

Institute for Work & Health Activity Plan 2021/22



**Institute
for Work &
Health**

Research Excellence
Safe Work
Healthy Workers



2021/22 Activity Plan

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

Institute for Work & Health
400 University Ave Suite 1800
Toronto, ON Canada
M5G 1S5

Telephone: 416.927.2027
Website: www.iwh.on.ca

2021/22 Activity Plan

The 2021-26 Occupational Health and Safety Strategy provides a framework for Ontario's OHS system partners that aims to keep Ontario one of the healthiest and safest jurisdictions in Canada. As a valued contributor to the Ontario OHS system, the Institute for Work & Health will align the focus of our research activities to support the objectives of the strategy. The Institute's 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 effort to understand the needs of Ontario's small businesses. The Institute for Work & Health is committed to supporting the strategic priorities identified by the Ministry of Labour, Training and Skills Development. The projects and activities documented in the Institute's 2021/22 Activity Plan demonstrate alignment to these priorities and include the following:

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

Dr Cameron Mustard

President & Senior Scientist

2021/22 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 & safety professionals, disability management professionals and clinicians.

The Institute is structured in three programs. The Research Program focuses on the prevention of work-related injury and illness and the prevention and management of work disability. The Institute for Work & Health has a specific focus on work-related musculoskeletal conditions which are responsible for approximately 50 per cent of disability compensation claims involving time lost from work-related injury and illness. The Knowledge Transfer & Exchange and Communication Program builds and maintains relationships with stakeholders to enable the ongoing exchange of information and research evidence and works with the research team and stakeholders to develop a wide range of products (tools, guides, policy briefings, newsletter articles, videos) to communicate and apply research findings. The Corporate Services Program provides facility management services, financial management services, human resource services and support to the Institute's ten-member Board of Directors. The Institute's projected staff complement for 2021/22 will be 54 FTEs, which are distributed across the three programs: the Research Program, the Knowledge Transfer & Exchange and Communication Program, and Corporate Services.

The 2021/22 Activity Plan describes individual research projects to be conducted over the course of the year, outlining project objectives, staffing, stakeholder involvement and the alignment to the Ontario Prevention Office's Strategies. The work of the Knowledge Transfer & Exchange and Communication Program and the organizational support role played by the Corporate Services Department are also described in the plan.

Research

The Institute's research plans for 2021/22 are organized into two areas of focus: 1) the prevention of work-related injury and illness and, 2) the prevention and management of work disability. Research projects in the area of primary prevention focus on working conditions and health, vulnerable workers, the prevention of musculoskeletal disorders, the effectiveness of occupational health and safety programs and practices and the influence of regulation and economic incentives on workplace practices. Research projects in the area of work disability management & prevention focus on the measurement of health and function, the effectiveness of clinical treatment, optimal return-to-work practices and the influence of compensation and benefits on the social and economic circumstances of disabled workers. In both of these two areas of research, we devote efforts to the development of evidence-based guides and tools that may be useful to our non-research partners.

Knowledge Transfer & Exchange and Communications

The aim of the Knowledge Transfer and Exchange (KTE) and Communications department is to put research findings into the hands of key decision-makers in a timely, accessible and useful manner. The decision-makers could be workers, employers, OHS professionals, policy-makers, clinicians or other researchers. Additionally, KTE and Communications staff aim to strengthen stakeholder relationships and to make research evidence available, understandable and useable.

Corporate Services

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

Prevention of Work-Related Injury and Illness

In this section, we provide an overview of the Institute's research plans for 2021/22 focused on the prevention of work-related injury and illness. Our portfolio of projects addresses vulnerable workers, the effectiveness of occupational health and safety programs and working conditions and health. We also focus on the development of evidence-based guides and tools that may be useful to our non-research partners. The Institute's knowledge transfer & exchange staff will engage with our partners to support the transfer of research evidence to policy and practice and will continue to strengthen relationships with workplace parties (employers, organized labour, health and safety associations, and OHS professionals) to support their participation in our research activities.

Alignment to the 2021-26 Occupational Health and Safety Strategy

The project activities described in this section will align to, and support the objectives of the 2021-26 Occupational Health and Safety Strategy. In the year ahead, we will initiate a strong portfolio of research to strengthen information on the causes of occupational injury in Ontario, to align to the first objective of the 2021-26 strategy, to build and use the best evidence to target initiatives and measure performance. We will also continue the Institute's substantial investments in evaluating the effectiveness of occupational health and safety training services in Ontario, with a focus on understanding the strengths and limitations of virtual OHS instruction formats.

The role of workplace policies and practices in ensuring the health and safety of workers will continue to be an important focus of the Institute's research in 2021/22. The Institute will begin a new project that is aimed at understanding factors influencing the effectiveness of workplace health and safety committees (WHSCs) in the federally regulated private sector (FRPS) with a specific focus on non-unionized settings. This initiative aligns to the 2021-26 OHS Strategy objective to support workplaces to fulfill OHS roles and responsibilities and achieve excellence. And we will be attentive to opportunities to contribute research evidence to support strengthened OHS practices in Ontario's small businesses.

Working conditions and health

The impact of working conditions on health will continue to be a focus for the Institute's research in 2021/22. The Institute will complete a project that provided an opportunity to examine movement behaviours during work and non-work among a large sample of workers and gain insight into variations in cardiometabolic risk. In 2021/22, we will continue to expand our research work on several projects aiming to gather more knowledge on how workers use cannabis in relation to the workplace and their perceptions and attitudes towards workplace use. These multi-year projects will offer insight into cannabis use and associated long-term recovery and return-to-work outcomes for Ontario workers as well as establish a baseline for cannabis and workplace fatalities in the province.

A. Prevention of Work Related Injury and Illness

Effective Occupational Health and Safety Practices

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Working Conditions and Health

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

Project Period: Ongoing, to be completed Q3

Introduction: The recommendations of the Expert Advisory Panel on Occupational Safety & Health (2010) emphasized the development of mandatory fall protection training for workers working at heights (WAH). In response to this recommendation, the Prevention Office, Ontario Ministry of Labour, Training and Skills Development, has implemented regulations defining training program standards and has established a program for the accreditation of training providers. The Occupational Health and Safety Awareness and Training Regulation requires employers in Ontario to ensure that workers on construction projects successfully complete a WAH training program if they may use specified methods of fall protection. A training provider approved by the Prevention Office must deliver the program. The training requirements came into force on April 1, 2015. By the end of 2018, more than 500,000 people had been trained by about 200 accredited training providers.

Objectives:

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

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

Collaboration and Partnerships: IHSA is a collaborator on the learner follow up study. There is a project advisory committees with labour and management representatives from the construction sector.

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

Project Targets for 2021/22:

First Quarter: Update analysis of Ontario injury incidence trend with 2019 data
Update analysis of inter-provincial claims analysis, using AWCBC and StatsCan data

Second Quarter: Submit 2nd manuscript to peer-reviewed publication based on follow up analyses

Third Quarter: Complete analyses for 3rd manuscript

Fourth Quarter: Submit 3rd manuscript

Estimating the financial benefits of OHS prevention expenditures: a study of Ontario employers (1390)

Project Period: Ongoing, to be completed in Q3

Introduction: An IWH project team recently completed a cross-sectional survey of a broadly representative sample of 370 employers in the province of Ontario to obtain estimates of firm-level occupational health and safety (OHS) prevention expenditures. Across all participating firms, the average OHS prevention expenditure per worker per years was estimated to be approximately \$1,400. We do not have information currently in Ontario that describes employers' assessment of the financial benefits of these OHS prevention expenditures. To estimate employers' assessments of the financial benefits of OHS prevention expenditures, we will conduct a cross-sectional survey and facilitate consensus decisions in a sample of 80-100 employers in the province of Ontario. In each participating firm, we will recruit three senior officials to participate in the project's data collection activities: the senior official responsible for health and safety, a senior director of human resource policies and a senior director of the firm's financial management. The research team will convene a consensus meeting of the three senior officials in the firm to review the firm-level prevention expenditure estimates and facilitate a discussion to obtain the firm's consensus estimate of the 'tangible' and 'intangible' benefits of prevention. The final phase of the project workplan will calculate a 'return on investment' (ROI) estimate for each participating firm (estimated financial benefits / prevention expenditures).

