

Poorer post-injury experiences lead to worse RTW outcomes for psychological claimants

IWH's 12-month follow-up study of injured workers in Australia found many interconnected differences in return-to-work process for physical and psychological claimants

Workers disabled by work-related psychological injuries have less desirable return-to-work (RTW) experiences than workers with musculoskeletal disorders (MSDs), and these experiences are associated with poorer RTW outcomes during their first eight to 11 months on workers' compensation leave, according to a study by researchers at the Institute for Work & Health (IWH). What's more, the study shows, these poorer experiences are interconnected.

"We observed different self-reported experiences at the personal, workplace, health-care provider and workers' compensation levels, which suggests approaches to address differences in RTW for psychological and musculoskeletal conditions need to be integrated," says Dr. Peter Smith, a senior scientist and scientific co-director at the Institute and study lead author.

As reported in a previous article based on early findings from this same study (see $At\ Work$, September 2016), workers' compensation

claimants with psychological injuries have lower expectations than claimants with MSDs that they will return to their previous jobs. They're also less likely to be contacted by their workplace's RTW coordinator, to be offered modified duties and to accept modified duties. They face more negative reactions in response to their injury from supervisors and co-workers, and experience more stressful interactions with health-care providers, RTW coordinators and workers' compensation case managers.

Now, further analysis of these findings shows that many of the differences are interconnected—that is, one is associated with another. Notably, supervisors' reactions to injury are associated with several other experiences in the RTW process that also affect outcomes. "We found that claimants with psychological injuries were much less likely to receive a positive supervisor response to their injury," says Smith.



Lewis Gottheil retires from IWH board

The Institute for Work & Health (IWH) thanks **Lewis Gottheil** for his many years of service on its board of directors. Gottheil is former director of the legal department at Unifor, Canada's largest private-sector union. He joined the IWH board in 2012, becoming vice-chair in fall 2017 and retiring at the end of 2019. Assuming the role of vice-chair is **Melody Kratsios**, senior program manager at the engineering firm AECOM. To learn about the Institute's board members, go to: www.iwh.on.ca/board-of-directors

Announcing IWH's new KTE manager

Congratulations to **Sara Macdonald**, who has been promoted from knowledge exchange associate to manager of knowledge transfer and exchange. Many supporters and users of IWH research will already be familiar with Macdonald, who oversees the Institute's stakeholder knowledge exchange networks for workplace parties and health practitioners. To learn more about Macdonald, please go to: **www.iwh.on.ca/people/sara-macdonald**

Register for IWH systematic review workshop

Registration is now open for the next annual IWH systematic review workshop. Taking place May 13-15 at IWH's downtown Toronto location, the workshop is intended for clinical trainees, clinicians, decision-makers, academics and researchers (epidemiologists, statisticians) who want to learn how to plan and carry out a systematic review and communicate its results. Sign up by the April 22 deadline at: www.iwh.on.ca/events/spring-2020-systematic-review-workshop

IWH 2020/21 Activity Plan now available

If you want to know what research projects are on the go at the Institute, they're all set out in the annual Activity Plan. The latest edition, covering research and KTE activities in 2020/21, is now online. Find it at: www.iwh.on.ca/corporate-reports. To search for individual research projects, go to: www.iwh.on.ca/projects

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What Research Can Do

How IWH findings, methods and expertise are making a difference

IWH newcomer training resource sees uptake by various groups in Canada

Newcomers to Canada often lack knowledge about occupational health and safety (OHS) issues or about their rights and responsibilities in the event of a work injury or illness. The Institute for Work & Health (IWH)'s Safe Work Toolkit, published in December 2019, is designed to help settlement agencies provide this training to their newcomer clients. This toolkit is an update of Prevention is the Best Medicine, first created in 2011. Like its predecessor, the Safe Work Toolkit contains learners' fact sheets, trainers' guides and slide presentations to help trainers run sessions.

