

# Development and Evaluation of Quick Start Guideline for MICRO & Small Business



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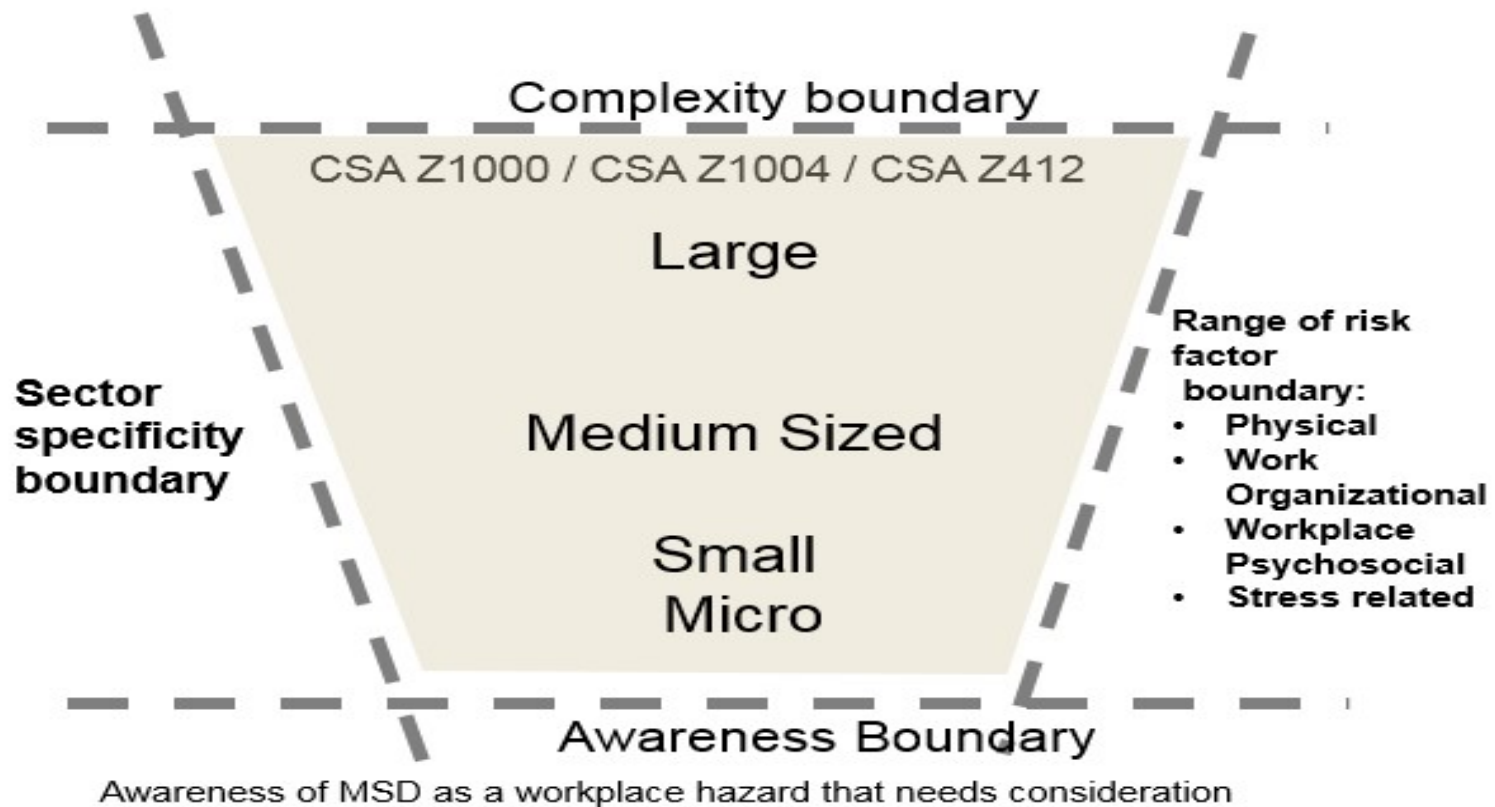
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# Prospect





## Challenges for Prevention

- **Higher exposure** to occupational hazards in comparison to larger corporations (Hermawati, et al., 2014; Mendeloff, 2006; Harncharoen et al., 2016; Hasle & Limborg, 2006).
- **Higher rates** of fatal/serious injuries and the highest rate of fatalities across all industry sectors (Mendeloff, 2006).
- They have more difficulties controlling exposure to hazards at their workplaces (Hasle & Limborg, 2006)

Characteristics of and the unique situation of small businesses result in a **lesser ability** to address OHS hazards.