Objectives:

- To recruit 80-100 Ontario employers to participate in a consensus-based deliberation to obtain the employer's estimate of the tangible and intangible financial benefits of OHS prevention expenditures
- To calculate an average estimated 'return on investment' for Ontario employers' expenditures on OHS prevention

Researchers: Cameron Mustard (Principal Investigator), Emile Tompa, Basak Yanar.

Collaboration and Partnerships: We will seek the assistance of Ontario's Health and Safety Associations in the recruitment of employers to participate in this study.

Potential Audiences and Significance: We anticipate interest on the part of the Health and Safety Excellence Program of the Ontario Workplace Safety & Insurance Board, the Ontario Ministry of Labour and the Ontario Health and Safety Associations in the findings from this project.

Project Targets for 2021/22:

First Quarter: Continue recruitment of employers and continuation of data collection protocol

Second Quarter: Continue recruitment of employers and continuation of data collection protocol

Third Quarter: Complete analysis and preparation of project report

Fourth Quarter: Project completed

Factors influencing the effectiveness of workplace health and safety committees (1415)

Project Period: New

Introduction: In response to a recommendation contained in the Expert Panel Report on Modern Federal Labour Standards, the federal Labour Program has an interest in understanding factors influencing the effectiveness of workplace health and safety committees (WHSCs) in the federally regulated private sector (FRPS) with a specific focus on non-unionized settings.

Existing Canadian research focused primarily on large, unionized enterprises, has identified a range of factors influencing the effectiveness of committee performance, including: the composition of committees, the role and scope of committees, the functional attributes of committees and the expertise of committee members.

As a foundation for a planned research initiative in this area, Labour Canada has contracted with the Institute for Work & Health to prepare research design options for the planned research initiative.

Objectives:

- To complete a literature review, that includes a typology of factors influencing the effectiveness of WHSCs
- To develop specifications for the sampling of non-unionized FRPS workplaces to ensure a representative sample
- To develop and evaluate options for data collection procedures to assess the factors influencing the effectiveness of WHSC in non-unionized settings in the FRPS in Canada, to include the specification of eligible workplace participants, and the specification of options for the collection of information from eligible workplace participants with consideration given online surveys, in-person interviews or focus groups
- To develop recommendations concerning optimal sample size considerations for the planned research initiative

Researchers: Cameron Mustard (Principal Investigator), Basak Yanar.

Collaboration and Partnerships: No formal collaborations are planned for this research design options phase of work.

Potential Audiences and Significance: We anticipate interest on the part of Canadian OHS regulators in the findings from this project.

Project Targets for 2021/22:

- First Quarter:* Complete all deliverables for the research design options phase.
- Second Quarter:* Collaborate with Labour Canada in the implementation of a planned research initiative in this area
- Third Quarter:* Collaborate with Labour Canada in the implementation of a planned research initiative in this area
- Fourth Quarter:* Collaborate with Labour Canada in the implementation of a planned research initiative in this area

Occupational Injury Risks in Ontario (1175)

Project Status: Ongoing

Introduction: The Expert Advisory Panel on Occupational Health & Safety reported to the Minister of Labour (MOL) 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 MOL with responsibility to develop and execute 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 the workplace level and at the system level (Recommendation 6). The Ontario Auditor-General's review of the the Ministry of Labour (2019) also recommended strengthened research investments to understand the effectiveness of measures to deter OHS violations. In responding to these recommendations, the Occupational Health and Safety Strategy 2021-2026, Ontario Ministry of Labour, Training and Skills Development, has defined a priority objective to 'build and use the best evidence'. The goal of this project is to support the implementation of this objective in the Occupational Health and Safety Strategy 2021-2026 by establishing an epidemiology unit focused on occupational injury. The objective of this unit will be to develop enhanced information on occupational injury hazard exposures in the Ontario labour force and to evaluate the effectiveness of workplace and regulatory measures to control the risk of occupational injury in Ontario.

Objectives:

- To complete planning to define the scope and and three-year workplan for an epidemiology unit on occupational injury
- To initiate a range of epidemiologic studies to accomplish the Year1 objectives in the workplan for the epidemiology unit on occupational injury

Researchers: Cameron Mustard (Principal Investigator), Aviroop Biswas, Victoria Landsman, Lynda Robson, Peter Smith.

Collaboration and Partnerships: A project team within the Prevention Office, Ontario Ministry of Labour, Training and Skills Development will contribute to the definition of objectives and timelines of this project.

Potential Audiences and Significance: The Ontario Occupational Health and Safety Strategy 2021-2026 places prominent emphasis on enhanced data for the measurement of the Ontario prevention system and the development of a common database for planning and operational purposes. This project will support improvements in OHS performance measurement.

Project Targets for 2021/22:

<i>First Quarter:</i>	Complete workplan to understand the influence of workplace safety culture in the prevention of work-related injury
<i>Second Quarter:</i>	Complete planning to define the scope and and three-year workplan for an epidemiology unit on occupational injury
<i>Third Quarter:</i>	Initiate workplan to estimate occupational exposures to physical and chemical hazards in Ontario that increase risk of occupational injury
<i>Fourth Quarter:</i>	Initiate workplan to apply Emergency Department visit records as a source of information on the incidence of work-related injury in Ontario

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

Project Period: Ongoing, to be completed in Q3

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

Objectives:

- To estimate the number of cancer cases due to carcinogen exposure in the Ontario construction sector over the period to 2060
- To identify prevention studies that could reduce airborne/dermal chemical, and physical hazards in Ontario construction
- To evaluate prevention strategies in terms of costs and impacts on the future burden of occupational cancer in Ontario construction
- To organize a special issue of a peer-reviewed journal in which to profile some of the analyses from this project

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

Collaboration and Partnerships: The Infrastructure Health and Safety Association, the Provincial Building and Constructions Trade Council of Ontario, and the Occupational Health Clinics of Ontario Workers.

Potential Audiences and Significance: Infrastructure Health and Safety Association, the Provincial Building and Constructions Trade Council of Ontario, and Occupational Health Clinics for Ontario Workers (partners). The OHS Branch of the Ministry of Labour, Training and Skills Development and the Provincial Labour Management Health and Safety Committee of the construction industry (Section 21 committee) (knowledge users).

Project Targets for 2021/22:

First Quarter: Ongoing activities of submitted manuscripts
Ongoing management of special issue of the International Journal of Environmental Research and Public Health (IJERPH)
Prepare and submit system-level economic evaluation methods manuscript for special issue of IJERPH

Second Quarter: Ongoing management of special issue of the IJERPH

Third Quarter: Ongoing management of special issue of the IJERPH

Fourth Quarter: IJERPH special issue activities completed

XXII World Congress on safety and health at work (2020)

Project Period: Ongoing, to be completed Q3

Introduction: The World Congress on Safety and Health at Work is the world's largest global forum for occupational health and safety professionals. In September 2021, Canada will host the 22nd gathering of the Congress as a virtual meeting, an adjustment required to respond to the global public health challenges of COVID-19. More than 2,500 international delegates are expected to participate. The Congress provides a forum for exchange of knowledge, practices and experience in order to promote safe and healthy work for all, strengthens connections, networks and alliances while laying the groundwork for cooperation and strengthening relationships among all concerned. The Congress is a platform for the exchange of knowledge, innovation, and both strategic and practical ideas to protect the health of workers. The motto for the 2021 World Congress is 'Prevention in the Connected Age: Global solutions to achieve safe and healthy work for all.

Objectives:

- To progress planning and preparations for the September 2021 virtual meeting of the World Congress on Safety and Health at Work

Researchers: Cameron Mustard, Mary Cicinelli, Fareena Kahn.