Since its release in 2011, the toolkit has been used by different types of stakeholders, in Ontario and beyond. One Ontario agency that turned to the toolkit was KEYS Job Centre, a non-profit organization providing employment services in Kingston. "In their first jobs, many newcomers face hazards they've never encountered before and they may not be aware of the risks," said Karl Flecker, an immigrant employment specialist at KEYS.

Like many similar centres, KEYS offers job-preparation workshops and English-as-a-second-language (ESL) classes. But there was a curriculum gap, Flecker noticed. "There was no information about OHS, workers' rights or workplace injury," he said. KEYS employment specialists began to use material from the IWH toolkit in 2015 and encouraged ESL instructors to do the same.

"Beyond connecting people to a job, it's important to prepare them so they are likely to speak up if there is an issue at work," Flecker said. Indeed, after they started offering the enhanced programming, KEYS saw a marked difference in post-hire follow-up conversations. "Our clients are telling us about health and safety issues at work and reporting incidents," noted Flecker at the time. "We are slowly building empowerment."

In the Northwest Territories and Nunavut, the Workers' Safety and Compensation Commission (WSCC) needed a plain-language guide about rights and responsibilities; it approached IWH in 2017 to adapt the toolkit for new workers. "The materials are a great resource for workers in the North—not just

for newcomers, but also for the isolated and remote aboriginal population whose primary language is not English," said Meta Antolin, an OHS specialist at WSCC who works with communities to develop their OHS programs. She added that introducing workers to their rights and responsibilities goes hand in hand with promoting safer work conditions in the North.

The WSCC adapted the IWH toolkit to include legislation from the Northwest Territories and Nunavut. Although its focus was on the modules that addressed OHS, the commission also found a demand for information on workers' compensation rights and responsibilities.

Elsewhere in Canada, the Alberta Workers' Health Centre (AWHC) in Edmonton also adapted the IWH toolkit. AWHC provides services and programming to assist Alberta workers with their health, safety and work injury concerns. In 2013, the centre partnered with community groups to start the New Alberta Workers project, a province-wide program that taught temporary foreign workers, immigrants and refugees about their OHS rights and responsibilities. Borrowing from the IWH toolkit, the team created a health and safety rights guide, workshops and peer-to-peer training. "OHS concepts are not easy to teach, especially when language, literacy and cultural issues are at play," said Jared Matsunaga-Turnbull, AWHC's executive director. "The IWH toolkit helped us frame Alberta's legislation in plain language."

Lori Shortreed, coordinator of the New Alberta Workers program, said the toolkit's modules for teachers helped build capacity in peer-to-peer training workshops. "We used parts of the modules to train multicultural brokers—that is, front-line settlement and employment advisors—who knew very little about OHS," she said at the time. "The Emodules] are simple, clear and concise, and gave the peer trainers more confidence with the information." The program, which ran until the end of 2017, reached more than 2,900 workers.

This column is based on an IWH impact case study, published in December 2017, available at: www.iwh.on.ca/impact-case-studies.

Strategy launched for greater workforce inclusion of people with disabilities

At conference to unveil pan-Canadian disability and work strategy, advocates say time is ripe for change

Advocates of more accessible and inclusive labour markets for persons with disabilities are now promoting the adoption and implementation of a voluntary pan-Canadian strategy, released in late 2019 with a view to improving work opportunities for people with disabilities.

Moving Forward Together: A Pan-Canadian Strategy for Disability and Work was developed by the Disability and Work in Canada (DWC) Steering Committee over two years of extensive consultations with a host of stakeholders, including persons with disabilities, injured workers, disability organizations, service providers, government representatives, unions and labour organizations, employers and employer associations, researchers and others.

Institute for Work & Health (IWH) Senior Scientist Dr. Emile Tompa is a member of the DWC Steering Committee in his capacity as director of the Centre for Research on Work Disability Policy (CRWDP), a research partnership with its national office based at IWH. The DWC Steering Committee also includes representatives from the Canadian Council on Rehabilitation and Work, Inclusion NL and the Ontario Network of Injured Workers Groups.