# Why Small Businesses?

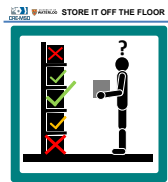
Approximately 403,236 Small Businesses in Ontario employ thirty three percent of Ontario's workforce.

- The large size of this market combined with industry sector differences, variety of business models, and cultural diversity, makes reducing risk and eliminating hazards in small business a unique undertaking.
- Studies have made it clear that exposure to workplace hazards combined with the lack of resources to mitigate those risks leaves workers who are employed by small business in a more vulnerable position than their counterparts in larger businesses.
- 29% of all lost time injuries accepted by the WSIB in Ontario are attributed to small business workers.
- Studies have made it clear that exposure to workplace hazards combined with the lack of resources to mitigate those risks leaves workers who
- are employed by small business in a more vulnerable position than their counterparts in larger businesses.

# Quick Start Guideline

2016

Needs of Small Businesses



2017

Development and user testing of QSG recourses

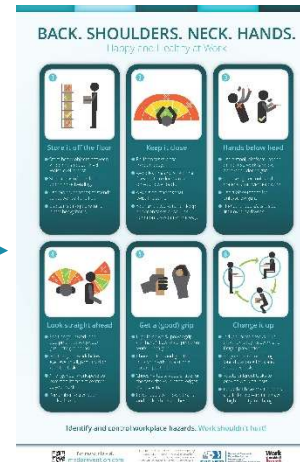
2018

Pilot testing of QSG



Today

Launch of MSD Prevention Guideline



2019

Evaluation





# Overall Objective

Old MSD Guideline:

- ❑ Gaps for small business

Overall Objective :

- ❑ To evaluate the needs of micro, and small businesses.
- ❑ To develop MSD prevention resources that fulfil the needs of micro and small businesses.

# **2016**

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## Small Businesses Needs Assessment



# Methodology

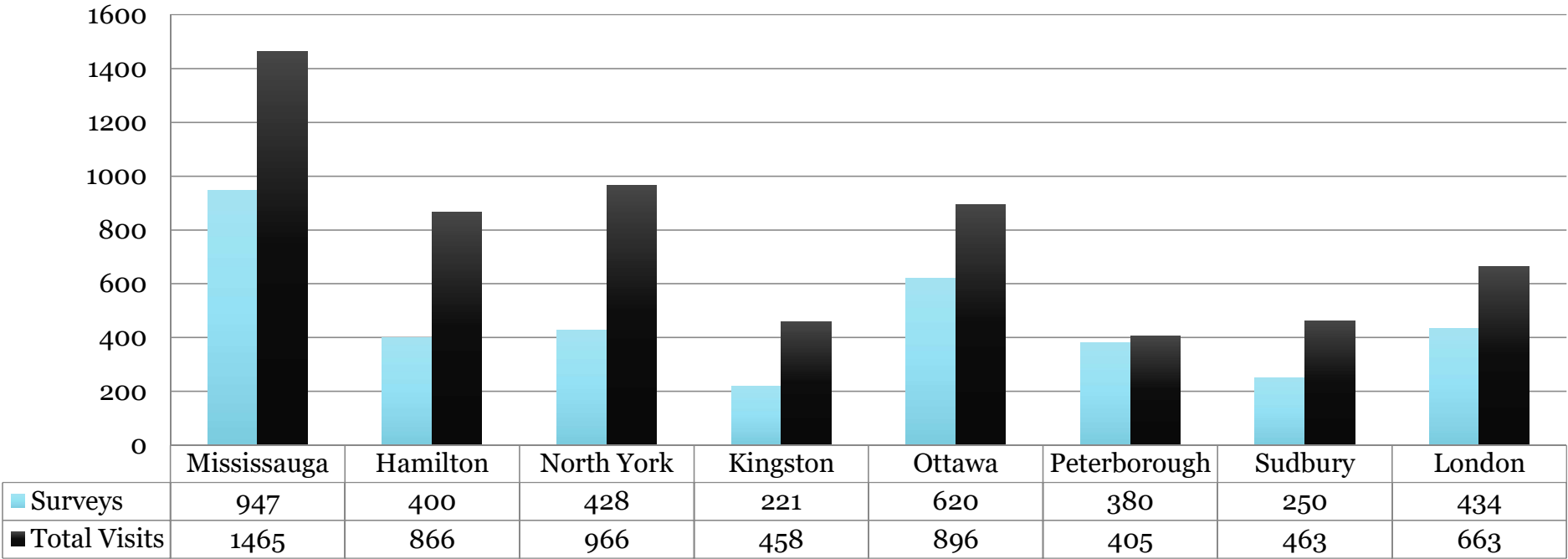
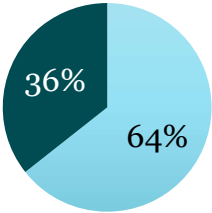
- MOL Summer Student Outreach Program
- An anonymous survey to gain feedback on workplace safety.
- The survey consisted of twenty-four questions.
- The opening and closing sections of the survey asked general information about the businesses and the individual completing the survey.
- The remaining three sections focused on Occupational Health and Safety Awareness of regulation and training, workplace harassment, and **musculoskeletal disorders.**