Collaboration and Partnerships: The World Congress is sponsored by the International Labour Organization (ILO) and the International Social Security Association (ISSA). Canadian hosts for the 2021 World Congress are the Institute for Work and Health (IWH) and the Canadian Centre for Occupational Health & Safety (CCOHS). The Canadian hosts are supported by a National Advisory Committee.

Potential Audiences and Significance: Participants attending the virtual 2021 World Congress will include high-level government officials and decision-makers in the public and private sectors, labour leaders, and CEOs, occupational Safety & Health professionals such as safety engineers, safety technicians, occupational hygienists, scientists, occupational physicians and others dealing with occupational medicine, regulators, labour inspectors, and safety and health inspectors, trade unions, workers and their representatives, social security institutions and researchers, instructors, trainers and teachers in the field of OSH education.

Project Targets for 2021/22:

First Quarter: Complete preparations for the virtual format of the XXII World Congress
Congress registration opens

Second Quarter: Prepare virtual program content for the XXII World Congress
Congress registration continues
Hosting of the XXII World Congress, September 20-23, 2021

Third Quarter: Complete evaluation of Congress outcomes
Conclude project

Fourth Quarter:

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

Project Period: Ongoing

Introduction: 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 occupational health and safety 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:

- To 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
- To examine whether trends in these constructs differ according to age, sex, labour market gender roles, occupational groups, and geographic location
- To examine the reciprocal relationship between potentially modifiable factors and workplace cannabis use over time

Researchers: Nancy Carnide (Co-Principal Investigator), Peter Smith (Co-Principal Investigator), Andrea Furlan, Hyunmi Lee, Sara Macdonald, Michael Frone (University at Buffalo), Shawna Meister, Amy Porath (Canadian Centre on Substance Use and Addiction).

Collaboration and Partnerships: Partners include Health Canada, Labour Program (Employment and Social Development Canada), Public Services Health & Safety Association, Canadian Centre on Substance Use and Addiction, Canadian Centre for Occupational Health and Safety, Ontario Ministry of Labour, Training and Skills Development, Ontario Building Trades, Unifor, Workplace Safety North, Workplace Safety & Prevention Services, WorkSafeBC, Nova Scotia Trucking Safety Association, and Federally Regulated Employers – Transportation and Communications (FETCO).

Potential Audiences and Significance: Key audiences include employers, occupational health and safety associations and professionals, and policy makers. This project will provide information to understand the short-term effects of legalization on the workplace and help to inform development of policies, practices, and prevention initiatives to ensure lower risk use among Canadian workers.

Project Targets for 2021/22:

- First Quarter:* Obtain ethics renewal. Continue analyses of survey 3 data. Manuscript preparation and speaker series presentation. Refine the survey instrument for survey 4 with feedback from the advisory committee
- Second Quarter:* Continue analyses of survey 3 data. Manuscript preparation. Finalize survey instrument; obtain ethics renewals. Data collection
- Third Quarter:* Data cleaning and initial data analysis of survey 4 data
- Fourth Quarter:* Data analysis; meet with advisory committee. Manuscript preparation

How much movement do workers need to be healthy? Understanding work-related and non-work contributions to the movement patterns of Canadian workers and their cardiometabolic consequences (1395)

Project Period: Ongoing, to be completed Q3

Introduction: An increasingly sedentary society has necessitated efforts to promote physical activity, and the workplace provides an ideal setting for activity promotion as >15 million Canadians spend half their days at work. However, activity at work might not confer the same health benefits as 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. Previous Canadian studies examining workers' activity patterns have generally relied on self-reported data that are subject to recall and social desirability biases, limiting accuracy and reliability. Accelerometers have created opportunities to improve surveillance and analytic research on activity and health in free-living individuals, although their use has been mostly limited to small studies. To our knowledge, no studies have objectively measured the movement patterns of a representative sample of Canadian workers. This study would provide an opportunity to examine movement behaviours both during work and non-work among a large sample of workers and gain insight into variations in cardiometabolic risk.

Objectives:

- To describe the movement patterns of Canadian workers at work and outside of work, explore differences in patterns between older and younger workers, between men and women, and identify which patterns are associated with optimal cardiometabolic health profiles

Researchers: Aviroop Biswas (Principal Investigator), Cameron Mustard, Peter Smith, Stephanie Prince Ware (Public Health Agency of Canada).

Collaboration and Partnerships: None

Potential Audiences and Significance: This project fills an unexplored gap in our understanding of how movements are accumulated by Canadians in free-living conditions at their jobs and how they influence overall movements, and in turn cardiometabolic health. Findings will inform movement patterns that are both feasible and beneficial for workers and inform public health recommendations on whether certain movement patterns at work offer protective cardiometabolic benefits.

Project Targets for 2021/22:

First Quarter: Complete analysis with possibility of additional analyses

Second Quarter: Manuscript preparation
Dissemination of findings

Third Quarter: Manuscript preparation
Dissemination of findings

Fourth Quarter: Project completed

Cannabis and workplace fatalities: establishing a baseline in Ontario (1400)

Project Period: Ongoing

Introduction: On October 17, 2018, cannabis use for non-medical purposes was legalized in Canada. Cannabis-related workplace injuries have been identified as an important public safety metric for surveillance. Yet, there is no existing population-based data source that can readily be used to estimate the current extent of cannabis involvement in workplace injuries in Canada, nor monitor trends in involvement over time. Coroner records, which provide detailed information on the causes and circumstances of death (including toxicology), may represent an important existing source of data for measuring and identifying trends in cannabis use among fatally injured workers. Using coroner data housed at the Office of the Chief Coroner from Ontario, this study aims to assess the feasibility of using coroner data as a data source for surveillance of cannabis-related workplace fatalities.

Objectives:

- To measure the proportion of workplace fatalities that undergo toxicology testing, assess the nature and quality of data available on toxicology testing, examine the worker-, workplace-, injury- and incident-related factors associated with being tested, and describe trends over time
- To estimate, among cases with toxicology data, the nature and extent of cannabis involvement in workplace fatalities, explore variation by worker-, workplace-, injury-, and incident-related factors, and describe trends over time, comparing fatalities involving cannabis with those involving other substances and no substances

Researchers: Nancy Carnide (Co-Principal Investigator), Peter Smith (Co-Principal Investigator), Momtaz Begum, Andrea Furlan, Cameron Mustard, Dylan Maccarone, Sara Macdonald, Lily Fang (Health Canada), Tammy Khuc (Ontario Health), Nikhil Rajaram (Ontario Ministry of Labour, Training and Skills Development), Melissa Smith (Employment and Social Development Canada, Labour Program).

Collaboration and Partnerships: Partners include Ontario Ministry of Labour, Training and Skills Development, Health Canada, Public Services Health & Safety Association, Infrastructure Health and Safety Association, Workplace Safety North, and Workplace Safety & Prevention Services

Potential Audiences and Significance: Key audiences include employers, occupational health and safety associations and professionals, and policy makers. This project will provide an assessment of the feasibility of using coroner data to measure and monitor cannabis-related workplace fatalities and initial pre-legalization information on cannabis involvement in workplace fatalities in Ontario. Where determined to be feasible, this study will establish a standardized process to support ongoing surveillance following legalization and act as a pilot to inform a larger scale study to expand data collection.

Project Targets for 2021/22:

First Quarter: Complete data abstraction. Obtain ethics renewal

Second Quarter: Data cleaning and initial data analysis

Third Quarter: Data analysis. Meet with advisory committee. Manuscript preparation

Fourth Quarter: Data analysis; meet with advisory committee. Manuscript preparation

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

Project Period: New

Introduction: 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. The Occupational Cancer Research Centre, led by Dr. Paul Demers, has developed a unique surveillance program, the Occupational Disease Surveillance System (ODSS), originally designed to detect and monitor risks of work-related disease in Ontario workers. The proposed work aims to adapt the ODSS and establish a surveillance program to monitor opioid-related harms among injured workers and the Ontario workforce more broadly. The ODSS will be updated and data from recent compensation claimants will be linked to healthcare data to capture current trends in opioid-related hospitalizations and emergency department visits among Ontario workers. This project is a collaboration between the Institute for Work & Health and the Occupational Cancer Research Centre at Ontario Health.