With a vision of Canada as a country where people with and without disabilities have equal opportunities and choices in their careers, jobs and work, the strategy rests on two main pillars or objectives: 1) fostering disability-confident and inclusive workplaces, and 2) developing comprehensive supports for persons with disabilities.

Fostering disability-confident and inclusive workplaces involves initiatives that address workplace design, workplace accessibility, supports available to employers and workplace culture change. Developing comprehensive supports for persons with disabilities entails initiatives that focus on government supports for persons with disabilities,

the navigability and alignment of support programs and school-to-work transitions.

Strategy launched at 2019 conference

Key components of the strategy were identified at the 2017 DWC Conference and a June 2018 federal-provincial/territorial policy roundtable, both held in Ottawa. A draft strategy was discussed at the 2018 follow-up conference. Input on the document was sought throughout 2019, via online surveys and in-person consultations held across the country. The final strategy was launched in early December at the 2019 DWC Conference, also held in Ottawa.

The 2019 conference focused on identifying key initiatives that could quickly and effectively be implemented and thereby build momentum for the strategy. Examples included developing workplace case studies, creating knowledge hubs or portals to help employers easily access accommodation resources, establishing and promoting the use of accessibility and disability management standards, and making the current disability tax credit a refundable program (so that low-income earners would receive the credit, whereas currently they do not if they don't owe taxes).

In her remarks at the conference, the Honourable Carla Qualtrough, federal Minister of Employment, Workforce Development and Disability Inclusion, credited DWC for making the link between accommodating injured workers, with which employers are more familiar, and employing persons with disabilities.

"I thought, 'What a strategically innovative way to get employers comfortable with disability," she said. "I think we're going to be able to talk about inclusion and disability and accommodation a little differently now because of the work you're doing."

Qualtrough also spoke of a sense of momentum and readiness for change. The *Accessible Canada Act*, which was passed

unanimously in June 2019, "was the only piece of legislation in the last session over four years that received all-party consent," she noted. "That's because Canada is ready. We are ready."

Federal Deputy Minister of Public Service Accessibility Yazmine Laroche offered conference participants lessons learned on successful implementation, based on the work her office has done to date on accessibility and inclusion in the federal public service.

"Make it real. Make it easy," said Laroche. She described examples of innovations currently being piloted. One is a workplace accommodation passport that details the accommodations needed by an individual and follows the employee across his or her career in government. Another is a centralized library of adaptive technologies for use by workers on contract. She also spoke of the importance of knowledge sharing. "Don't feel you always have to start from scratch. There are already people doing great things; we need to have easier access to them."

Steve Estey, an international disability rights advocate from the Council of Canadians with Disabilities, also spoke about the progress made when civil society uses Canada's global commitment—i.e. the ratification of the United Nations Convention of the Rights of Persons with Disabilities—to hold governments accountable and to monitor their progress.

Long-time inclusion and disability rights advocate Mary Reid summed up the two-day conference. "The strategy will take on a life of its own. Collectively in this room, we don't own it. The country owns it. But we're responsible, by being here through our passions and through our commitments, for taking this strategy and ensuring everybody across this country feels part of it and can feel equally proud of it," she said in her closing remarks.

To get the strategy, conference report, and conference videos and presentation slides, go to: www.crwdp.ca/en/national-conference-2019-disability-and-work-canada. ■

Can an eight-item questionnaire pick up on real-world differences in OHS practice?

Study of IWH-OPM finds consistent differences in how high and medium scorers approach health and safety

Occupational health and safety (OHS) professionals often talk about their need for a short, concise leading indicator tool—something that can quickly assess the adequacy of workplace health and safety practices without requiring too much time and involving too many people.

The Institute for Work & Health Organizational Performance Metric (IWH-OPM) is designed to do this. With just eight items that can be scored by a person knowledgeable about an organization's health and safety policies and practices, this instrument is intended to give a snapshot of the adequacy of those policies and practices and identify areas that could be the focus for improvement.

So how well can a set of eight items capture something as broad and multi-faceted as an organization's OHS policies and practices? Pretty well, it turns out, according to a new study from the Institute for Work & Health (IWH).

