MSD Prevention Guideline for Ontario

A multi-stakeholder initiative led by the Centre of Research Expertise for the Prevention of Musculoskeletal Disorders (CRE-MSD)

Co-Leads
Dr. Amin Yazdani
Dr. Richard Wells

Amin Yazdani, PhD, CSP
Professor, OHSW Program Coordinator
School of Business
Conestoga College Institute of Technology and Advanced Learning
Adjunct Assistant Professor, University of Waterloo
Adjunct Assistant Professor, McMaster University
ayazdani@conestogac.on.ca

Acknowledgements

The many workplace stakeholders who have contributed their time, knowledge and experiences to the project

The Ontario Ministry of Labour for funding to support the development of the MSD Prevention Guideline and its dedicated website

CRE-MSD receives funding through a grant provide by the Ontario Ministry of Labour. The views expressed are those of the authors and do not necessarily reflect those of the Province.

info@msdprevention.com

Richard Wells wells@uwaterloo.ca
Amin Yazdani ayazdani@uwaterloo.ca

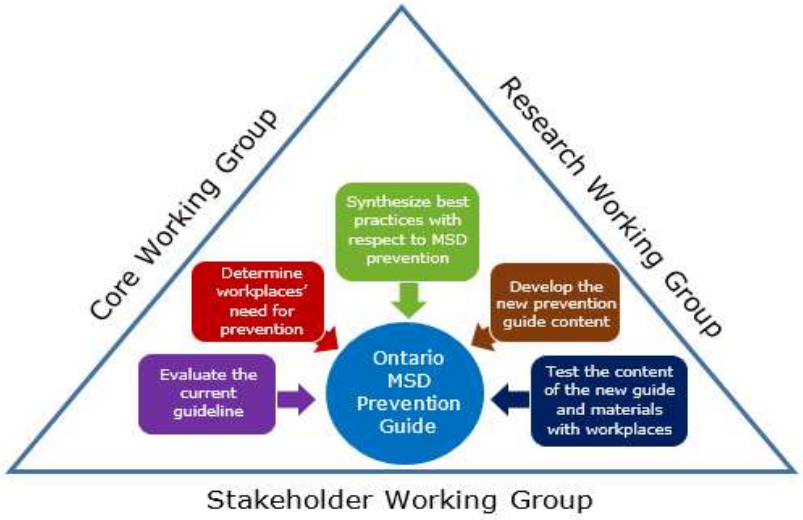
Context

- The Ontario MSD Prevention Guideline and Toolboxes developed by the Ontario Health and Safety system were originally developed under the auspices of the Occupational Safety and Health Council of Ontario (OSHCO) in 2005-6 and published in 2007/8.

- It was overdue for review!
- Building on this previous work, CRE-MSD is leading a project to develop a new Ontario Prevention Guide

The overall goals of this project are to:

- Evaluate the current Guideline, determine workplaces' needs for prevention and synthesize best practices with respect to MSD prevention;
- Develop the new prevention guide content and selected draft materials;
- Test the content of the new guide and materials with workplaces;
- Prepare content for guideline and sample material;
- Website Development Phase 1: Templates, navigation;
- Website Development Phase 2: Development of graphic resources, population of the website with content developed and user testing.