Objectives:

- To adapt and expand the ODSS to examine opioid-related adverse health events
- To monitor and describe temporal trends of opioid-related hospitalizations and emergency department visits among Ontario workers since 2006
- To identify the demographic, nature of injury, and occupational characteristics associated with opioid-related hospitalizations and emergency department visits
- To compare incident rates of opioid-related harms in the ODSS to those in the general population of Ontario

Researchers: Nancy Carnide (Co-Principal Investigator), Andrea Furlan, Sara Macdonald, Nathan Debono (Ontario Health) Paul Demers (Co-Principal Investigator; Ontario Health).

Collaboration and Partnerships: Partners include the Ontario Workplace Safety & Insurance Board, the Ontario Ministry of Labour, Training and Skills Development, Public Health Ontario, Ontario Building Trades, and the International Brotherhood of Boilermakers.

Potential Audiences and Significance: Key audiences include healthcare providers, injured worker advocates, workers' compensation organizations, employers, and policy makers. This project will result in a surveillance program aimed at identifying and monitoring opioid-related harms in the Ontario working population. The information will help us understand whether rates of opioid-related harms in particular worker subgroups are changing over time, to inform targeted prevention and harm reduction activities.

Project Targets for 2021/22:

Note: The project received began October 2020, ethics was submitted, data linkage, data cleaning, development of operational case definitions for opioid-related harms, preliminary analyses, and an advisory committee meeting were conducted.

First Quarter: Develop project website. Data cleaning and preliminary data analyses
Request Ontario population rates from ICES

Second Quarter: Develop project website. Continue data analyses

Third Quarter: Continue data analyses. Obtain ethics renewal

Fourth Quarter: Meet with the advisory committee. Manuscript preparation. Update project website

Prevention and Management of Work Disability

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

Workplace practices for sustainable return-to-work

The Institute for Work & Health has conducted actionable research for more than two decades that supports improvement in workplace practices to prevent disability. The Institute will continue this commitment in 2021/22. Institute scientists have been engaged for several years in research evaluating disability management practices in the workplace. In 2021/22, the Institute will continue their deep focus on accommodations and communications in the workplace impacting workers across age ranges. This will include continuing to work on studies that look at sustainable work participation, including workplace communication and accommodation from the perspective of various workers, including those with disabilities and episodic and chronic health conditions.

The economic impact of work disability

Institute scientific staff have conducted important research over the past decade on the adequacy of workers' compensation benefits and the economic impact of work disability on individuals and households. The Institute will continue a strong portfolio of research work on this theme in 2021/22, including the final year of the work done as part of the Centre for Research on Work Disability Policy (CRWDP), a multi-year trans-disciplinary initiative that looks into the future of work disability policy and labour-market engagement in Canada. We will complete our work on a project that aims to describe the long-term outcomes affecting people with work related injuries or illnesses after they are no longer engaged with the Ontario workers' compensation system.

Measuring health and function

In 2021/22, we will continue our work in measuring health and function through the perspective of employment needs and supports. More specifically, we are looking at supporting employment participation of young Canadian adults with disabilities. We will continue existing and commence new projects that examine future-proofing of young Canadians with disabilities for the changing labour market. In 2021/22 the Institute will work on a new multi-stakeholder pilot project aimed at developing, implementing and evaluating the first occupational and environmental medicine tele-mentoring program network of its kind.

B. Prevention and Management of Work Disability

Return-to-work Practices

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

Project Period: New

Introduction: Work-related injuries and illnesses are an important public health concern, with profound impacts on a worker's physical health, mental well-being, and financial security. There is growing interest 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. Using a mixed-methods design, workers' compensation claimants that participated in the Ontario Life After Work Injury Study (project 2320) will be re-interviewed 18 months after their first interview (~3 years after filing their workers' compensation claim) 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:

- To 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
- To 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
- To evaluate the cross-sectional and longitudinal association between condition-related use and recovery outcomes

Researchers: Nancy Carnide (Co-Principal Investigator), Peter Smith (Co-Principal Investigator), Andrea Furlan, Sara Macdonald, Cameron Mustard, Colette Severin, Shawna Meister (Canadian Centre on Substance Use and Addiction), Stephanie Premji (McMaster University), Tiffany Turnbull (Ontario Workplace Safety & Insurance Board).

Collaboration and Partnerships: Partners include the Ontario Workplace Safety & Insurance Board, Canadian Centre on Substance Use and Addiction, Prevention Link (Ontario Federation of Labour), Injured Workers Community Legal Clinic, Workplace Safety & Prevention Services, the Canadian Injured Workers Alliance, and Gratton Consulting.

Potential Audiences and Significance: Key audiences include health care providers, injured worker advocates, and workers' compensation authorities. This project will provide information to inform programs, policies and practices around cannabis use in this population, including an identification of the worker subgroups most likely to benefit from guidance around use.

Project Targets for 2021/22:

Note: The project began in October 2020, ethics was submitted, a follow-up questionnaire designed, consultation with the advisory committee, and telephone interviews were started.

First Quarter: Conduct telephone interviews

Second Quarter: Continue telephone interviews

Third Quarter: Obtain ethics renewal and complete telephone interviews; Initial data cleaning

Fourth Quarter: Conduct data cleaning and analysis

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

Project Period: Ongoing

Introduction: The unprecedented size of the baby boom generation (born 1946-1964) has created concerns about the greying of the workforce. One strategy to sustain labour force growth and personal financial security is to help individuals work longer. Yet apprehensions about older workers have been raised, including whether there are age-related changes in motivation to learn new skills (e.g., new technology), life course changes in responsibilities (e.g., caregiving), and changes in physical capacity (e.g., fatigue, physically demanding work). Whether due to negative stereotypes or actual work-personal life changes, emerging research suggests that older workers can be concerned about communicating their needs to others. This raises alarms that communication is a significant barrier to receiving supports, accommodations and training that could sustain work productivity and high job satisfaction. Ultimately, the absence of supports may impact work outcomes like absenteeism, productivity or even forgoing employment, which in turn, may fuel continued negative perceptions of older workers. Currently, there is little data examining how older workers make decisions about whether, to whom, what to say, and when to communicate their job needs. By understanding processes related to communication, we can inform workplace practices and policies and help older workers to sustain employment and take advantage of the financial, personal and social benefits of work.

Objectives:

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

Researchers: Monique Gignac (Principal Investigator), Julie Bowring, Genevieve Jessiman-Perreault, Arif Jetha, Faraz Shahidi, Sabrina Tonima, Jill Cameron (Rehabilitation Sciences, University of Toronto), Vicki Kristman (Lakehead University).

Collaboration and Partnerships: Not Applicable.

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

Project Targets for 2021/22:

First Quarter: Continue analyzing survey data; Prepare paper on issues related to working with a disability and COVID

Second Quarter: Continue data analysis with postdoctoral fellow and PhD student input to develop new studies. Return to qualitative data for paper preparation

Third Quarter: Continue data analysis with postdoctoral fellow and PhD student input to develop new studies. Return to qualitative data for paper preparation

Fourth Quarter: Continue data analysis with postdoctoral fellow and PhD student input to develop new studies. Return to qualitative data for paper preparation

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)

Project Period: Ongoing

Introduction: 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 mental and physical health 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:

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

Researchers: Monique Gignac (Principal Investigator), Dorcas Beaton, Julie Bowring, Curtis Breslin, Emma Irvin, Arif Jetha, Sara Macdonald, Ron Saunders, Peter Smith, Emile Tompa, Sabrina Tonima, Dwayne Van Eerd, Gemma Woticky, Renee-Louise Franche (WorkSafeBC), Joy MacDermid (University of Western Ontario), William Shaw (University of Connecticut Health Center), Aaron Thompson (University of Toronto).

