review and development
Plan and host quarterly virtual PKEG meeting

Second Quarter:

Conduct network membership renewal as needed/recruit new network members as needed
Launch new network/network structure as needed, welcome new network members
Plan a virtual prevention research exchange forum with and for network members
Plan and host quarterly virtual PKEG meeting

Third Quarter:

Host virtual prevention research exchange forum for network members
Review meeting-forum formats and determine approach for 2022-23 meetings
Plan and host quarterly virtual PKEG meeting

Fourth Quarter:

Plan future network communication strategies
Plan other engagement activities for network members
Plan and host quarterly virtual PKEG meeting

IWH Hosted Events

Introduction: The Institute hosts two key events over the course of each year. The IWH Speaker Series is a monthly event featuring presentations by IWH scientists about the Institute's latest research findings. The IWH Speaker Series runs from September to June and each session attracts over 150 attendees from a diversity of professions across Ontario and beyond. Presentations are audio-recorded and made available on the IWH website and YouTube channel. The IWH also offers regular opportunities for external academics to present work and health research to IWH staff and scientists. We anticipate over the 2022/23 year that presentations will continue to be held via a live webinar platform.

The second key event hosted by the Institute is the annual Alf Nachemson Memorial Lecture, established in 2002 to honour Dr. Alf Nachemson's significant contribution to research evidence in clinical decision-making. The Nachemson lectureship is awarded annually to a prominent national or international individual who has made a significant contribution to work and health research, including the role of evidence in decision-making and evidence-based practice in the prevention of work-relevant injury, illness or disability. The lecture is delivered at a networking event to which the Institute's stakeholders are invited. The annual Nachemson lecture is a flagship event for the Institute, bringing together stakeholders and partners across the prevention system and beyond. (Note: The Nachemson lecture was postponed during the years that IWH staff planned and facilitated the XXII World Congress on Safety and Health at Work and during the period of the Covid-19 pandemic.)

Audience: All stakeholder groups

Objectives:

- Increase the visibility of the Institute's research provincially, nationally, and internationally
- Identify and acknowledge individuals who have made significant contributions to work and health research
- Provide an opportunity for networking among work and health researchers and users of their research, including workplace parties (e.g., workers, employers), policy-makers and practitioners
- Provide access to emerging and novel evidence in work-health research from the Institute

Team: Siobhan Cardoso, Monique Gignac, Sara Macdonald, Cindy Moser, Peter Smith, Sabrina Tonima, (Project Leaders), Kristina Buccat, Jan Dvorak, Uyen Vu,

Collaboration and Partnerships: Not Applicable

Project Targets for 2021/23:

First Quarter: Plan communications for and host Nachemson lecture

All Quarters: Plan monthly external and weekly internal IWH Speaker Series presentations
Create targeted event promotions and track attendance and other outcomes
Maintain and support webinar streaming functionalities

Fourth Quarter: Develop and implement a communication plan for 2023 Nachemson lecture

NB: The Nachemson lecture may not be held in-person in 2022-23 due to the COVID-19 pandemic. An online or hybrid format will be considered as a replacement.

Outreach and Promotion (0650)

Introduction: The Institute for Work & Health engages in ongoing activities to increase its visibility provincially, nationally and internationally, as well as to increase the potential uptake and application of its research evidence. Throughout the year, the Institute raises awareness and the profile of IWH research through participation in key events and conferences where targeted resources are made available to stakeholder groups.

Audience: All stakeholder groups, with particular attention to workplace parties and stakeholders concerned with health, safety and return to work.