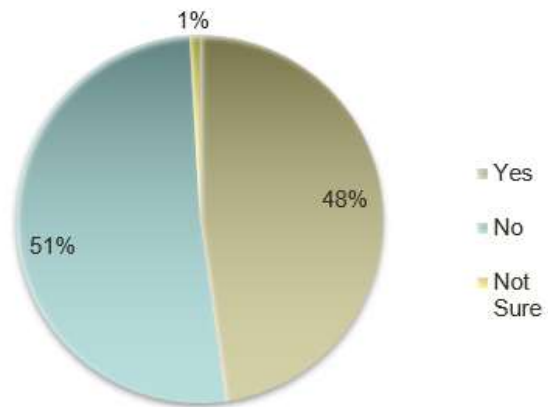
# Results

Workplaces Visited = 6182

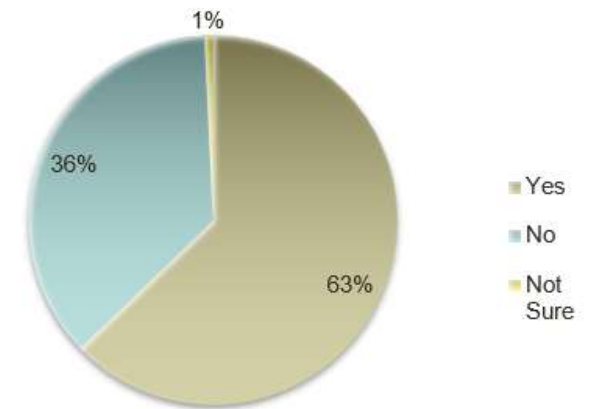
Surveys Completed    Surveys Not Completed



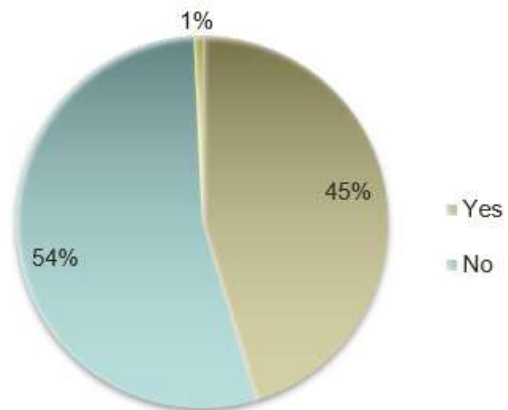
**Working with your arms above your head**