Collaboration and Partnerships: Partners include The Arthritis Society, the Canadian Mental Health Association, Crohn's & Colitis Canada, the Great-West Life Centre for Mental Health in the Workplace, Mindful Employer Canada, the Multiple Sclerosis Society of Canada, the Ontario Ministry of Labour, Training and Skills Development, Realize Canada, and the University of Toronto.

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

Project Targets for 2021/22:

First Quarter: Submit revised approach/avoidance communication paper to JOOR; Create an online version of the Job Demands & Accommodation Planning Tool (JDAPT); apply for ethics and begin JDAPT online evaluation testing

Second Quarter: Prepare HPW midterm evaluation materials for SSHRC/CIHR; Begin manuscript reporting on JDAPT feasibility testing; Develop initial items for communication decision-making tool; work with new trainees to develop new research in accommodation and communication of episodic disability needs; continue to work with partners to meet project and partner needs

Third Quarter: Seek to enhance partnerships for evaluation testing of JDAPT; get researcher and partner input on communication decision-making tool; begin pilot testing of communication decision making tool; work with trainees to develop new research in

accommodation and communication of episodic disability needs; continue to work with partners to meet project and partner needs

Fourth Quarter: Seek to enhance partnerships for testing of JDAPT; get researcher and partner input on communication decision-making tool; continue pilot testing of communication decision making tool; work with trainees to develop new research in accommodation and communication of episodic disability needs; continue to work with partners to meet project and partner needs

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

Project Period: Ongoing

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

Objectives:

- To identify the workplace supports needed by Millennial young adults with RD, and to what extent are they available and used
- To examine characteristics of Millennial young adults with RD and how their work conditions relate to unmet workplace support needs
- To review findings to assess if those that report greater unmet workplace support needs are more likely to indicate difficulties with employment
- To examine whether or not work conditions impact the relationship between unmet workplace support needs and difficulties with employment?

Researchers: Arif Jetha (Principal Investigator), Julie Bowring, Monique Gignac, Catherine Backman (University of British Columbia), Vicki Kristman (Lakehead University), Laurie Proulx (Canadian Arthritis Patient Alliance), Lori Tucker (University of British Columbia).

Collaboration and Partnerships: Canadian Arthritis Patient Alliance, The Arthritis Society.

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

Project Targets for 2021/22:

First Quarter: Complete recruitment of Time 2. Complete paper examining the relationship between accommodation and presenteeism

Second Quarter: Prepare for time 3 data collection. Prepare REB re-submission

Third Quarter: Conduct time 3 data collection

Fourth Quarter: Complete two manuscripts

Ontario life after work injury study (2320)

Project Period: Ongoing, to be completed in Q4

Introduction: The purpose of this study is to describe the long-term outcomes affecting people with work related injuries or illnesses after they are no longer engaged with the Ontario workers' compensation system. The study will compare 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, claimants with longer time to resolution, and claimants with prolonged claim activity. Second, we will compare health and labour market outcomes of the three groups of workers' compensation lost-time claimants to two similar cohorts of injured workers (a historic one from Ontario and a more contemporaneous one from another jurisdiction) and to a cohort of Ontario workers with similar occupational and demographic characteristics who have not recently experienced a work-related injury or illness. The aim of this study will be to identify factors associated with positive and negative labour market and health recovery outcomes and to determine if there are particular groups of workers who are at most risk for poor labour-market and health recovery outcomes.

Objectives:

- To develop an interviewer-administered questionnaire to collect information in the following domains: (1) Return to work and labour market status; (2) sources of income; (3) function, recovery and other health outcomes; (4) perceptions of the fairness of the claim and RTW process; (5) interactions between the claimant, their workplace and their healthcare providers; and (6) basic socio-demographic characteristics and pre-injury information on occupation, earnings, industry and workplace size
- To recruit three groups of 400 lost-time claim beneficiaries to participate in an interviewer-administered survey. Followed by linking survey responses to WSIB administrative records
- To conduct descriptive and regression analyses to identify the modifiable and non-modifiable factors within the OIWOS 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

Researchers: Cameron Mustard (Principal Investigator), Nancy Carnide, Colette Severin, Peter Smith, Emile Tompa.

Collaboration and Partnerships: IWH has a long history of successful collaboration with the WSIB in support of program and service delivery evaluation, reform and improvement. We have high expectations that this work will return important benefits to the design and administration of WSIB claimant services.

Potential Audiences and Significance: The findings from this project will be of interest to representatives of injured workers and administrators of work disability insurance programs in Canada.

Project Targets for 2021/22:

First Quarter: Continue descriptive and regression analysis
Complete chronic disease manuscript

Second Quarter: Continue descriptive and regression analysis
Complete chronic pain manuscript

Third Quarter: Continue descriptive and regression analysis
Complete return-to-work manuscript

Fourth Quarter: Project completed

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

Project Period: Ongoing

Introduction: Return to work (RTW) after injury can be challenging for the individual returning, police services and workers compensation systems. This can be the case regardless of the type of injury (physical or psychological). There is a growing scientific literature examining the most effective RTW interventions for workplaces, including a number of recent systematic reviews. However, there is a knowledge gap regarding the practical aspects of RTW for first responders. In addition, scientific research is only one source of evidence. The original definition of evidence-based practice includes practitioner expertise plus worker experience along with the best available research evidence.

Objectives:

- To describe and synthesize current RTW programs/practices along with the best available research evidence
- To conduct interviews and focus groups with Occupational Health and Safety (OHS) practitioners, managers/supervisors, and workers within the police force to gather detailed information about current RTW practices in Ontario
- To 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

Researchers: Dwayne Van Eerd (Principal Investigator), Siobhan Cardoso, Emma Irvin, Monique Gignac, Arif Jetha, Morgane Le Pouésard, Emile Tompa, Basak Yanar, Tanya Morose (PSHSA).

Collaboration and Partnerships: Tanya Morose (Public Services Health & Safety Association).

Potential Audiences and Significance: The primary audience is police services in Ontario. Exploring and better understanding these differences are critical to how the WSIB can target their supports for injured worker outcomes and their experiences with the workers' compensation system.

Project Targets for 2021/22:

- First Quarter:* Interview data collection continues. Continue QL coding and synthesis of literature findings. Initiate QL data analysis
- Second Quarter:* Complete QL analysis of interview data. Synthesis of literature and practices data. Host teleconference (advisory committee and co-investigators) to discuss findings and preliminary messages for use in guide
- Third Quarter:* Draft guide for stakeholder workshop. Review and update (as needed) KTE plans for project. Conduct stakeholder workshop. Review advisory committee role in KTE
- Fourth Quarter:* Complete guide. Initiate KTE activities. Write final report

Income security and labour-market engagement: envisioning the future of disability policy in Canada (2195)

Project Period: Ongoing, to be completed in Q4

Introduction: A significant current context of work disability policy is the changing nature of work, workers, and injuries. By work disability policy, we mean policy related to any federal or provincial Canadian program that shapes income security and labour-market engagement for work-disabled individuals. We also include employers in the disability policy system as they play an important role. In the past, efforts to revamp the Canadian work disability policy system have been piecemeal, uncoordinated, and have failed to address core changes to workplaces and the labour-markets. Our eight-year initiative is a transdisciplinary inquiry into the future of work disability policy and labour-market engagement.

Objectives:

- To 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
- To identify problems and challenges associated with program coordination and complexity
- To identify relevant and favourable alternative approaches to system design or service provision
- To build capacity for research and knowledge mobilization on the topic of work disability policy

Researchers: Emile Tompa (Principal Investigator), Sabrina Imam, Arif Jetha, Kathy Padkapayeva, Ron Saunders, plus over 60 academics and over 60 partners from across the country.

Collaboration and Partnerships: Disability communities and program provider representatives.

Potential Audiences and Significance: Canadian work disability policy system, including injured worker/ disability communities, employers, policymakers, disability program administrators, and service providers.