Objectives:

- Seek new opportunities to reach out to stakeholders at non-academic conferences and events (e.g., professional association events)
- Present key research initiatives at non-academic, stakeholder events where appropriate
- Work with intermediary organizations, e.g., professional groups and associations to reach their members/clients
- Assist IWH researchers in linking with workplace parties and other stakeholders
- Enhance knowledge exchange with leaders from employer and labour communities
- Profile the Institute as a credible and reliable resource of evidence-based information and tools for improving the health of workers

Team: Sara Macdonald (Project Leader), Kristina Buccat, Siobhan Cardoso, Monique Gignac, Cindy Moser, Peter Smith, Sabrina Tonima, Uyen Vu,

Collaboration and Partnerships: Professional groups, employer associations, unions, health and safety associations

Project Targets for 2022/23:

<i>First Quarter:</i>	Review the objectives and purpose of the outreach plan Review virtual conference attendance and exhibit opportunities against the budget Create branded conference material for online dissemination Review existing products/materials used for conference exhibits
<i>Second Quarter:</i>	Create new electronic materials/products for engagement at virtual conferences Prepare for upcoming conference attendance and exhibits, as needed Exhibit at virtual conferences
<i>Third Quarter:</i>	Identify new opportunities for outreach and promotion Exhibit at virtual conferences
<i>Fourth Quarter:</i>	Review conferences and other events to attend and exhibit in 2023 Review existing products/materials used for conference exhibits

Products: Newsletters, Plain-Language Summaries and Other Information Resources (0604, 0611, 0629, 0636, 0660, 0663, 0665, 0690)

Introduction: The Institute for Work & Health's Communications Department produces a wide range of products that are designed to share IWH research findings, events and resources with stakeholders. These products include newsletters, plain-language summaries, infographics, videos, annual/corporate reports and articles written for stakeholder publications and other resources. Communications and KTE together also develop tools and guides, policy briefs, case studies and other resources, as appropriate. All products and resources are written in plain language, with messages tailored to targeted audiences. The main product for sharing plain-language IWH findings with our stakeholders is the quarterly newsletter, *At Work*, which is available online in html and pdf formats (and, occasionally, in print for distribution at outreach events).

Audience: Policy-makers (in the fields of occupational health and safety, disability management, workers' compensation, accessibility and inclusion, and public health); workplace parties (employers, labour representatives and workers); OHS/disability professionals; health practitioners; other researchers in the field of work and health; and the intermediary organizations representing and serving these external stakeholders (e.g., health and safety associations, professional associations)

Objectives:

- Develop lay-friendly, easy-to-access informational resources targeted to and valued by external stakeholders
- Keep external stakeholders aware of the research and events coming out of the Institute
- Ensure IWH information is of high quality, and is relevant to and easily understood by stakeholders
- Encourage and support uptake and use of IWH research findings and resources
- Increase the Institute's visibility as a credible, reliable and impartial source of research evidence
- Facilitate recruitment of participants into research projects, as appropriate

Team: Cindy Moser (Project Leader), Uyen Vu (Co-Lead), Kristina Buccat, Jan Dvorak, Sara Macdonald, Sabrina Tonima

Collaboration and Partnerships: IWH scientists, researchers and other staff

Project Targets* for 2022/23:

- Write, lay out and post quarterly issue of *At Work*
- Write and post one to two *Research Highlights* per quarter
- Write and post *Sharing Best Evidence* when IWH systematic review conducted
- Produce and post at least two videos/video shorts during year
- Write one to two articles per quarter for external stakeholder publications
- Produce and post IWH Speaker Series webinar recordings
- Produce and post *5 Things We Think You Should Know* (general and topic-specific)
- Produce and post at least two infographics during year
- Write and post impact case studies, as impacts are identified and approved
- Write, lay out and post *Issue Briefing*, as suitable topics are identified and approved
- Write, develop and post approved tools, guides and other resources
- Write, produce and post 2021/22 annual report

*Most project targets are dependent upon research findings and topics being available that lend themselves to being best communicated to stakeholder audiences via the format referenced.