"The IWH-OPM is good for getting a quick picture of the adequacy of an organization's health and safety policies and practices," says Dr. Basak Yanar, an IWH research associate and lead author of the paper reporting on this study, which was published in January 2020 in the *International Journal of Workplace Health Management* (doi: 10.1108/IJWHM-09-2018-0126). "In our study, higher IWH-OPM scores were found to correspond with higher-performing organizations in terms of their observed OHS practices and policies."

Drawing on in-depth interviews, worksite observations and document analysis at five workplaces, the research team found a pattern emerge in the health and safety performances of high IWH-OPM scorers compared to medium IWH-OPM scorers, says Dr. Lynda Robson, IWH scientist and principal investigator of the study.

"At high-performing organizations, OHS was done well at all levels of the organization and across all departments, whereas at medium-performing organizations, OHS performance was inconsistent within the organization," she says. "As well, high performers aimed for incorporating best practices, whereas medium-performing organizations were more interested in achieving and maintaining compliance."

Eight items to assess a firm's OHS

The IWH-OPM was developed by IWH and Ontario's prevention system partners. Based on research and practical expertise, they identified eight questions—out of many potential questions—that could provide a quick assessment of an organization's OHS performance. The tool, first tested in 2009, has been shown to have internal consistency and structural validity. It has been used by different types of stakeholders in several Canadian jurisdictions to strengthen safety performance in workplaces.

To better understand how IWH-OPM scores correspond with real-world organizational OHS policies and practices, Yanar and another researcher visited and conducted in-depth interviews at Ontario workplaces that had completed the IWH-OPM in 2012-2013. At each of the five organizations that took part—two high-scoring and three medium-scoring workplaces in four sectors (agriculture, community services, manufacturing and transportation)—the team spent two days interviewing on average seven workplace representatives in various roles and functions.

The team probed for similarities and differences in five dimensions: OHS leadership, OHS culture and climate, employee participation, OHS policies and practices, and OHS risk control. It found differences between high and medium scorers across all five categories. Below are detailed accounts of the patterns they found.

OHS leadership

In high-performing organizations, a commitment to health and safety was found at all levels of management. For example, OHS managers reported that executive leaders were up to date with OHS developments and major incidents, and routinely consulted with them before authorizing significant operational changes. In both high-performing organizations, a dedicated senior manager was assigned to manage health and safety. In the high-performing organization with multiple locations, each location had its own safety manager. Importantly, OHS managers were given autonomy and authority in their jobs.

In the medium-performing organizations, managers responsible for OHS may have been personally invested in OHS, but they had other responsibilities (e.g. operations, human resources) that competed for their time. As well, the commitment to safety was less consistent at the other levels of management. At one organization, executive leadership was described as disinterested and uninvolved in safety, focusing instead on traditional business matters. At another, OHS professionals sometimes felt they lacked respect from the senior leadership. Supervisors were also described as having varying levels of commitment to health and safety in these organizations.

OHS culture and climate

In high-performing organizations, safety was clearly stated as a key organizational value. Its importance was reinforced by messages from the executive leadership. Messages from management, including from executives, drove home the view that everybody is responsible for safety, people can refuse work if it's not safe, and both client safety and employee safety are important.

In medium-performing organizations, safety was also seen as important, but less consistently across the organization. In one organization, a participant said the importance of safety depended on "who you talk to" and that some directors and managers

were "not interested in safety." Safety goals were set lower, at achieving compliance as opposed to incorporating best practices. And although tensions between safety and production were sometimes found in both high- and medium-performing organizations, only in medium-performing organizations did the team find examples of cost reduction or productivity being placed ahead of safety.

The differences in safety culture and climate among organizations were also apparent in the recognition of employee safety practices. In high-performing organizations, safe practices were actively supported through verbal recognition, reward programs (e.g. safe employee of the month awards), and gifts or letters of appreciation. Verbal recognition and small rewards for safe practices were also used at the medium-performing organizations, but less frequently or uniformly.