Project Targets for 2021/22:

<i>First Quarter:</i>	Prepare and host CRWDP closing symposium Complete SSHRC final funding report Host DWC federal-provincial policy round table CRWDP closing symposium materials uploaded to website
<i>Second Quarter:</i>	Ongoing planning for DWC 2021 conference Submit SSHRC final funding report
<i>Third Quarter:</i>	Host DWC 2021 conference in December 2021
<i>Fourth Quarter:</i>	Disability and Work in Canada 2021 Conference materials uploaded to website

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

Project Period: Ongoing, to be completed Q3

Introduction: The European Agency for Safety and Health at Work (EU-OSHA) would like to improve information on costs and benefits in the area of occupational safety and health (OSH) in order to help policy makers to set priorities in European and national prevention strategies and to allocate resources most efficiently and to raise awareness of costs of non-OSH among policy makers outside the field of OSH. With these aims in mind, the objective of this study is to estimate the costs of work-related injuries, illnesses and deaths for at least five countries out of EU28 + Norway and Iceland. In the estimation of costs, the following aspects will be taken into account: value life and health impacts, transparent and reproducible methodology, distinguish between cost bearers (e.g., employers, workers and their families, government and society at large).

Objectives:

- To develop a cost calculation model to estimate the costs of work-related injuries, illnesses and deaths
- To apply the model to the data from five EU countries in order to estimate the economic burden of work injury and illness in those countries for reference year 2015
- To prepare and publish a methodology manuscript from the study to support standardization of the cost calculation model

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

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

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

Project Targets for 2021/22:

First Quarter: Prepare draft of methodology manuscript on the cost calculation model

Second Quarter: Complete and submit the methodology manuscript

Third Quarter: Revise and resubmit methodology manuscript as needed

Fourth Quarter: No specific activities

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

Project Period: Ongoing, to be completed in Q3

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

Objectives:

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

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

Collaboration and Partnerships: Not applicable.

Potential Audiences and Significance: Consultations with WSIB policymakers and worker representatives to ensure the analyses and results are framed appropriately and address relevant issues.

Project Targets for 2021/22:

First Quarter: Complete and submit final report to the funder
Prepare and submit manuscripts for peer-review publication

Second Quarter: Continue with peer-review manuscript submission activities

Third Quarter: Ongoing peer-review manuscript activities

Fourth Quarter:

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

Project Period: Ongoing

Introduction: Financial incentives for employers to recruit, retain and promote persons with disabilities (FIs) take many forms. They are used in Canada and elsewhere as a way to address low rates of employment among people with disabilities. However, to date there has been little research examining how and when they work to improve employment opportunities for 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. The overarching goal of the initiative is to undertake a multi-module, partnered research and knowledge mobilization initiative to develop evidence-informed resources on best-practices for the use of FIs.

Objectives:

- To 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
- To undertake an international environmental scan of good practices in the use of FIs
- To develop case studies using qualitative and quantitative methods that contextualize how and when FIs work well or do not work well and why
- To develop contextualized, evidence-informed resources for stakeholders (including government and employer representatives) on best practices in the use of FIs

Researchers: Emile Tompa (Co-Principal Investigator), Rebecca Gewurtz (Co-Principal Investigator, McMaster University), Emma Irvin, Heather Johnston, Cindy Moser, Kathy Padkapayeva, Dan Samosh.

Collaboration and Partnerships: Maureen Haan (Canadian Council on Rehabilitation and Work), Abdou Saouab (Employment and Social Development Canada), Michael MacDonald (Jazz Aviation).

Potential Audiences and Significance: This study is of relevance to federal and provincial/territorial governments and policymakers as well as service providers who provide job development, matching and support services for workers with disabilities and employers.

Project Targets for 2021/22:

First Quarter: Continue with case study development
Complete resource environmental scan, perceptions study, and mapping exercise
Initiate interviews for environmental scan
Host quarterly advisory committee meeting

Second Quarter: Continue with case study development
Complete interviews for the environmental scan
Host quarterly advisory committee meeting

Third Quarter: Continue with case study development
Complete report for environmental scan, perceptions study and mapping exercise
Initiate drafts of lay friendly resources
Host quarterly advisor committee meeting

Fourth Quarter: Complete case studies, report and prepare manuscripts
Host quarterly advisory committee meeting seek input on resources

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

Project Period: Ongoing

Introduction: 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 labor market subgroups including young workers and people living with disabilities. 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 labor market conditions represents an important direction in social and public health policy that can shape pathways to better health for the working population.

Objectives:

- Construct medium-to-long-term views of the future of work as it relates to young people with disabilities

Investigators: Arif Jetha (Principal Investigator), Monique Gignac, Ali Shamaee, Peter Smith, Emile Tompa.

Collaboration and Partnerships: Employment and Social Development Canada Government of Canada, Canadian Council for Rehabilitation and Work, Civic Innovation Office, City of Toronto, Nextbillion.org, The Knowledge Society, Education at Work Ontario.

Potential Audiences and Significance: Policy makers, people with disabilities, employers, social innovation groups, employment service providers. This work will inform future-proofing policies and programs that support young people with disabilities.

Project Targets for 2021/22:

First Quarter: Complete paper on young people with disabilities' perspectives of the future of work and submit for peer review

Second Quarter: Conduct qualitative analysis of informant interviews

Third Quarter: Author paper on key informant interviews

Fourth Quarter: Future proofing planning meeting and generation of applied recommendations

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

Project Period: New

Introduction: 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:

- To better understand specific job accommodations that can enhance the school-to-work transition and emerging barriers that young people with disabilities could face in accessing needed job accommodations within the changing world of work

Researchers: Arif Jetha (Principal investigator), Monique Gignac, Kay Nasir, Sara MacDonald, Emile Tompa, Dwayne Van Eerd; Kathleen Martin Ginis (University of British Columbia).

Collaboration and Partnerships: Abilities Centre, Canadian Council for Rehabilitation and Work (CCRW), National Educational Association for Disabled Students (NEADS).

Potential Audiences and Significance: This project aims to generate future-oriented and proactive evidence regarding the school-to-work transition of young people with disabilities and to advance knowledge of job accommodation practices. The findings will be of interest to employers, educators, employment service providers, policy-makers and young adults with disabilities and their families.

Project Targets for 2021/22:

First Quarter: Assemble advisory panel
Delphi survey development and pilot testing
Ethics submission

Second Quarter: Recruitment of survey participants,
Administration of Delphi survey (two rounds)
Data analysis (survey results)

Third Quarter: Interviews, data analysis (interview results)
Generation of key themes

Fourth Quarter: Knowledge transfer activities
Writing final report

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

Project Period: New

Introduction: 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. We apply 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. Findings will 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. 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:

- To uncover dimensions of the future of work that will be most likely to impact the transition to work of young people and identify the specific groups of young people who are most vulnerable to inequities within the changing labour market and benefit from additional support

Researchers: Arif Jetha (Principal Investigator), Monique Gignac, Sara Macdonald, Kay Nasir, Ali Shamaee, Peter Smith; Yani Hamdani (University of Toronto), Vicki Kristman (Lakehead University).

Collaboration and Partnerships: Not applicable.

Potential Audiences and Significance: Educators, employers, youth-based community organizations and policy makers. This work will inform policies and programs that support the transition to work of vulnerable young people in the future of work and address existing and emerging labour market inequities.

Project Targets for 2021/22:

First Quarter: Develop and finalize interview guide and data collection procedures
Submit ethics protocol

Second Quarter: Recruit young people and conduct interviews
Complete annual reporting

Third Quarter: Continue to recruit young people and conduct interviews
Begin qualitative analysis and examine emergent themes

Fourth Quarter: Continue qualitative analysis and examine emergent themes

ECHO Occupational and Environmental Medicine (OEM): development, implementation and evaluation (2335)

Project Period: New

Introduction: Physicians and nurses play an important role in return-to-work and disability management of injured workers. However, they receive little training related to occupational medicine, work functioning or workers' compensation systems. Physicians complain of frustration with complex cases and the burden to deal with the WSIB. In 2014, Dr. Furlan implemented the first Project Extensions for Community Healthcare Outcomes (ECHO) in Canada. ECHO is a tele-mentoring program that uses weekly videoconference case-based discussions with an inter-professional team of experts to connect with physicians and nurses in rural and remote areas of Ontario to leverage scarce healthcare resources, 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 in the world.