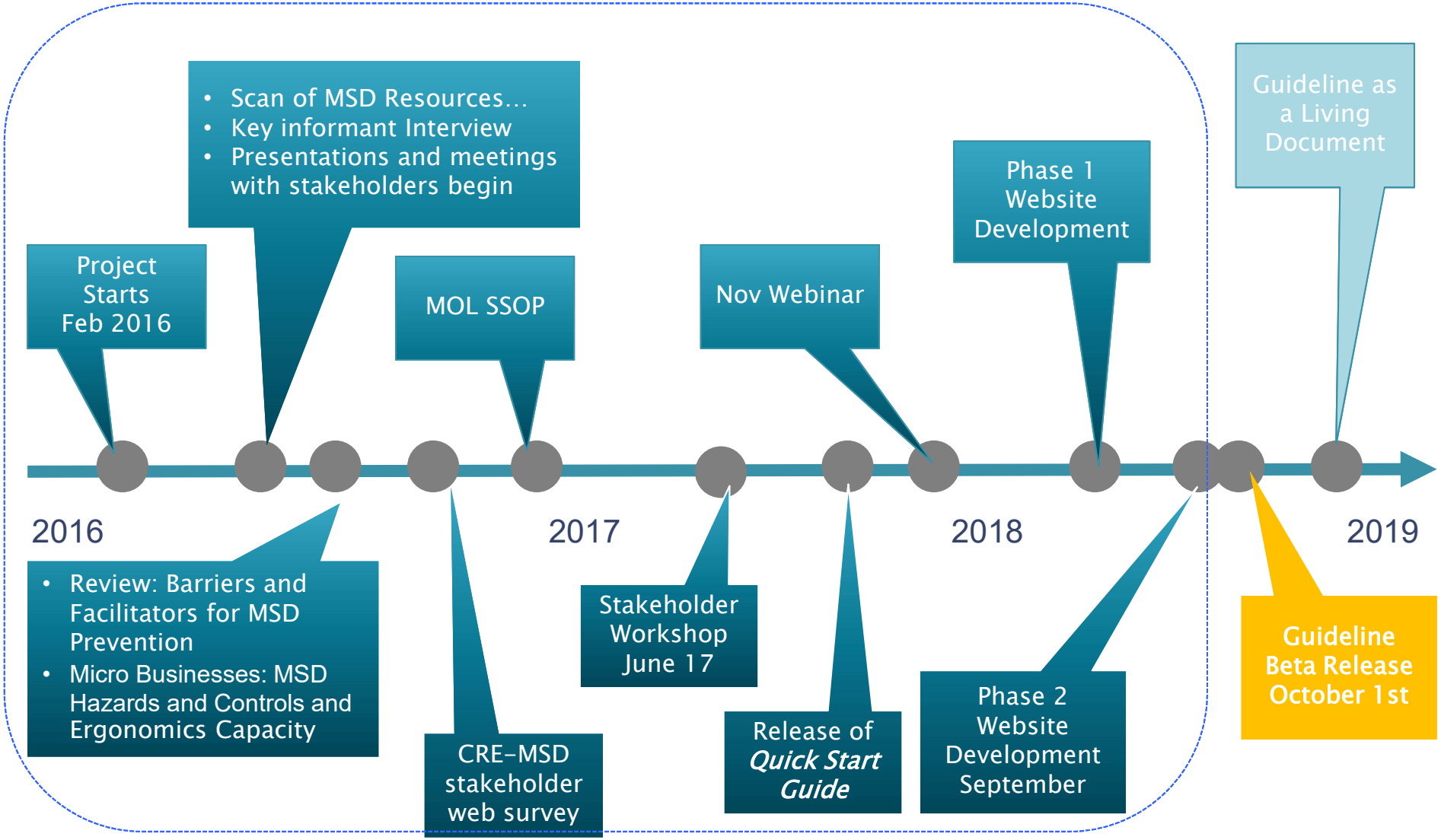


How we got input…

- Environmental scan
- Multiple meetings with multiple stakeholders,
- CRE-MSD web survey focussed on small and micro businesses[1]
- Interviews with small and micro businesses during SSOP
- Interviews with key stakeholders
- Feedback from a CRE-MSD workshop in June 2017
- Reviews and original research:
  - ✓ "Participative Ergonomics and OHSMS"; "Barriers to Ergonomics Change", "Low Back MSD Risk Factors"; "Micro and Small Businesses and MSD"; "Test of Messages for Low Back Pain in Small Businesses"

[1]We also incorporated the findings of the web survey administered by the Health and Safety System (EIPAC) on the needs of business to make ergonomics changes.

Timeline of Activities:



SMALL BUSINESS STUDY

SMALL BUSINESS SLIDE DECK

User input: Main findings

- Small businesses are a major underserviced community.
- There is a need for separate approaches for small/ micro, smaller and larger businesses.
- MSD prevention should be better integrated into business processes using common language and processes.
- Participation of workers is very important for OH&S, especially for MSD.
- Current standards (CSA, ISO) are too complex. This makes them in-accessible to most organizations.
- Be solutions oriented. Also don't assume familiarity with OH&S concepts and language

Needs 1 and 2:

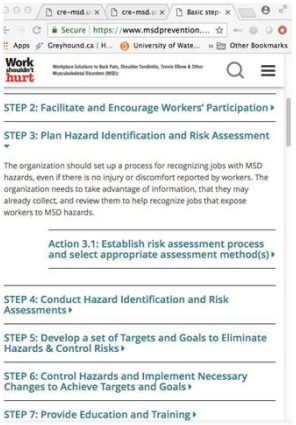
- To provide relevant information and resources to workplaces with different sizes and H&S capacity:
- Three versions of the Guideline were created.