Employee participation

At the high-performing workplaces, worker input was actively sought by managers, including feedback on operational aspects of OHS and daily safety protocols. At one of the high-performing organizations, employees were encouraged to submit work requests to address hazards and make OHS suggestions. In the other, employee meetings always began with an OHS component. Employees' familiarity with OHS policies and practices was seen positively as contributing to ongoing improvements. Their suggestions and feedback were also welcomed.

In the medium-performing organizations, employees were also given opportunities to report concerns through channels such as meetings, joint health and safety committee (JHSC) inspections and formal reporting processes. Participation, however, was mostly limited to reporting safety concerns. Opportunities for employees to become involved with decision-making processes were fewer.

OHS policies and practices

High-performing and medium-performing organizations had different approaches to OHS policies and procedures and OHS communication and learning. In high-performing organizations, OHS policies and procedures were comprehensive, well documented and well implemented. Practices around the reporting of hazards and incidents were

strong. Managers and supervisors regularly shared information about new OHS policies and practices with employees, using diverse communication channels such as mandatory safety meetings, logbooks, memos, flyers and pamphlets, phone calls and in-person chats. Employees were also able to regularly communicate their needs and concerns through hazard sheets, safety meetings, emails and phone calls.

For new OHS information, high-performing organizations turned to external sources such as provincial Safety Groups (networks of organizations that plan and implement improvements in their OHS management), the labour ministry, health and safety associations and OHS consultants. Their OHS knowledge management methods included performance measurement, incident analysis and corrective/preventive action, sharing of best practices among different locations, sharing of new information in management meetings and annual safety meetings. Highperforming organizations were also the only ones in the study that underwent formal OHS management audits. These helped identify shortcomings in OHS management and risk controls—deficiencies that were then addressed within the following year.

At medium-performing organizations, policies and procedures were aimed more at meeting legislative requirements and reacting to incidents, rather than implementing "best practices." In mediumperforming organizations, communication channels were more limited and top-down. Means of OHS communication included OHS boards and newsletters, inserts sent out in employees' bi-weekly pay envelopes, emails and staff meetings. In one mediumperforming organization, departments were described as "siloed" and inter-departmental communication was rare.

Risk control

The degree to which risk controls were implemented varied between high- and medium-performing organizations. While all organizations carried out the monthly JHSC inspections required by legislation as well as other routine equipment inspections, the high-performing organizations had additional means to proactively detect and assess hazards. They had separate mechanisms for reporting hazards and near misses, and for tracking suggestions for improvements. High performers investigated even minor

incidents. They conducted formal risk assessments and analyzed hazard reports to identify priorities. Although personal protective equipment (PPE) was available to employees in all organizations, only in high-performing organizations was PPE use strongly enforced.

Risk control measures at medium-performing organizations, in contrast, were more focused on basic compliance with legislation. The use of PPE was left to the discretion of departmental supervisors and individuals, and not strictly enforced. Overall, the high-performing organizations were more proactive and "engineered out" risk as much as possible, while the medium-performing organizations adopted a more reactive approach that aimed at regulatory compliance.

Low performers absent from study

Not represented in this study were work-places that scored low on the IWH-OPM, Yanar and Robson note. Low performers were already scarce in the overall sample of Ontario workplaces that had taken the IWH-OPM in 2012-2013. Among the 250 in this overall sample that also indicated they would be interested in taking part in subsequent research, only nine scored low. "We took considerable effort to recruit low-performing organizations, but our efforts were unsuccessful," says Yanar.

The IWH case study analysis can help government prevention programs and workplaces understand what IWH-OPM scores represent in terms of real-world OHS practices, policies and cultures in the workplace. "Based on this analysis, OHS professionals both inside and outside an organization can use the IWH-OPM to quickly get an overall picture of how well an organization's OHS programs and policies are working and what type of action needs to be taken to prevent injuries and illness," says Yanar.

For example, Yanar continues, if an organization scores high on the IWH-OPM (i.e. close to the maximum score), then high OHS capacity and commitment could be assumed. "In this case, sophisticated conversations about sustaining an OHS culture would likely be appropriate," she says.