Objectives:

- To successfully implement an ECHO OEM in Ontario
- To evaluate the performance of ECHO OEM in increasing capacity to manage patients with work-related injuries or diseases, or environmental exposures in primary care settings
- To improve engagement of physicians with WSIB regarding patient care

Researchers: Andrea Furlan (Principal Investigator), Nancy Carnide, Shireen Harbin, Emma Irvin, Sara Macdonald Colette Severin, Peter Smith, Anil Adisesh (University of Toronto), Behdin Nowrouzi-Kia (University of Toronto).

Collaboration and Partnerships: Partners include the ECHO Ontario Superhub, ECHO Institute at the University of New Mexico, University of Toronto, Association of Family Health Teams of Ontario (AFHTO), Nurse Practitioners' Association of Ontario (NPAO), Lakehead University, Occupational Cancer Research Centre, St. Michael's Hospital, Occupational Medicine Specialists of Canada (OMSOC), Occupational Health Clinics for Ontario Workers (OHCOW), and the Workplace Safety and Insurance Board

Potential Audiences and Significance: Key audiences include healthcare providers, injured workers, workplace parties. ECHO has the potential to positively impact the outcomes for working adults and our health system more broadly.

Project Targets for 2021/22:

Note: The project began in January 2021, ethics was submitted, design of the pre- and post-ECHO questionnaires, an Advisory Committee was held, and development of a needs assessment was started.

- First Quarter:* Complete needs assessment and develop didactic curriculum
Prepare advertising material and recruit health care providers (spokes)
- Second Quarter:* Conduct pre cycle 1 baseline data collection and deliver cycle 1 weekly sessions
- Third Quarter:* Complete delivery of pre-cycle 1 weekly sessions
Conduct data cleaning and analyses
Conduct post-cycle 1 data collection
- Fourth Quarter:* Hold meeting with Advisory Committee
Complete data analyses of cycle 1
Conduct modifications to curriculum and data collection tools

Canadian work disability prevention standard for paramedics with PTSI (3400)

Project Period: Ongoing

Introduction: The prevention and management of workplace disability (focused on tertiary and secondary prevention) is a significant challenge for Paramedic services. It also has an impact beyond the workplace affecting individuals in paramedic families, and communities. This project involves the development, promotion, and dissemination of a nationally applicable Canadian Paramedic Organization Work Disability Prevention Standard and related tools, with a focus on helping prevent and manage work disability associated with post-traumatic stress injury (PTSI) of Paramedics; helping prevent psychological harm from workplace exposures; and building the capacity of Paramedic services to address the psychological health and wellbeing of Paramedics. The proposed Standard and related tools will provide an innovative approach to preventing and managing PTSI systematically, by addressing it in a strategic, coordinated, and broad organizational management framework. The Standard will provide guidance to systematically manage work disability prevention activities within Paramedic services. It will include a framework for the management of work disability prevention and management, and for hiring and retaining workers with mental and physical disabilities. It will be designed to be integrated with other related frameworks such as CSA Z1003.1, the Paramedic Psychological Health and Safety in the Workplace (focused on primary prevention). The work disability prevention standard for paramedic organization will focus on tertiary and secondary prevention.

Objectives:

- To synthesize evidence on work disability management systems in the peer reviewed and grey literatures to help inform the development of a Canadian standard for paramedic on work disability prevention
- To undertake a needs assessment of paramedic organization in the area of work disability management and prevention of PTSI and mental health
- To develop, promote and disseminate a nationally applicable Canadian standard for paramedics on work disability prevention
- To develop guidance and tools to facilitate uptake of the standard in paramedic organizations

Researchers: Emile Tompa (Co-Principal Investigator), Amin Yazdani (Co-Principal Investigator, Conestoga College), Sabrina Imam, Emma Irvin, Dwayne Van Eerd, Ron Meyers, Nicki Islic (CSA Group).

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

Potential Audiences and Significance: Paramedics and paramedic organizations across Canada and other first responders such as police, firefighters and military personnel.

Project Targets for 2021/22:

First Quarter: Ongoing technical committee meetings to develop the standard
Complete manuscript from peer-reviewed literature review (scoping review)

Second Quarter: Complete develop of the standard

Third Quarter: Complete public consultations and responses to commentary
Finalize standard document
Begin developing resources for implementation

Fourth Quarter: Ongoing development of resources for implementation

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

Project Period: Ongoing

Introduction: This multi-year project involves the development and ongoing testing of the DASH, a 30-item self-completed questionnaire designed to measure disability and symptoms in any or multiple disorders of the upper limb. The DASH Outcome Measure was jointly developed by the Institute for Work & Health (IWH) and the American Academy of Orthopaedic Surgeons (AAOS). It is used internationally with translations available in over 50 dialects and languages. In 2005, the 11-item QuickDASH was released. In 2011, we published a paper that outlined benchmarking scores for the DASH. In 2012, the 3rd edition of the DASH/QuickDASH User's Manual was loaded onto our website. Several tools to assist users with the calculation of DASH/QuickDASH scores have been developed within the Institute. In 2012, we developed the DASH Outcome Measure application for use on the iPad. In the last year we have systematically reviewed the literature finding all articles that have used the DASH. This includes over 300 articles on the DASH's measurement properties. Ongoing work with the DASH includes creating new evidence and standards as well as creating ways to make the growing body of evidence on the DASH accessible to our key stakeholders. We are rechecking that the content of the DASH is still relevant and comprehensive for capture the impact of a musculoskeletal disorder of the upper limb on day to day functioning.

Objectives:

- To continue work with the DASH and review of measurement properties
- To revise the scoring system for the DASH based on the findings of repeated factor analysis and a recheck of the relevance of the content of the DASH
- To pro-actively address issues related to the DASH

Researchers: Dorcas Beaton (Institute Coordinator), Jocelyn Dollack, Selahadin Ibrahim.

Collaboration and Partnerships: Consultation with stakeholders, regulatory bodies and other researchers have and will continue to occur throughout the development and fulfillment of these projects.

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

Project Targets for 2021/22:

First Quarter: Continue quarterly screening of articles using new online screening system.
Reach out to stakeholder groups to determine needs for the DASH
Report on opportunities for developing a database of the measurement property studies of the DASH
Submit scoping review of literature on measurement properties

Second Quarter: Begin literature review papers on the DASH Outcomes Measure
Complete study on rechecking the content validity of the DASH Outcome Measure
Look for opportunities to gain funding for systematic reviews of this literature

Third Quarter: Plan for and conduct reviews of measurement properties in various regions
Explore online learning platforms to build modules on use of the DASH

Fourth Quarter: KT activities to promote best use of the DASH Outcome Measure

Measurement methodology studies (0925)

Project Period: Ongoing

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

Objectives:

- To evaluate approaches used to determine the validity and reliability of different indicators/measures and the approaches used to review these properties in the literature.
- To produce models of recovery based on qualitative and quantitative findings.
- To advance evidence-based approaches to selection of outcome measurement instruments in musculoskeletal disorders and work-related injuries.

Researchers: Dorcas Beaton (Institute Coordinator), Cynthia Chen, Emma Irvin, Peter Smith, Dwayne Van Eerd, Rachelle Buchbinder (Monash University, Australia), Kim Cullen (Memorial University), Frances Guillemain (University of Nancy, France), Jeff Katz (Brigham and Women's Hospital, Harvard University), Mary Kita (University of Toronto), Zahi Touma (University of Toronto), Peter Tugwell (University of Ottawa), G Wells (Ottawa Hospital Research Foundation).

Collaboration and Partnerships: Partners in this project include clinicians, researchers, trainees, and students, in the field of measurement. We have strong links with OMERACT (international organization standardizing outcome measurement in rheumatology research) as well as collaborations with international groups such as COMET, COSMIN and IMMPACT.