Quick Start Guide

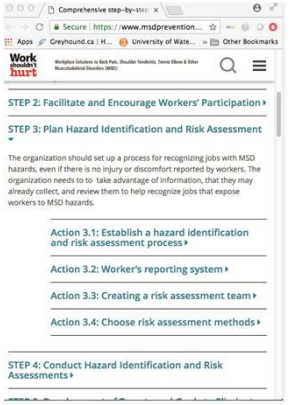
Basic Guideline

Comprehensive Guideline

Basic



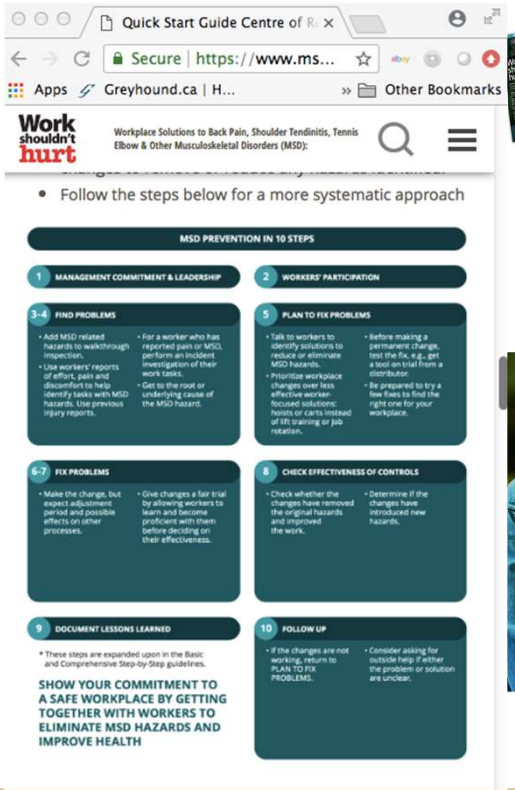
Comprehensive



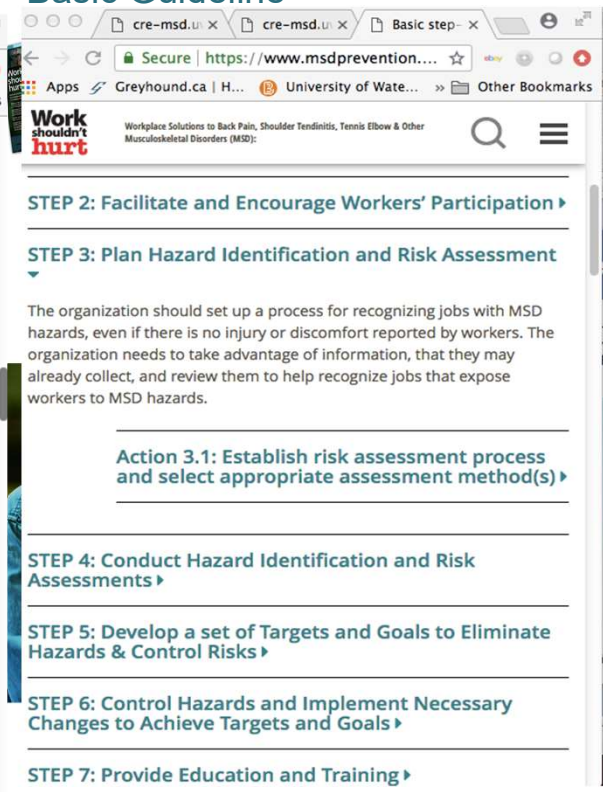
Three Guideline Versions

Needs 1 and 2: To provide relevant information and resources to workplaces of different sizes and OH&S capacity: Three versions of the Guideline were created… scalability.