If an organization gets a medium-level score (i.e. about three-quarters of the maximum), then "an analysis of gaps and opportunities would likely be appropriate."

Estimating the societal costs of work injuries and illnesses in five EU countries

New economic burden method developed by IWH used to estimate the value of OHS to society at large

Having a clear picture of occupational injury and illness costs is crucial for policy-makers, employers, labour, researchers and other stakeholders in the occupational health and safety field. Such cost estimates can help set priorities when allocating resources for prevention efforts. They are also key to tracking the effectiveness of prevention efforts over time.

In the summer of 2019, the European Agency for Safety and Health at Work (EU-OSHA) published an analysis of the economic burden of work injuries and illnesses in five European Union (EU) countries-Finland, Germany, the Netherlands, Italy and Poland. It was conducted by a team of researchers from the Institute for Work & Health (IWH), the Netherlands Organisation for Applied Scientific Research (TNO) and Valdani Vicari & Associati, based in Italy. Leading the project for IWH was Senior Scientist Dr. Emile Tompa, who worked with IWH post-doctoral fellow Amir Mofidi to develop and apply a new method for calculating such estimates.

The method, based on what's called a "bottom up" approach, was developed by Tompa and recently used in a research project on the economic burden of lung cancer and mesothelioma from work-related asbestos exposures in Canada. It's an approach that starts with an estimate of the incidence—the number of cases—of work injuries, illnesses and fatalities. Health-care costs (direct costs), productivity costs (indirect costs) and health-related quality of life costs (intangible costs) associated with each case are then calculated to arrive at the overall economic burden.

Using this method, Tompa's team found that the total costs of work injuries and illnesses in 2015 ranged from 6.0 billion euros (Finland) to 107.1 billion euros (Germany). These costs ranged from 2.9 per cent (Finland) to 10.2 per cent (Poland) of a country's gross domestic product (GDP).

And according to the report published by EU-OSHA last July, *The value of occupational safety and health and the societal costs of work-related injuries and disease*, the costs per case were highest in the Netherlands (at 73,410 euros) and lowest in Poland (37,860 euros). A journal article on this research has been submitted for peer review.

"Having an estimate of the economic burden of occupational injuries and illnesses is the first step in understanding the magnitude of the problem. In addition, having country-level data to compare countries against one another can be valuable in many ways," says Tompa. "It lets policy-makers of these countries ask, 'Are we doing better or worse than our peers in the EU?' 'What are they doing differently?' 'What are their legislations, policies, programs and practices that are leading to better outcomes?'"

Information on the costs per case is also useful when calculating the cost-effectiveness of prevention efforts, adds Tompa, who shared his findings at an IWH Speaker Series presentation in November 2019 (www.iwh.on.ca/events/speaker-series/2019-nov-12). "It helps stakeholders understand how much investment they can make in prevention and still realize a net benefit. It also helps them evaluate the economic benefits of addressing an issue—as well as the costs of not doing so."

Two approaches used

With a few exceptions, analyses of the economic burden of work injuries and illnesses to date have tended to be conducted on a smaller scale. They have focused on particular health conditions or specific sectors; country-level analyses are complex to carry out and have rarely been done, says Tompa.

The team used two burden estimate approaches—a more commonly used "top down" approach that draws on country-level aggregate data as its starting point, and the

"bottom up" approach, which begins with granular data—i.e. the number of new cases in a given year.

One advantage of the bottom-up approach is that it allowed Tompa's team to consider consequences beyond the economic output of individuals. "In the bottom-up approach that we've developed, we aimed for a more holistic approach to estimating the impact of work injuries and illnesses in order to better reflect the total costs to society. We weren't just looking exclusively at productivity," Tompa says.

Three broad cost categories are used in the bottom-up method (see the online sidebar: www.iwh.on.ca/newsletters/ at-work/99/estimating-societal-costsof-work-injuries-and-illnesses-in-fiveeu-countries). They include some novel or difficult-to-estimate items, such as the loss of ability to contribute to domestic activities, informal caregiving of family members, and the loss of health-related quality of life. Productivity costs include those associated with presenteeism, absenteeism, reduced work ability from permanent impairment and the costs to employers to replace a worker on leave due to injury or illness.