Reach and Dissemination: Website, Outreach, Media, Social Media, e-Alerts and Subscriber Acquisition (0630, 0650, 0655, 0660, 0682, 0690)

Introduction: The Institute for Work & Health's research findings, news, events and resources only become useful, valued and effective when they reach their intended audiences. The Institute's Communications Department, working closely with the KTE Department, ensures the Institute reaches a growing number of people within its stakeholder audiences through various dissemination activities, including websites, e-alerts, social media channels, media relations activities and stakeholder conferences. Through these channels and other subscriber-growth activities, the Institute also seeks to extend its reach to ensure more and more stakeholders are receiving and taking up IWH research.

The main vehicle for housing the Institute's information is the IWH website: www.iwh.on.ca. The main vehicle for maintaining regular contact with our stakeholders is our monthly e-newsletter, *IWH News*. The Institute also disseminates information through its social media accounts (Twitter, LinkedIn and YouTube), targeted e-alerts and various KTE activities (see Stakeholder Networks and Outreach and Promotion).

Audience: Policy-makers (in the fields of occupational health and safety, disability management, workers' compensation, accessibility and inclusion, and public health); workplace parties (employers, labour representatives and workers); OHS/disability professionals; health practitioners; other researchers in the field of work and health; and the intermediary organizations representing and serving these external stakeholders (e.g., health and safety associations, professional associations)

Objectives:

- Keep external stakeholders aware of the research, news and events coming out of the Institute
- Encourage, support and increase uptake and use of IWH research findings and resources
- Build awareness of the Institute for Work & Health brand as a reliable source of information
- Promote events, including the IWH Speaker Series
- Extend the reach/audience for IWH research
- Support the building and maintenance of strong and active stakeholder relationships
- Monitor and manage reach, dissemination, and impact metrics
- Keep website contents, features, design and security up to date

Team: Cindy Moser (Project Leader), Uyen Vu, Jan Dvorak (Co-Leads), Kristina Buccat, Siobhan Cardoso, Lyudmila Mansurova, Sara Macdonald, Sabrina Tonima

Collaboration and Partnerships: IWH scientists, researchers and other staff

Project Targets for 2022/23

- Write, lay out and email monthly issues of *IWH News* to subscribers
- Send notifications about quarterly editions of *At Work* to subscribers
- Promote IWH events, such as the IWH Speaker Series
- Support stakeholder surveys on use and sharing of IWH research
- Add contents/features to IWH website, including accessibility and search enhancements
- Monitor and update website security
- Prepare informational and promotional materials for stakeholder conferences
- Write, disseminate and follow up on media releases and media requests, as needed
- Tweet daily on weekdays, post weekly on LinkedIn and keep YouTube channel current
- Update media contact list, key stakeholder list and subscriber lists in CRM
- Undertake initiatives to increase *IWH News* and *At Work* subscriber sign-ups
- Track communications metrics (website visits, downloads, subscribers, social media followers, media mentions) and compile in quarterly report to 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 2022/23, Corporate Services will continue work on updating our human resources policies. Corporate Services will also ensure compliance with the Ontario government's 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 conduct ongoing and new initiatives that align and support staff health and wellness.

BUDGETInstitute for Work & Health
2022-2023 Budget Summary Sheet

MLTSD - Core Funding	2022-23		2021-22
Research	\$ 3,928,393	70 %	\$ 3,986,517
KTE and Communications	\$ 951,072	17 %	\$ 778,837
Corporate Services	<u>\$ 747,017</u>	13 %	<u>\$ 704,128</u>
	\$ 5,626,482		\$ 5,469,482
External Funding			
Research Grant Funding	\$ 2,158,738		\$ 3,572,012
KTE Grant Funding	\$ -		\$ -
Corporate Services	\$ -		<u>\$ -</u>
	\$ 2,158,738		\$ 3,572,012
Total Budget			
Research	\$ 6,087,131	78 %	\$ 7,558,529
KTE and Communications	\$ 951,072	12 %	\$ 778,837
Corporate Services	<u>\$ 747,017</u>	10 %	<u>\$ 704,128</u>
	\$ 7,785,220		\$ 9,041,494