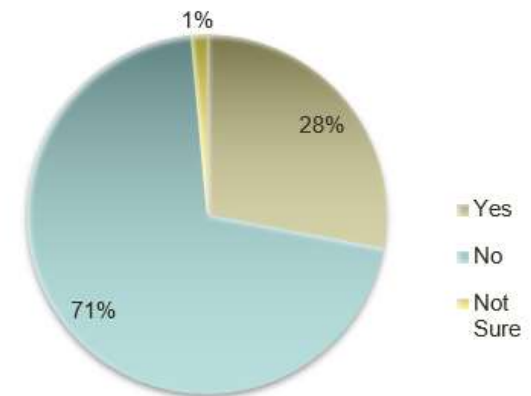
**Frequent bending of your back**



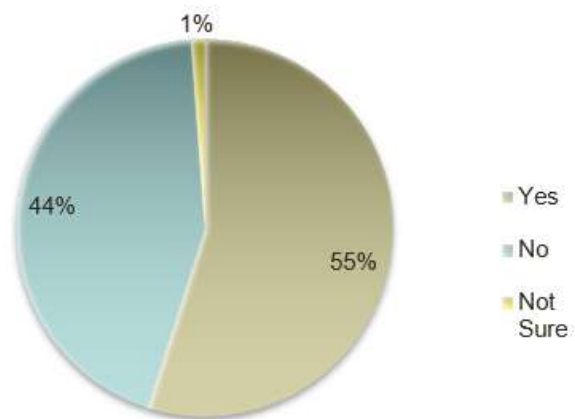
**Having to stay in one position for long periods of time**



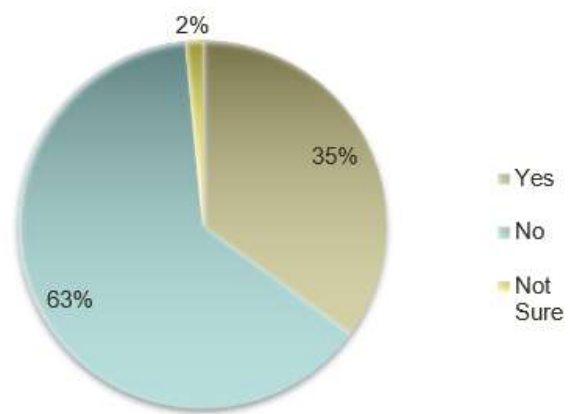
**Exerting high gripping forces with your hands**



### Highly repetitive work



### Heavy or frequent lifting, pushing or pulling





# Awareness of MSD Hazards and Controls in Micro and Small Businesses...

- Respondents preferred **traditional forms of information on MSD:**
  - i.e., simple posters and flyers
- Respondents seemed to **struggle with all H&S issues:**
  - We are not alone!



## Needs Assessment Findings:

- Little resources available!
- **Small businesses** are a major underserved community. It is Very challenging for them to identify hazards and assess/prioritize them.
- There is a need for **separate approaches** for micro, smaller and larger businesses.
- MSD prevention should be better integrated into business processes using common language and processes.
- Micro and small firms with 1-20 persons do not usually have a person with specific responsibilities for H&S.
- Concepts in H&S likely not well understood (MSD, hazard; control; hierarchy of control).
- Day-to-day reactive approach.



## **Challenges Reported by Small Businesses: Findings from KW Team**

- Management commitment
- Corporate buy-in
- Employee buy-in
- Time
- Funding
- Resources
- Commitment
- Staff
- Expertise
- Training
- Knowledge
- Awareness of MSD hazards and regulations
- Prioritization of MSD prevention