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

Project Targets for 2021/22:

- First Quarter:* Revise handbook on instrument selection for OMERACT, including use of conceptual frameworks in developing instruments (E Pinsker)
Lead technical advisory group of OMERACT
Submit paper on findings of quality assessment in systematic reviews of measurement properties
Teach in measurement courses University of Toronto: Clinical Epidemiology
Submit grant on validation of critical appraisal tools for measurement studies
- Second Quarter:* Submit abstracts to ISOQOL, ACR on methods approach to instrument selection
Prepare for lead methodological sessions at OMERACT 2022
Provide editorial support to OMERACT for their OMERACT2020 articles
Submit article on advances in instrument selection
- Third Quarter:* Participate in international collaborations on standards for instrument selection comparing standards and decision making
Explore the interest in developing a core outcome set for work and health research
- Fourth Quarter:* Promote model of recovery from Pinsker thesis and literature, create dissemination plan and implications for measuring health outcomes

Methodological developments in systematic reviews (0951)

Project Period: Ongoing

Introduction: IWH is committed to continuously improving the field of systematic review methodology. In 2021, we propose to initiate, undertake, and advance the following methods projects: comparison of Cochrane vs. non-Cochrane reviews, comparison of evidence synthesis methods, realist and rapid review project, AI project, and update IWH SR and KT methods papers.

Objectives:

- To complete paper on adapting the established SR methodology and stakeholder approach.
- To complete paper on the findings of our AI use and findings.
- To complete Prognosis review exemplar paper.

Researchers: Emma Irvin (Institute Coordinator), Dwayne Van Eerd (Institute Coordinator), Nancy Carnide, Andrea Furlan, Joanna Liu, Maggie Tiong, Jill Hayden (Dalhousie University), Jo Jordan (Keele University), Robin Parker (Dalhousie University), Maurits Van Tulder (VU, Amsterdam).

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

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

Project Targets for 2021/22:

<i>First Quarter:</i>	Complete Winter session U of T course on Systematic Review methods Hold IWH SR workshop online Complete and submit AI paper
<i>Second Quarter:</i>	Complete IWH methods paper and submit
<i>Third Quarter:</i>	Publish sensitivity analysis with new evidence synthesis algorithm Prepare for Winter session of U of T course Hold IWH SR workshop online
<i>Fourth Quarter:</i>	Run Winter session U of T course on Systematic Review methods

Knowledge Transfer & Exchange (KTE) & Communications

At the Institute for Work & Health, knowledge transfer & exchange (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.

2021/22 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.

The work of IWH's KTE and Communications Departments 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.

C. Knowledge Transfer & Exchange and Communications

Knowledge Transfer & Exchange

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Communications

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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 annually 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 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 (MOLTSD), and the Workplace Safety and Insurance Board (WSIB). IWH also participates in other Ontario prevention system forums such as the System Ergonomics Committee.

Objectives:

- To facilitate and support knowledge exchange among IWH researchers and network members to enhance existing research and future studies at IWH
- To 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.
- To increase participation in IWH research projects and IWH events
- To 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), Kristina Buccat, Jan Dvorak, Cindy Moser, Uyen Vu.

Collaboration and Partnerships: Professional bodies (associations/regulatory colleges), Health & Safety Associations, Ontario Centres of Research Excellence.

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

Project Targets for 2021/22:

<i>First Quarter:</i>	Review format for the OHS Professionals' network meeting Continue review of IWH networks and strategic fit with IWH research activities Host quarterly virtual PKEG meeting
<i>Second Quarter:</i>	Complete assessment of current networks and network development needs Plan virtual disability prevention research exchange forum for network members Host quarterly virtual PKEG meeting
<i>Third Quarter:</i>	Plan network communication strategies and conduct network membership renewal Host virtual disability prevention research exchange forum for network members Host quarterly virtual PKEG meeting
<i>Fourth Quarter:</i>	Launch new network/network structure as needed Review meeting-forum formats and determine approach for 2022-23 meetings Host quarterly virtual PKEG meeting

IWH hosted events

Introduction: The Institute hosts two key events over the course of each year. The first is the annual Alf Nachemson Memorial Lecture, established by the Institute 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. The second key event is the IWH Speaker Series, which is a series of research presentations hosted by the Institute. Held weekly from September to June, approximately one presentation per month is aimed at external stakeholders and advertised widely. The IWH Speaker Series has evolved to primarily provide an opportunity to learn about the latest findings from work and health researchers at the Institute. We anticipate over the 2021/22 year that presentations will be held via a live webinar platform. Presentations are audio-recorded and made available on the IWH website and YouTube channel.

Objectives:

- To increase the visibility of the Institute's research provincially, nationally and internationally
- To identify and acknowledge individuals who have made significant contributions to work and health research
- To 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
- To provide access to emerging and novel evidence in work-health research from the Institute

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

Collaboration and Partnerships: Not Applicable.

Audience: All stakeholder groups.

Project Targets for 2021/22:

All Quarters:

- Revisit all event planning to ensure they can be moved to an online format
- Review timeline and planning goals for online hosted events
- Create and implement a communication plan for each event
- Maintain and support webinar streaming functionalities
- Liaise with the IWH Speaker Series Committee
- Align hosted events with outreach strategies

Note: The Nachemson lecture will not be held in-person in 2021 due to the COVID-19 pandemic. An online 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.

Objectives:

- To seek new opportunities to reach out to stakeholders at non-academic conferences and events (e.g., professional association events)
- To present key research initiatives at non-academic, stakeholder events where appropriate
- To work with intermediary organizations, e.g., professional groups and associations to reach their members/clients
- To assist IWH researchers in linking with workplace parties and other stakeholders
- To enhance knowledge exchange with leaders from employer and labour communities
- To 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.

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

Project Targets for 2021/22:

<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 2022 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).

Objectives:

- To develop lay-friendly, easy-to-access informational resources targeted to and valued by external stakeholders
- To keep external stakeholders aware of the research and events coming out of the Institute
- To ensure IWH information is of high quality, and is relevant to and easily understood by stakeholders
- To encourage and support uptake and use of IWH research findings and resources
- To increase the Institute's visibility as a credible, reliable and impartial source of research evidence
- To facilitate recruitment of participants into research projects, as appropriate

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

Collaboration and Partnerships: IWH scientists, researchers and other staff.

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).

Project Targets for 2021/22:

All Quarters: Write, lay out and post quarterly issue of *At Work*
Write and post at least two *Research Highlights* per quarter
Write and post *Sharing Best Evidence* when IWH systematic review conducted
Produce and post at least two research-based videos/video shorts during year
Write 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) for conference distribution
Produce and post at least one infographic during year
Write and post one impact case study per quarter
Write, lay out and post an *Issue Briefing*, if worthy topic identified and approved
Write, develop and post approved tools, guides and other resources
Write, produce and post 2020/21 annual report

Note: 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, 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).

Objectives:

- To keep external stakeholders aware of the research, news and events coming out of the Institute
- To encourage, support and increase uptake and use of IWH research findings and resources
- To build awareness of the Institute for Work & Health brand as a reliable source of information
- To promote events, including the IWH Speaker Series
- To extend the reach/audience for IWH research
- To support the building and maintenance of strong and active stakeholder relationships
- To monitor and manage reach, dissemination and impact metrics
- To 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, Sara Macdonald, Lyudmila Mansurova, Sabrina Tonima.

Collaboration and Partnerships: IWH scientists, researchers and other staff.

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).

Project Targets for 2021/22:

All Quarters: 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 warranted
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

D. 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 2021/22, the department will continue work on our human resources policies. Corporate Services will also ensure compliance with the Ontario government directive concerning travel, meal and hospitality expenses.

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

The Joint Health & Safety Committee (JHSC) will work with members of the executive committee to address recommendations on health and wellness based on staff suggestions. The committee will continue to conduct ongoing and new initiatives that align and support staff health and wellness.