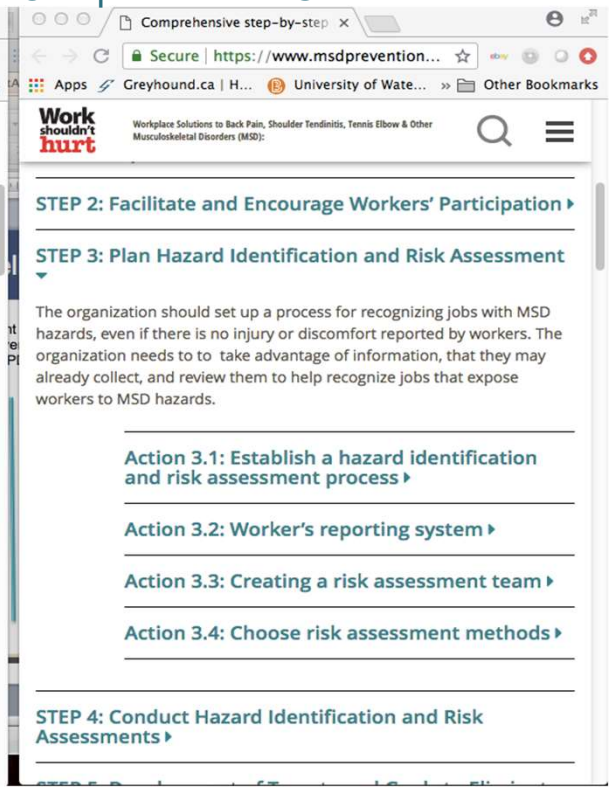
Quick Start Guide



Basic Guideline



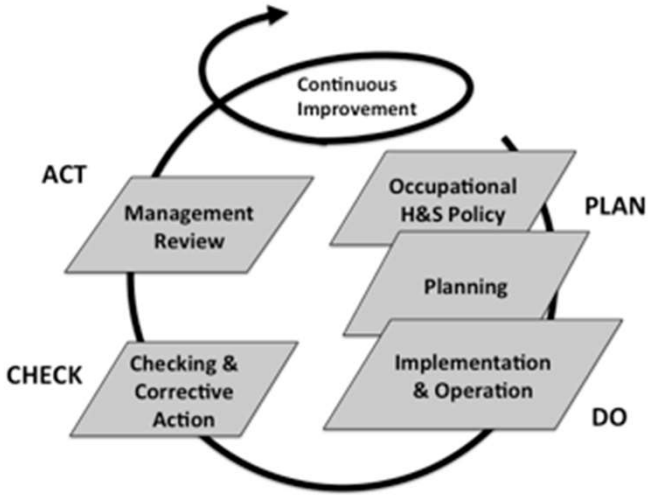
Comprehensive Guideline



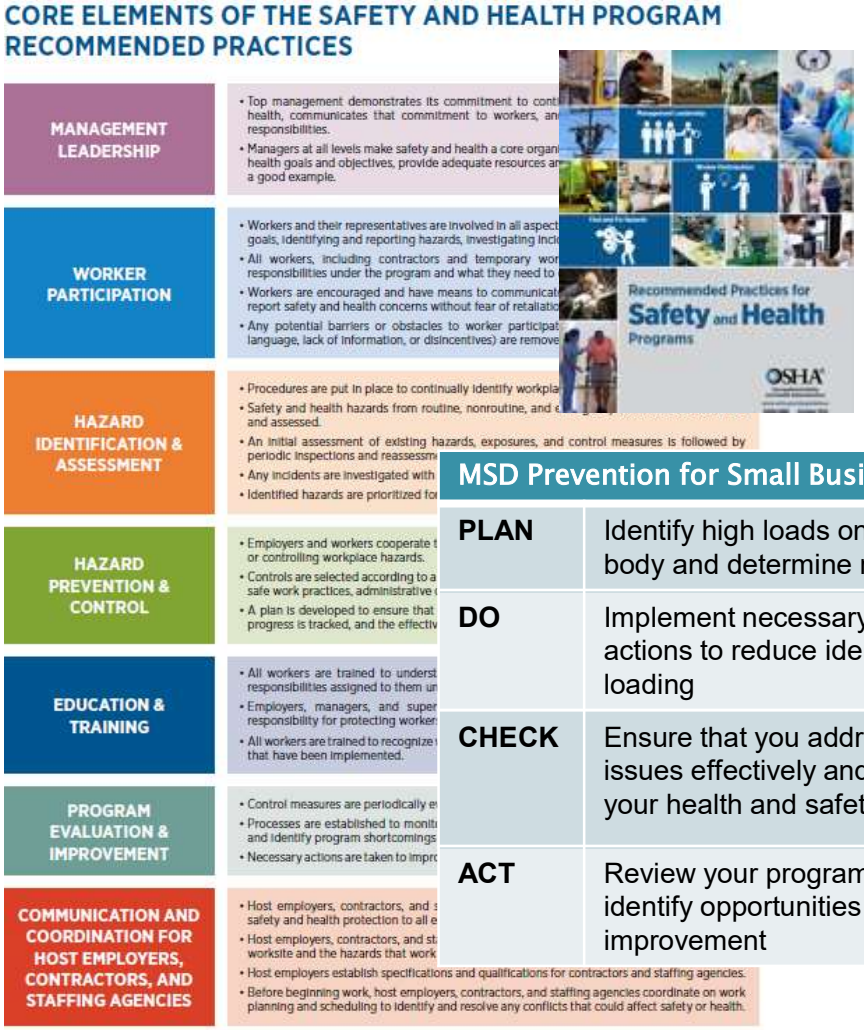
Need 3: Better integration into business processes

PDCA

- Matches current [best] practice
- Matches recent Provincial national and international approaches and CSA Standards
- Consistent with Participatory Ergonomics



CSA Z1000 | CSA Z1004 | OHSAS 18001 | ISO 45001:2016



MSD Prevention for Small Businesses	
PLAN	Identify high loads on the body and determine remedies
DO	Implement necessary control actions to reduce identified loading
CHECK	Ensure that you addressed issues effectively and monitor your health and safety
ACT	Review your program and identify opportunities for improvement

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Review article

Prevention of musculoskeletal disorders within management systems: A scoping review of practices, approaches, and techniques

Amin Yazdani [a, b, *], W. Patrick Neumann [c], Daniel Imbeau [d], Mark Pagell [f], Richard Wells [a, b]

[a] Department of Kinesiology, Faculty of Applied Health Sciences, University of Waterloo, 200 University A
[b] Centre of Research Expertise for the Prevention of Musculoskeletal Disorders (CRE-MSD), 200 University
[c] Department of Mechanical and Industrial Engineering, Ryerson University, 350 Victoria Street, Toronto
[d] Département de Mathématiques et de Génie Industriel, École Polytechnique de Montréal, C.P. 6079, Succ.
[e] School of Public Health and Health Systems, Faculty of Applied Health Sciences, University of Waterloo, N2L 3G1, Canada
[f] Smurfit Graduate School of Business, University College Dublin, Carysfort Avenue, Blackrock, Co. Dublir

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Safety Science

journal homepage: www.elsevier.com/locate/safety

Integration of musculoskeletal disorders prevention into manage systems: A qualitative study of key informants' perspectives

Amin Yazdani[a,b,c,d,*], Margo Hilbrecht[e], Daniel Imbeau[f], Philip Bigelow[g], W. Patri Mark Pagell[i], Richard Wells[a,b]

[a] Department of Kinesiology, Faculty of Applied Health Sciences, University of Waterloo, 200 University Avenue, Waterloo, Ontario N2L 3G1,
[b] Centre of Research Expertise for the Prevention of Musculoskeletal Disorders (CRE-MSD), 200 University Avenue, Waterloo, Ontario N2L 3G1,
[c] Department of Geography and Earth Science, McMaster University, 1280 Main St W, Hamilton, Ontario 18S 4L8, Canada
[d] Department of Business and Hospitality, Conestoga College, 299 Doon Valley Dr, Kitchener, Ontario N2G 4M4, Canada
[e] Canadian Index of Wellbeing, Faculty of Applied Health Sciences, 200 University Avenue, Waterloo, Ontario N2L 3G1, Canada
[f] Département de Mathématiques et de Génie Industriel, École Polytechnique de Montréal, 2900 Boulevard Edouard-Montpetit, Montréal, QC H3T 1J4, Canada
[g] School of Public Health and Health Systems, University of Waterloo, 200 University Avenue, Waterloo, Ontario N2L 3G1, Canada
[h] Department of Mechanical and Industrial Engineering, Ryerson University, 350 Victoria St, Toronto, Ontario M5B 2K3, Canada
[i] Smurfit Graduate School of Business, University College Dublin, Stillorgan Rd, Belfield, Dublin 4, Ireland

