

Understanding the Ontario Health and Safety System: Research Centres – Paper 3

Erinn McCreath Frangakis, Joyce Guo, Catherine Brookman, Jack P. Callaghan

Occupational health and safety in Ontario is protected by the *Occupational Health and Safety Act (OHSA)* and is enforced by the Ministry of Labour, Training and Skills Development (MLTSD)¹. The main purpose of the OHSA is to protect workers from health and safety hazards by establishing rights and duties for all workplace parties. The MLTSD¹ works with six Health and Safety Associations (HSAs)², the Workplace Safety and Insurance Board (WSIB)³, and other partner institutions, including the Centre of Research Expertise for the Prevention of Musculoskeletal Disorders (CRE-MSD)⁴ to form the Ontario Health and Safety System.

This paper will outline the roles of associated Research Centres in Ontario, including the Centre of Research Expertise for the Prevention of Musculoskeletal Disorders (CRE-MSD)⁴, the Centre for Research Expertise in Occupational Disease (CREOD)⁵, the Occupational Cancer Research Centre (OCRC)⁶, the Institute for Work & Health (IWH)⁷, and the Centre for Research in

Occupational Safety and Health (CROSH)⁸. The other Health & Safety System Partners are described in separate papers in this series (see [Paper 1 – Government Bodies](#) and [Paper 2 – Health and Safety Associations](#)).

Centre of Research Expertise for the Prevention of Musculoskeletal Disorders (CRE-MSD)⁴

At a Glance: CRE-MSD⁴ is funded by the MLTSD¹ and based at the University of Waterloo. CRE-MSD⁴ leads research to improve the understanding and primary prevention of work-related musculoskeletal disorders (MSD). These injuries are the biggest contributor to lost time claims in Ontario. CRE-MSD⁴ collaborates with workplaces and researchers to develop evidence-based practical resources and tools to assist workplaces to prevent MSD. CRE-MSD⁴ has a large network of researchers from numerous different institutions in Ontario that assist in collaborating with workplace partners across all sectors in carrying out research. CRE-MSD⁴ helps employers to prevent MSD by: funding MSD research through annual seed grants; developing short position papers explaining MSD research and its application to the workplace, and providing free thematic webinars and conferences. CRE-MSD⁴ is also home of the Ontario MSD Prevention Guideline (available at www.msdpredvention.com), an ongoing initiative that the Centre continues to develop through the sourcing and creation of new tools and resources to support small, medium, and large workplaces with MSD prevention. CRE-MSD⁴ is guided by three committees: the Steering Group helps guide the research program, the Scientific Committee reviews seed grant and position paper applications, and the Advisory Committee guides annual focus and the dissemination of information across diverse sectors and industries.

Centre for Research Expertise in Occupational Disease (CREOD)⁵

At a Glance: CREOD⁵ is funded and supported by the MLTSD¹. CREOD⁵ is affiliated with the Gage Occupational and Environmental Health Unit, a collaborative program of the University of Toronto and St. Michael's Hospital. CREOD's⁵ goal is to not only prevent occupational diseases but to understand how they happen. This includes looking at occupational exposures, processes, and the resulting disease. CREOD's⁵ focuses include: occupational skin disease; occupational lung disease; hand-arm vibration syndrome; biologic hazards, and joint health and safety committee programs. By contributing to research and knowledge in these areas, CREOD⁵ works with workplace parties, providers, and policy makers to disseminate and apply findings in useful ways. CREOD⁵ is guided by a multi-stakeholder Advisory Committee.

Key Messages

- Research Centres in the Ontario Health and Safety System are funded by the Ministry of Labour, Training and Skills Development (MLTSD)¹ to work on real life employer challenges through research projects in order to provide practical evidence-based solutions to help prevent injuries, diseases, and fatalities in the workplace.
- The knowledge gained by these Research Centres can be used to update policies and procedures to protect workers from various occupational health and safety issues.

Occupational Cancer Research Centre (OCRC)⁶

At a Glance: OCRC⁶ conducts research on occupational exposures, with a specific focus on workplace carcinogenic exposures. Research done at this Centre seeks to find the causes of cancer in the workplace and determine intervention tactics to help keep workers safe. Based on its research, the OCRC⁶ uses the findings to inform prevention programs, risk reduction, and policy. The OCRC⁶ seeks to determine when exposures to cancer-causing agents occur and how these risks can be altered over time. The Centre's research program includes three broad categories of research: surveillance of occupational cancers and workplace exposures; research to better understand the causes of occupational cancers; and intervention research to develop prevention and exposure reduction strategies. Some resources that OCRC⁶ provides include reports and publications, factsheets, videos, and presentations to aid in knowledge dissemination. The OCRC⁶ is jointly funded by Cancer Care Ontario, the MLTSD¹, and the Canadian Cancer Society, and it is supported by a multi-stakeholder Steering Committee.