# **2016-2017**

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User testing

# Awareness of MSD Hazards and Controls in Micro and Small Businesses...

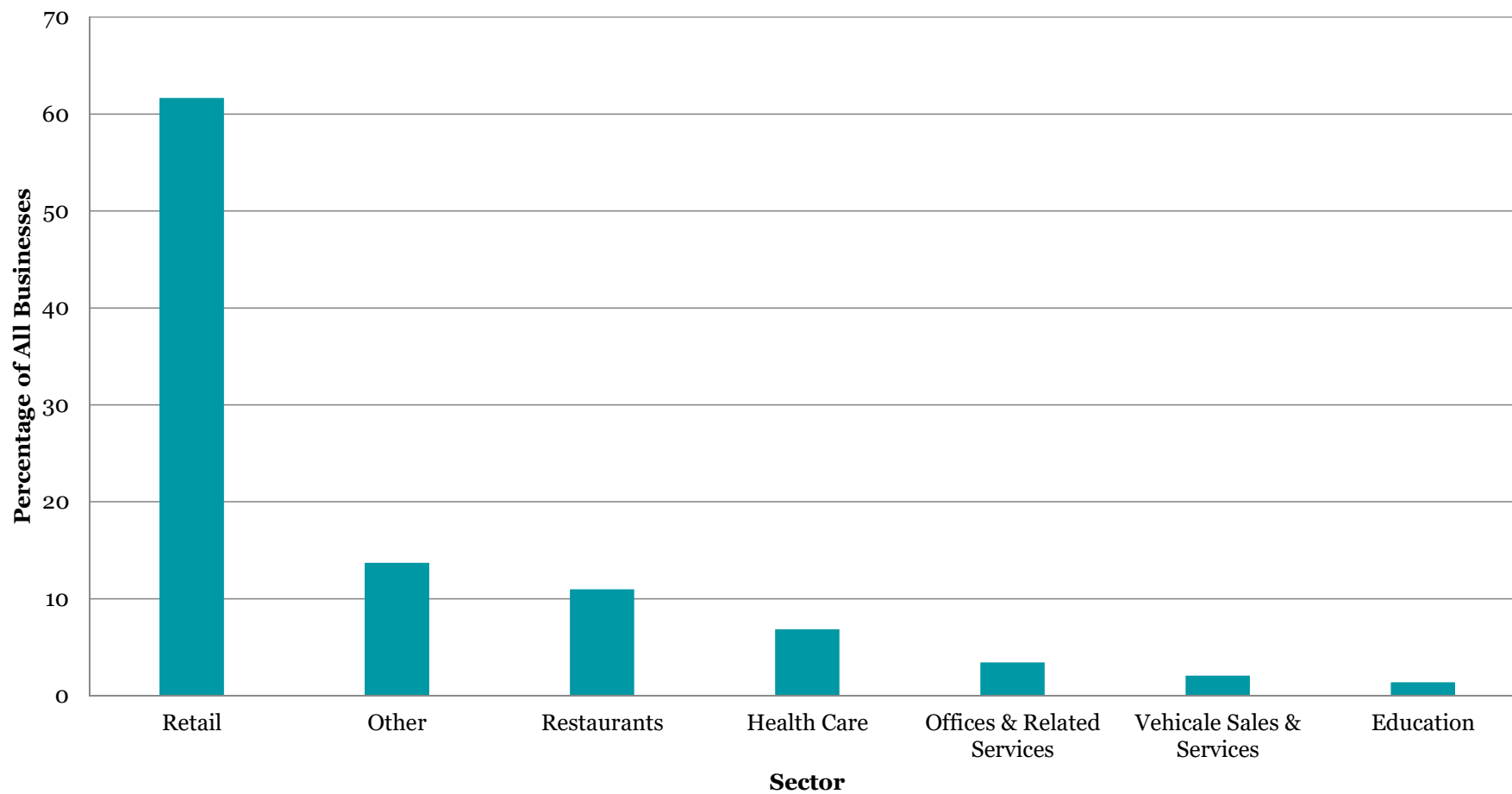
## To determine small businesses:

- Team of two students visited small businesses in KW to survey them about their awareness of MOL's regulations, about safety practices and about information needs.
- Awareness of the link between physical demands and MSD.
- Ability to recognize physical demands in their workplace.
- Ability to decide whether a recognized physical demand needs control.
- Ability to name appropriate controls.
- Preferences for MSD prevention literature.



# Results

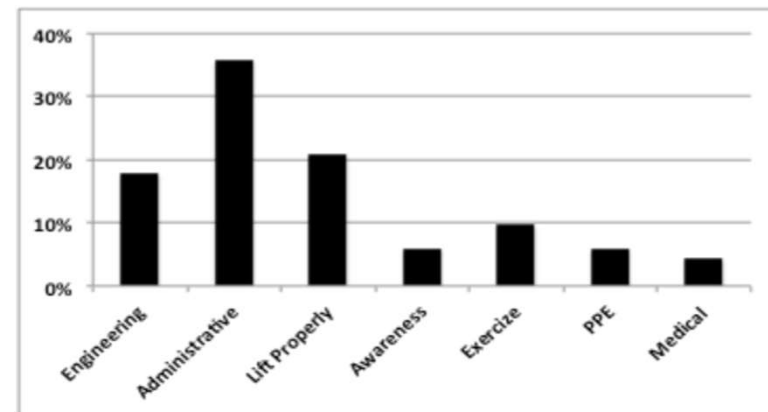
N= 146/251 businesses; ~95% small businesses <20 workers



# Awareness of MSD Hazards and Controls in Micro and Small Businesses...

- Size: 1-5 = 66% 6-20 = 30%  
20-50 = 4%
- Sample predominantly retail.
- Only 52% believed that physical demands in the workplace could cause injuries such as back, shoulder or neck pain.
- Over 40% of businesses did not know or were unsure how to identify physical demands in their workplace that might need to be reduced.