As part of the study, the team broke down the share of costs borne by three different stakeholders—workers and their families, employers and society. This required identifying the intricacies of each country's social security system to determine who pays for what. Tompa's team made some high-level estimates of the costs borne by each of the three stakeholder groups. It found workers bear the largest part of the costs.

The methods used in this project are now being applied in other European countries, says Tompa, who notes that previous economic burden analyses made little effort to use uniform methods. "There are benefits to using standardized methodologies. That was part of the contribution of our work—to develop a methodology that the EU can use to do comparative work across all countries in the region and over time," he adds.

Anticipating future risks among externally funded projects under way at IWH

A round-up of newly funded projects taking place at the Institute for Work & Health

Evidence-based practices and approaches in occupational health and safety and disability management can help achieve better outcomes for workers, employers and policy-makers. To identify these practices and approaches, the Institute for Work & Health (IWH) is supported by core funding from Ontario's Ministry of Labour, Training and Skills Development. IWH scientists also compete for funding from granting agencies to further their research work. Here are some of the projects that were awarded funding over the past year.

'Future-proofing' young people with disabilities

Labour markets in Canada and similar economies have entered what some are calling "the fourth industrial age." It's an era defined by the growth of artificial intelligence and machine learning, the automation of job tasks, and significant changes to the organization of work brought about by the integration of digital technologies in all aspects of life.

During such times of disruption, the most vulnerable in society have the potential to be the most adversely affected. In a project financed by the New Frontiers in Research Fund established by the Canadian Tri-agency Institutional Programs Secretariat, IWH Scientist Dr. Arif Jetha will use foresight methods to examine what future changes to the labour market could mean for young people with disabilities.

The project has three objectives: 1) to examine potential changes that may occur in the Canadian labour market 15 years from now, and how they may affect the work participation of young people with disabilities; 2) identify work-related skills that young people with disabilities will need in the changing labour market; and 3) develop concrete recommendations to "future-proof" young people with disabilities. (Future-proofing refers to the process of anticipating the

future and developing policies and programs to improve resilience and minimize the shocks and stresses of future events.)

"With foresight and planning, we can take steps to better understand the needs of the most marginalized groups and take advantage of opportunities to lessen their risks," says Jetha. "We hope this research will help highlight how different vulnerable groups will be affected, and contribute to societal efforts to ensure young people with disabilities are able to work and thrive in the fourth industrial revolution."

Establishing a baseline on the presence of cannabis in workplace deaths

More than a year after recreational cannabis was legalized in Canada, employers and prevention professionals are still cautiously watchful about the potential impact on workplace safety. Yet, no source of data is currently available on the extent to which cannabis use is implicated in workplace safety incidents and deaths. To help fill this gap, a project at IWH is examining the feasibility of using information collected by the Office of the Chief Coroner in the investigation of traumatic occupational fatalities.

The project, funded by CIHR, is being co-led by IWH Associate Scientist Dr. Nancy Carnide and Senior Scientist and Scientific Co-Director Dr. Peter Smith. By reviewing coroner reports on workplace deaths in Ontario from 2006 to 2018, the team will create and implement a comprehensive. standardized tool to extract information from coroner records on the extent of toxicology testing in work-related deaths, the quality of toxicology information, and the nature and scope of cannabis involvement in workplace fatalities.

"We will analyze trends in these measures over time and explore how fatalities that did and did not involve cannabis differ by worker, workplace and nature of accident," says Carnide. "If successful, this Ontario

study may lay the groundwork for similar analyses using coroner data across Canada."

Understanding long-term outcomes for injured workers

How well are people with work-related injuries and illnesses doing-both in terms of their health and personal finances—when they no longer receive benefits or services from the workers' compensation system? Does the answer differ for people who go back to work quickly compared to those whose workers' compensation claims extend beyond a year? A new study seeks to answer these questions and more as it examines how injured workers fare after they no longer receive benefits or services from Ontario's Workplace Safety and Insurance Board (WSIB).