ABSTRACT

Introduction: Musculoskeletal disorders (MSD) constitute a substantial fraction of workplace injuries and result in costs to employers, workers, and societies as a whole. MSD prevention programs disparate from w organizational approaches can be costly, ineffective and unmaintainable.

Objective: This study examines key informants' perspectives on the integration of MSD prevention programs management systems as a solution to issues associated with isolated or separate program.

Method: Seven Health & Safety (H&S) consultants, five H&S managers, five researchers, three policy makers, three labour representatives were interviewed on this topic. A thematic analysis approach was used to code analyze the data from the key informants' interviews.

Results: The participants consistently suggested that a disconnect of MSD prevention strategies from man ment system frameworks can lead to inadequate attention and ineffective prevention policies. Integratio MSD prevention into management systems was highly supported. Incorporating MSD hazard identification assessment into tools such as Failure Mode Effects Analysis, Job Safety Analysis, decision making tools, Kamishibai and Ishakawa (for Lean) was suggested to improve MSD prevention.

Contribution: This study gives expert insight into challenges associated with MSD risk factors as well as solut regarding current approaches to MSD prevention and effective tools for implementation.

Original article

Scand J Work Environ Health. 2015;41(2):111–123. doi:10.5271/sjweh.3467

How compatible are participatory ergonomics programs with occupational health and safety management systems?

by Amin Yazdani, MSc [1,2] W Patrick Neumann, PhD [3] Daniel Imbeau, PhD,[4] Philip Bigelow, PhD,[2,5] ilbrecht, PhD,[7] Richard Wells, PhD [1,2]

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DOI: 10.1080/24725838.2017.1386142

METHODS, MODELS, & THEORIES

Key Informants' Perspectives: Management Commitment, Training, and Worker Participation in the Prevention of Musculoskeletal Disorders

Amin Yazdani[1,*], Margo Hilbrecht[2], Daniel Imbeau[3], Philip Bigelow[4], W. Patrick Neumann[5], Mark Pagell[6], and Richard Wells[1]

[1]Department of Kinesiology, Fa of Applied Health Science, Univ of Waterloo, 200 University Ave West, Waterloo, Ontario N2L 3 Canada

OCCUPATIONAL APPLICATIONS To implement effective musculoskeletal disorder (MSD) prevention programs in organizations, there needs to be commitment from top and middle management, ongoing worker participation,

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Theberge N, Hilbrecht M, Wells R. How compatible are ealth and safety management systems? *Scand J Work* 3467

r cause of pain, disability, and costs. Prevention of MSD an ergonomics program, often a participatory ergonom- n activities take place under the umbrella of a formal or tem (OHSMS). This study assesses the similarities and could help improve MSD prevention activities.

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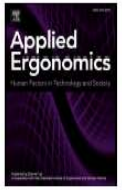

Review article

Barriers for implementation of successful change to prevent musculoskeletal disorders and how to systematically address them

Amin Yazdani[a,b,c,d,*], Richard Wells[b]

[a] Department of Kinesiology, University of Waterloo, 200 University Avenue West, Waterloo, Ontario, N2L 3G1, Canada
[b] The Centre of Research Expertise for the Prevention of Musculoskeletal Disorders (CRE-MSD), University of Waterloo, 200 University Avenue West, Waterloo, Ontario, N2L 3G1, Canada
[c] School of Business and Hospitality, Conestoga College Institute of Technology and Advanced Learning, 299 Doon Valley Dr, Kitchener, Ontario, N2G 4M4, Canada
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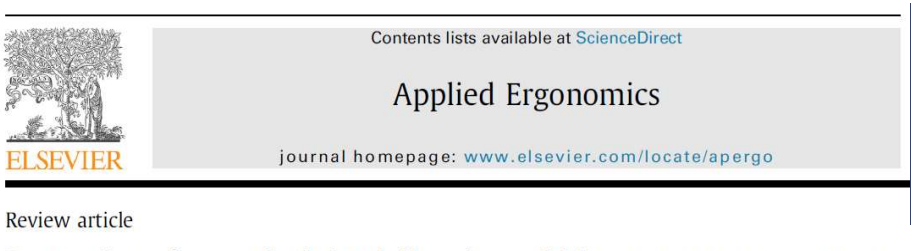
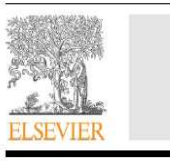
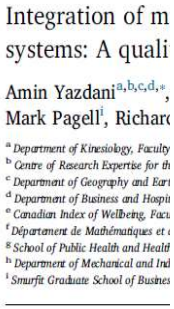
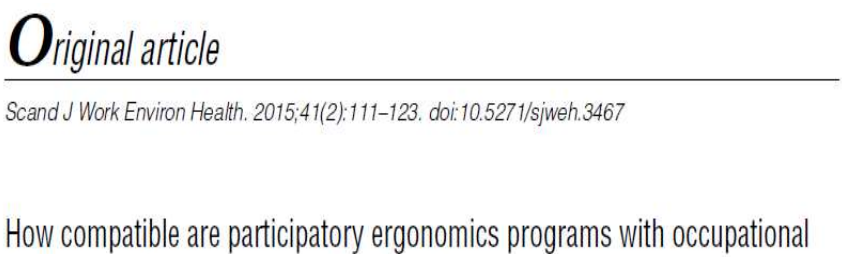