Institute for Work & Health (IWH)⁷

At a Glance: IWH⁷ is an independent, non-profit organization that conducts work injury and disability prevention research funded by the MLTSD¹. The IWH⁷ conducts research in two broad areas: primary prevention to ensure workers remain healthy and safe at work by preventing work-related injury and illness, and secondary prevention to improve the health and recovery of workers who have sustained a work- or non-work-related injury or illness that affects their ability to work. IWH⁷ researchers are a team of interdisciplinary scientists with a variety of backgrounds including professors, psychologists, and statisticians. The IWH⁷ is known for its expertise in conducting systematic reviews in occupational health and safety through their Systematic Review Program. The IWH⁷ research covers a variety of areas such as vulnerable populations, Ontario Health and Safety (OHS) practices, and differing working conditions. The IWH⁷ is governed by a Board of Directors made up of senior business, labour and academic leaders, and also receives guidance from a Scientific Advisory Committee that reports to the Board of Directors.

Centre for Research in Occupational Safety and Health (CROSH)⁸

At a Glance: CROSH⁸ is based at Laurentian University and engages in industrial research. CROSH⁸ brings together industry members, safety associations, government organizations, and multidisciplinary researchers in a formal setting. Together, their mission is to reduce workplace injuries in Northern Ontario by discussing and proposing solutions for workplace injury and disease problems. CROSH⁸ is involved in three main areas of research: Human Factors and Ergonomics (HFE); Occupational Health and Wellness (OHW); and Occupational Physiology and Environment (OPE). CROSH⁸ uses a field-to-lab-to-field approach, in which they assess workplaces from the field, develop a solution in the lab, then test the solution back in the field to ensure meaningful changes are being made in the workplace. With their research expertise, CROSH⁸ is working to solve health and safety problems faced by Northern Ontario industries. CROSH⁸ is guided by an Advisory Committee made up of industry, labour and Ontario health and safety focused organizations.

Conclusion

Research Centres are critical in the Ontario Health and Safety System because they help to identify root problems in the workplace and pinpoint possible solutions. These Centres consist of research professionals along with their own board of executives and are funded by the MLTSD¹, grants, and various partnerships. Together, Research Centres help create a deeper understanding for how and why

Implications for the Prevention of MSD

- Through research, stakeholders can learn about evidence-based work-practices to reduce MSD.
- Conclusions from research can be used to implement changes in the workplace such as the addition of safer workplace practices and the elimination of unsafe practices.
- Resources can be produced from research to make injury prevention findings convenient and accessible to everyone, such as the Ontario MSD Prevention Guideline (available at www.msdpreservation.com).

Resource papers are funded by the Centre of Research Expertise for the Prevention of Musculoskeletal Disorders, which receives funding through a grant provided by the Ontario Ministry of Labour, Training and Skills Development. The views expressed are those of the authors and do not necessarily reflect those of the Centre nor of the Province.

Resource papers are available online at: www.cre-msd.uwaterloo.ca.



injuries and diseases happen in the workplace by analyzing exposures, reviewing current evidence, and collaborating with workplace parties. This research helps to prevent future injuries and illness by influencing the creation of new health and safety guidelines, MLTSD¹ prevention strategies and safer work-practices, keeping Ontario workers safe on the job.

References

1. Ontario Ministry of Labour, Training and Skills Development: <https://www.ontario.ca/page/ministry-labour-training-skills-development>
2. Ontario's Health and Safety System: <https://www.ontario.ca/document/healthy-and-safe-ontario-workplaces-strategy/ontarios-occupational-health-and-safety-system>
3. Workplace Safety & Insurance Board of Ontario: <https://www.wsib.ca/en>
4. Centre of Research Expertise for the Prevention of Musculoskeletal Disorders: <https://uwaterloo.ca/centre-of-research-expertise-for-the-prevention-of-musculoskeletal-disorders/>
5. Centre for Research Expertise in Occupational Disease: <http://creod.on.ca/>
6. Occupational Cancer Research Centre: <https://www.occupationalcancer.ca/>
7. Institute for Work & Health: <https://iwh.on.ca>
8. Centre for Research in Occupational Safety and Health: <https://crosh.ca>