- Majority of survey participants (79%) were confident they had the appropriate knowledge to reduce injury risk due to high physical demands in the workplace, BUT **lifting properly and other administrative controls dominated.**





# Testing a simple message



## STORE IT OFF THE FLOOR



- ✓ Put heavier objects between knee and shoulder; waist level is best
- ✓ Put rarely used objects on the floor or below shoulder level
- ✓ Do your work on tables, benches, or even piled pallets
- ✓ Store things on shelves to decrease the numbers of times you need to bend forward in a day



## STORE IT OFF THE FLOOR

- ◆ *The closer your hands are to the ground when you are lifting, the more likely you are to hurt your back.*
- ◆ *You are more likely to hurt your back if you are lifting from the ground, even for a light object like a pencil!!!*
- ◆ *There is no "good" way to lift things from the ground. All methods are hard on your back... even if you bending your knees.*
- ◆ *So to prevent that problem altogether; 'Store it off the floor!'*

### Preventing Low Back Injuries from Lifting

- Don't work at floor level: do as much of your work as possible on benches, tables or even some piled pallets.
- Make effective use of your shelves: place most commonly used and/or the heaviest items at waist height
- Make use of chairs and tables when putting things down
- Use lift assist devices, hand trucks or handling devices to decrease manual materials handling
- Rarely used things could be stored on the floor but if they are heavy, use handling devices
- Team lift! Use a partner to help decrease the load

### What are we going to do today?

What can we do here at the work place today to prevent injuries while lifting?

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

Have an example you'd like to share? Or are you interested in more information?  
Send an email to [ayazdani@uwaterloo.ca](mailto:ayazdani@uwaterloo.ca) to learn more.



## Outcomes:

- The message delivered in “**toolbox talk**” format with accompanying schematic and notes also functioned as a poster;
- **Well received** by the micro / small business owners and managers;
- Conceptual and instrumental knowledge utilization was demonstrated:
  - **Changed the way they thought about lifting;**
  - **Planned to change (work/home) environment**
  - **Changed work environment**



## Implications:

- **Focus** on the biggest MSD hazards first;
- Find *messages / hazards* that are applicable across **multiple sectors**;
- Hazard identification and is difficult for small businesses: try **sneaky ways** to make it feasible;
- Choose **controls that are applicable** across multiple sectors;
- **Posters** seem to be a preferred mode of dissemination.
- The difficulty of effective MSD and OHS management in small businesses highlights the importance of **targeted prevention programs**.
- Both prevention programs and tools need to be **modified and adapted** for micro and small businesses.

# **2017-2018**

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Development for the Quick Start Guideline

# Quick Start Guideline

- Format: Modeled upon a tool box talk created and tested by CPWR\*
- Seven posters developed



\*Center for Construction Research and Training  
(CPW<http://www.cpwr.com/publications/handouts-toolbox-talks>).

# Quick Start Guideline

- Instruction: how to use this guideline; step-by-step guideline







# Potential Users

Organizations that:

- Are small or very small (also called “micro” businesses);
- May have a Health and Safety Representative;
- May not have much knowledge and few resources in Health and Safety;
- May be unfamiliar with MSD and their prevention;

Larger organizations may find this guideline useful for training and educational purposes.