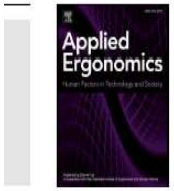






Implications for MSD Prevention processes

- MSD prevention and implementation processes should be approached as a **long-term commitment** to worker's safety and company success.
- Barriers to making ergonomics change to prevent MSD are essentially the same as those seen in Health and Safety in general. Implementing a **PDCA** model is a systematic and well accepted way to organize (prevention) activities in business.
- **Participative ergonomics** is compatible with **mature OHSMS.**
- In order for individual implementations to be accepted and utilized, they must be **culturally relevant** and **easy to integrate** into workers‘ current work practices and the organizations' procedures.



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[d] School of Geography and Earth Sciences, McMaster University, 1280 Main St W, Hamilton, Ontario, L8S 4L8, Canada

Guideline based upon 10 Step PDCA

PDCA

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ACT

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CHECK

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45001:2016

Work shouldn't hurt

About MSD

Prevent MSD

Deal with an MSD

Stakeholders

MSD Risk Assessment

Resource Library

CORE ELEMENTS OF THE SAFETY AND HEALTH PROGRAM RECOMMENDED PRACTICES

STEP 1: Demonstrate Management Commitment and Leadership

STEP 2: Facilitate and Encourage Workers' Participation

STEP 3: Plan Hazard Identification and Risk Assessment

STEP 4: Conduct Hazard Identification and Risk Assessments

STEP 5: Develop a set of Targets and Goals to Eliminate Hazards & Control Risks

STEP 6: Control Hazards and Implement Necessary Changes to Achieve Targets and Goals

STEP 7: Provide Education and Training

STEP 8: Evaluate Controls, the Program and the Organization's Performance

STEP 9: Document Lessons Learned and Stakeholders' Feedback

STEP 10: Review Processes, Achievements, and Identify Areas for Improvement

Prevent MSD | *Quick Start Guideline* | *Basic Guideline* | *Comprehensive Guideline*

mall Businesses

loads on the
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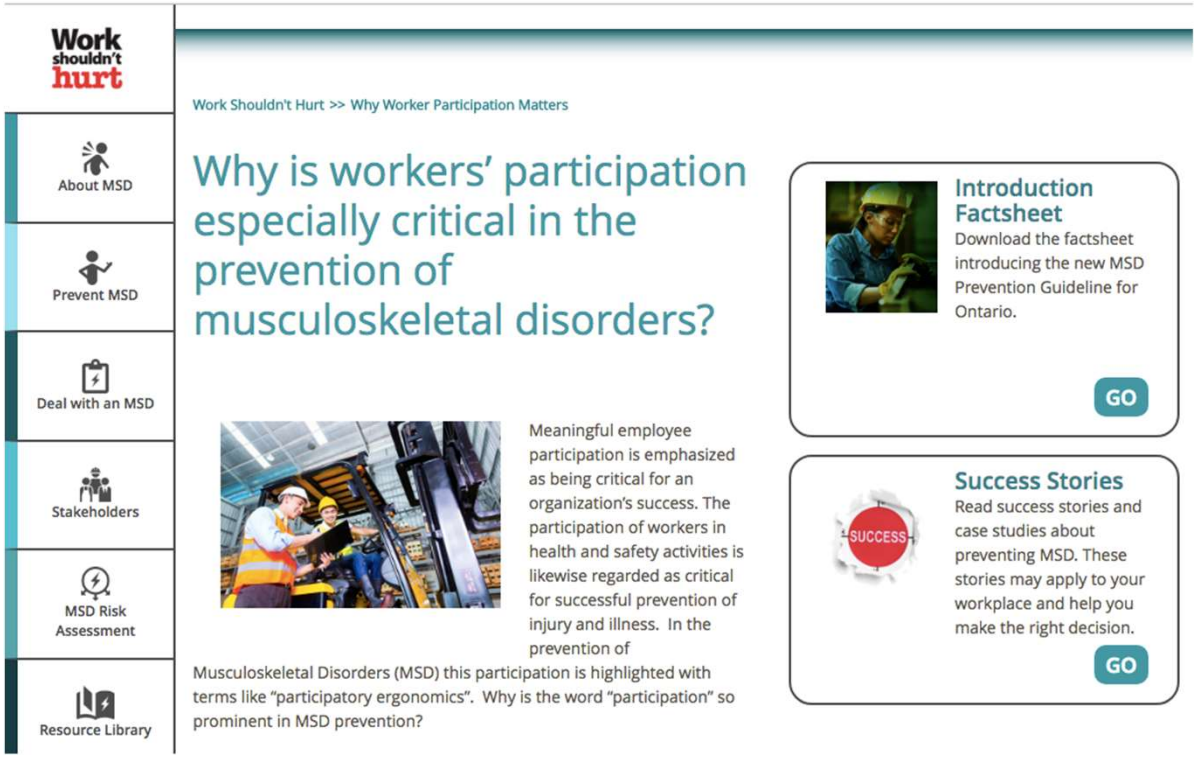
Need 4: Importance of Workers' Participation