Funded by the WSIB and led by IWH President and Senior Scientist Dr. Cam Mustard, the Ontario Injured Workers Outcome Study (OIWOS) will recruit three groups of workers' compensation claimants into the study: those whose claims were resolved relatively quickly, those whose claims took somewhat longer to resolve, and those whose claims were prolonged. The research team will then examine the health and job outcomes of these claimants, comparing them to those of other groups of injured workers and to those of Ontario workers who are similar in most respects except that they have not had a work injury or illness. The study hopes to identify whether particular groups of workers are at most risk for poor work and health outcomes.

"The results of this study have the potential to inform the design and administration of WSIB claimant services," says Mustard. "We have a long history of working with the WSIB to support its program and service delivery evaluation. This work demonstrates the value we continue to offer to support the improvement of Ontario's workers' compensation system." To see a full list of new grants awarded from October 2018 to December 2019, find the online version of this article at www.iwh.on.ca/ newsletters/at-work/99.

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Differences in RTW outcomes no longer found by 12-month mark

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"This poor response was also associated with more stressful interactions with claim agents or case managers, lower likelihood of having consultative return-to-work plans or modified duties, and less positive recovery expectations. Overall, these factors were associated with a reduced likelihood of sustained return to work within six months."

The study was based on a group of 869 workers' compensation claimants in the Australian state of Victoria, where chronic work-related mental stress is recognized as a compensable injury. The study sample was recruited such that one-fifth of the claimants had psychological injuries; the remainder had MSDs of the back or upper extremities. The claimants were interviewed three times over a 12-month period. The first interview took place about two to five months after their first day off work. The second and third interviews were conducted at six months and 12 months, respectively, after the initial interview.

The claimants in the study were asked about a broad range of factors in four areas: personal (recovery expectations and mental health status in the previous month); workplace (supervisor reaction to injury, co-worker reaction to injury, workplace offers of modified duty and/or consultative RTW plan); health care (contact between providers and the workplace); and workers' compensation system (interactions with case managers). They were also asked about attempted or sustained work returns. (Sustained RTW was defined as being back at work for 28 days or more.)

The findings revealed that, at the first interview two to five months after the injury, claimants with MSDs were 69 per cent more likely than psychological claimants to have a sustained return to work. At the second interview six months later, MSD claimants were 24 per cent more likely to have a sustained RTW. At the third interview a year after the first, no difference remained between psychological and MSD claimants with respect to their return to work.

"That says to us that, if you're trying to reduce the inequalities in the return-to-work outcomes of psychological and MSD claimants, you should act early," says Smith. "The further you get post-injury, the less it matters what type of injury the respondent has. Rather, what matters more is whether the respondent has been able to make a return-to-work attempt, and how successful that attempt was," says Smith.

According to the study, three factors explain much of the difference in RTW outcomes among claimants with psychological injuries compared to those with MSDs: their poorer mental health symptoms, greater likelihood of lacking a consultative RTW plan or being offered modified duties, and poorer supervisor responses to injury.

"While treating and preventing further exacerbation of mental health symptoms should remain an important part of the rehabilitation process for claimants with psychological injuries, other modifiable factors—in particular, supervisor response to injury and consultative RTW planning and modified duties—account for a sizeable proportion of differences in sustained RTW across injury types," says Smith.

"Our study suggests these should be prioritized to reduce inequalities in return to work for psychological injuries compared to MSDs."

One of the unique things about this study is that it examined how factors in the RTW process relate to each other. "In that context, we did see that a positive supervisor response is itself related to a number of key factors, such as mental health symptoms and offer of modified duties," says Smith.

Yet he cautions against interventions that focus singularly on supervisors' response to injury. "A supervisor's reaction to an injury is likely shaped by the same workplace culture that gave rise to a worker's psychological injury to begin with," he notes.

The study has been published in February 2020 in the journal *Social Psychiatry and Psychiatric Epidemiology* (doi: 10.1007/s00127-020-01839-3). ■