# **2018**

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## Pilot Testing of Posters

# Quick Start Guideline: User Testing



### Small Business Outreach – Guideline Poster and Mini Poster Distribution

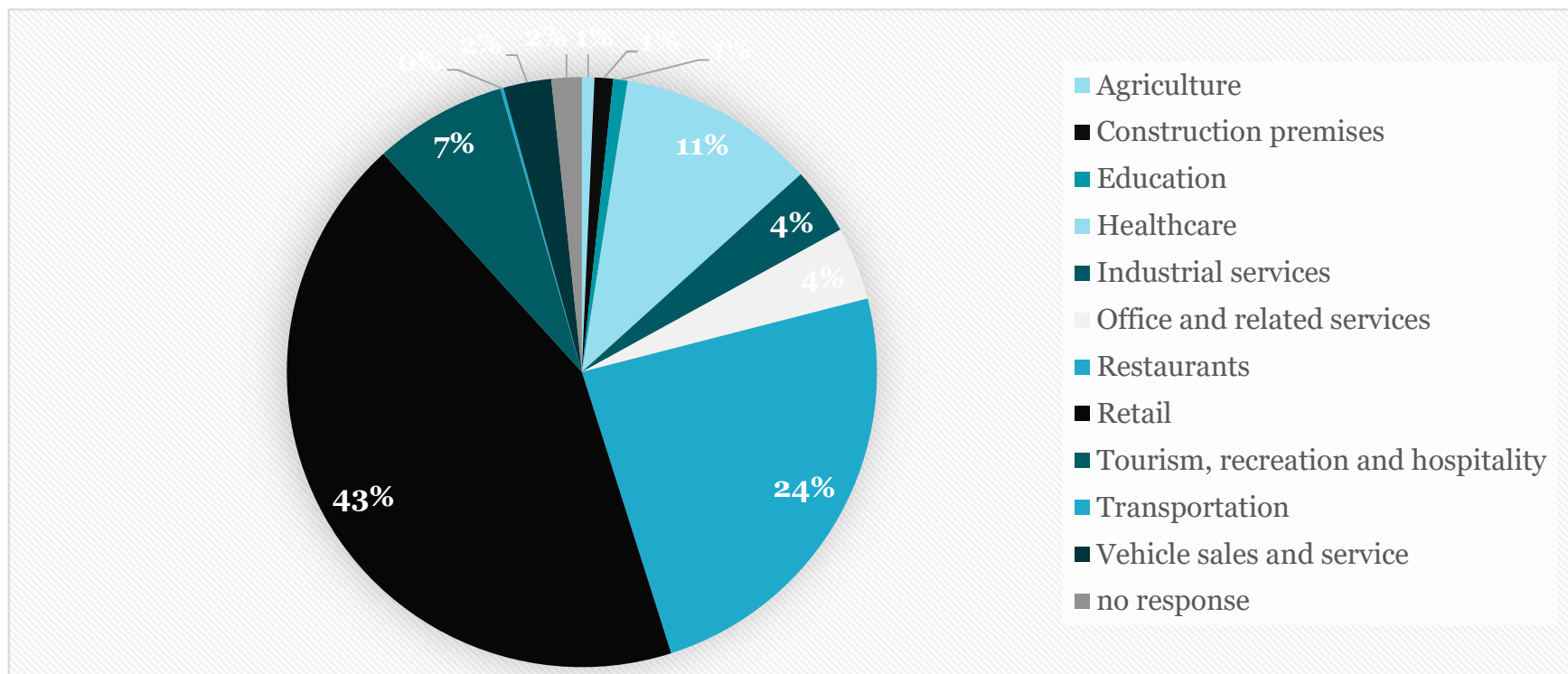
MOL Office Location	Target visits	# of posters sent
<b>Toronto</b>	<b>1425</b>	11x17 posters: 1,000  8.5x11 posters: 175 of poster #1 165 each of posters #2-6
<b>Ottawa</b>	<b>1430</b>	11x17 posters: 1,000  8.5x11 posters: 175 of poster #1 165 each of posters #2-6
<b>North York</b>	<b>2130</b>	11x17 posters: 1,500  8.5x11 posters: 250 each of posters #1-6
<b>Mississauga</b>	<b>1440</b>	11x17 posters: 600  8.5x11 posters: 100 each of posters #1-6
<b>Newmarket</b>	<b>1450</b>	11x17 posters: 600  8.5x11 posters: 100 each of posters #1-6

## Small Business Outreach – Guideline Poster and Mini Poster Distribution

MOL Office Location	Target visits	# of posters sent
<b>St. Catharines</b>	<b>715</b>	11x17 posters: 500  8.5x11 posters: 75 of poster #1 ;87 of poster #2; 87 of poster #3; 85 of poster #4 83 of poster #5; 83 of poster #6
<b>Windsor</b>	<b>700</b>	11x17 posters: 500  8.5x11 posters: 75 of poster #1; 83 of poster #2; 83 of poster #3; 85 of poster #4 87 of poster #5; 87 of poster #6
<b>Waterloo</b>	<b>710</b>	11x17 posters: 300  8.5x11 poster: 50 each of posters #1-6