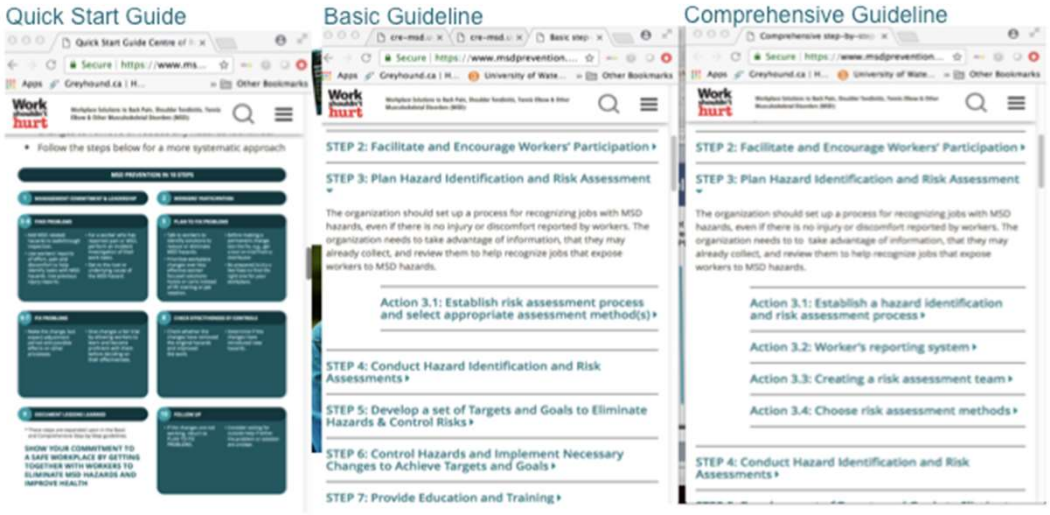
- Importance of workers' participation for MSD prevention stressed throughout Guideline with specific forms of participation described.



Need 5: Standards “too complex”

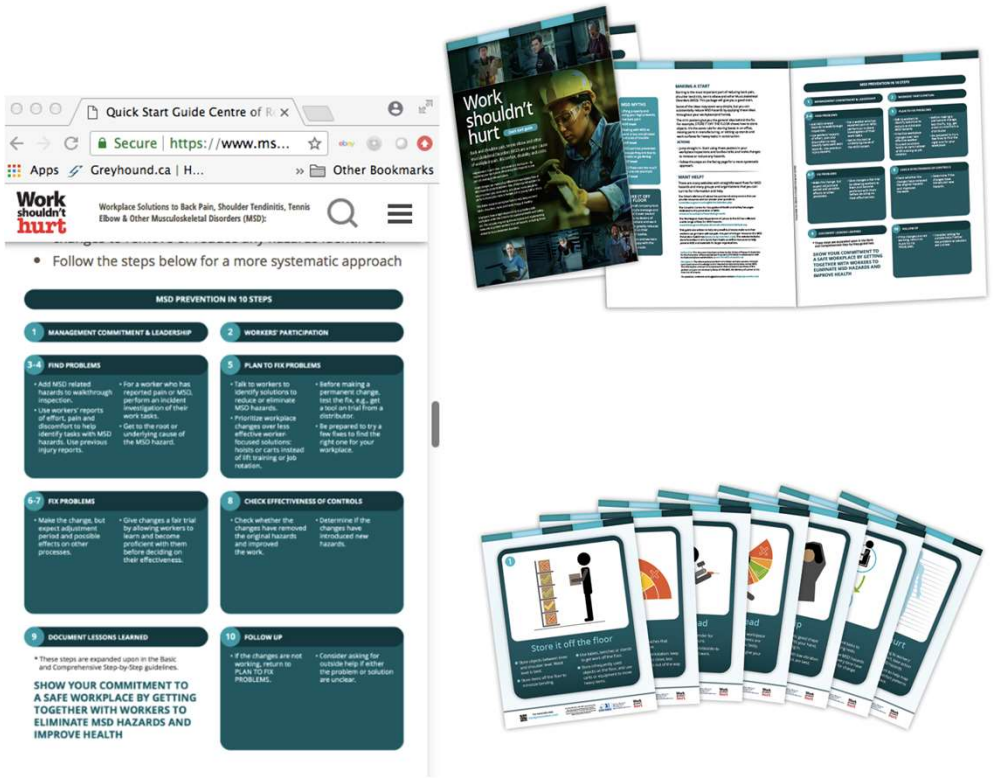
- Implementation oriented resources added to those of the current Guideline and linked to process steps.
- Creation of three guideline versions allows user to select desired level of detail BUT
- Processes are scalable to allow for the level of maturity in prevention practices of an organization.

- Language and process of all versions comparable and compatible with current Standards and practices.



Need 6. Don't assume familiarity with OH&S concepts and language

- Created the Quick Start Guide



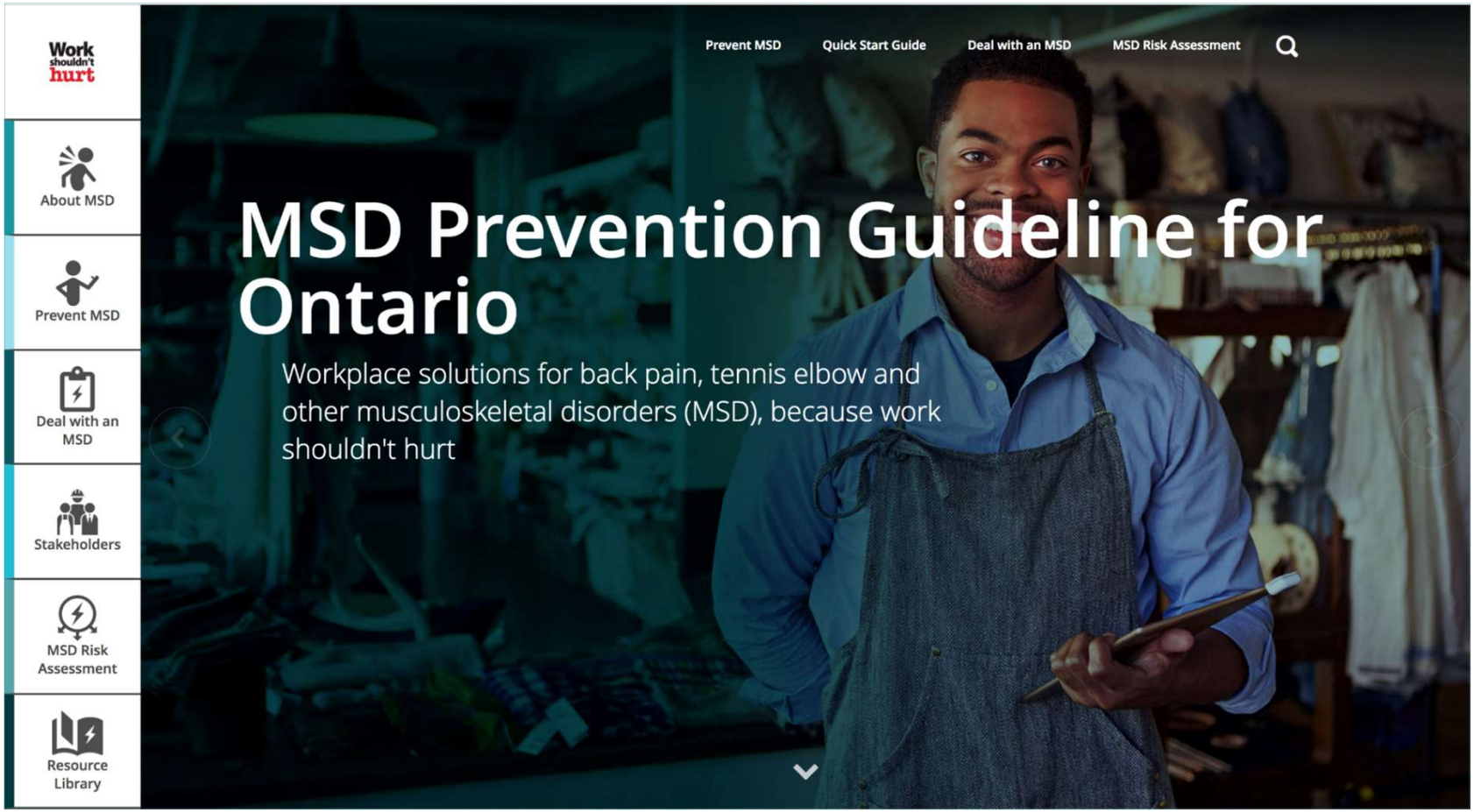
More about the Quick Start Guide before lunch

Web Site Phase 1

- To satisfy users' needs we created the website to give:
  - Multiple ways for users to find relevant resources and information.
    - Multiple entry points: By stakeholder; By level of detail; By process or risk assessment
    - *Video on home page*
    - Searchable resources
    - Help in selection of MSD assessment tools
  - Incorporation of current Guideline resources
  - *Video/graphics of hazards*
  - AODA[1] and WCAG 2.0[2] compliant
  - Responsive

[1] *Accessibility for Ontarians with Disabilities Act (AODA) and* [2]*Web Content Accessibility Guidelines (WCAG) 2.0*
Italics: Phase 2

MSD Prevention Website Walkthrough



https://www.msdprevention.com/

Next?

Anticipated website development…

Phase 2 Development

- Developing “Control Picker”, prevention resources and search function
- Develop Risk Assessment and other prevention resources in video, PDF and html formats
- Develop Quick Start Guide: Office
- Collect Stories and Case Studies
- Develop “Dealing with an MSD”

Continued Development

- Respond to user feedback on Beta Release via web survey etc
- Continue to convert resources to be AODA compliant
- Continue to add supporting information and literature