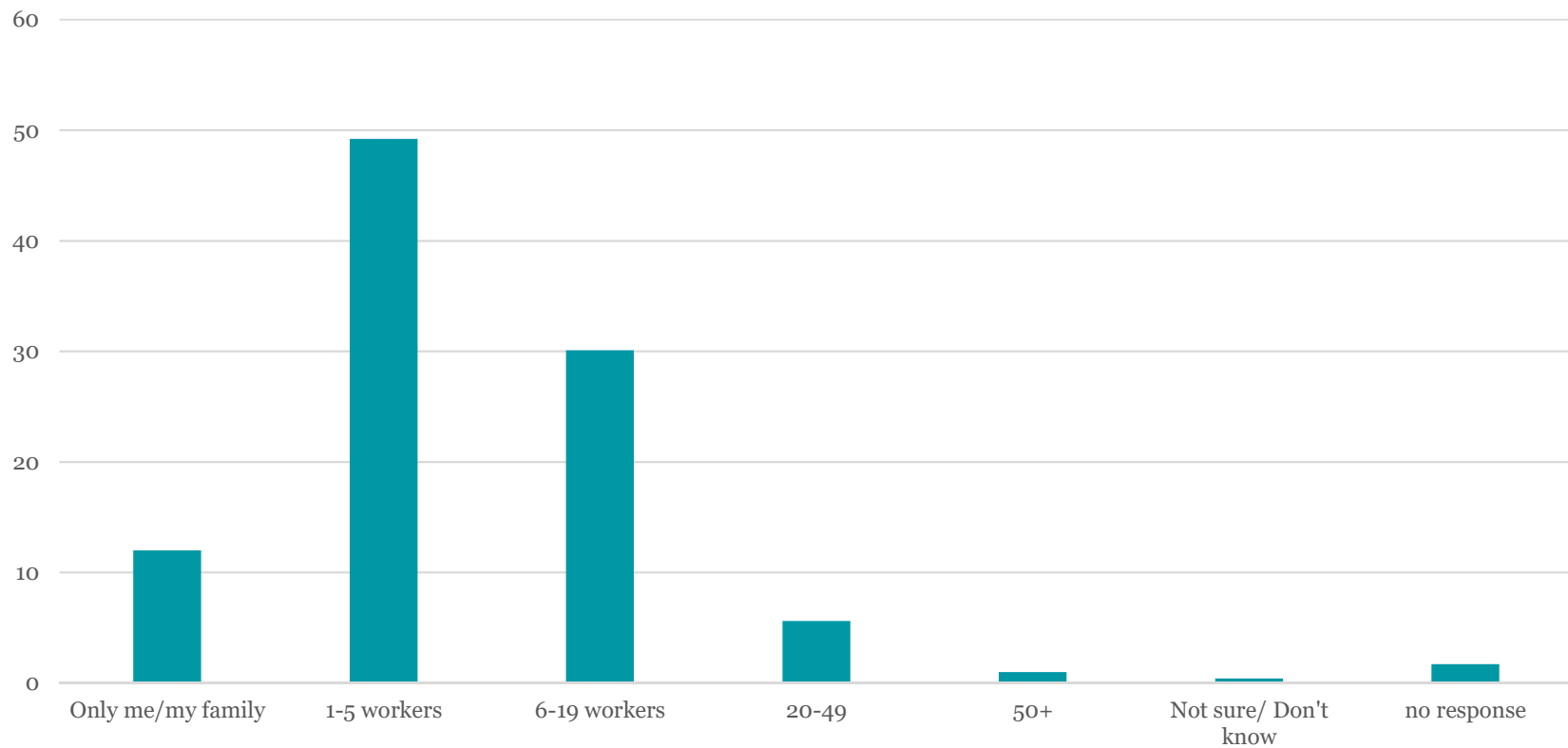
# Survey Sample

N = 2173 small businesses participated in this section of the study



# Survey Sample

How many workers work at this location?





## Small Businesses Feedback:

After reviewing the posters, did it change your thinking about physical demands at work that will cause pain and discomfort?

- **42%** of those participated, said: **YES**
- 58% Of the participants suggested that they **already knew the information** or reported that the **hazard does not exist in their workplace** (poster they received was not applicable to their workplace).





## Small Businesses Feedback:

*Did you find the information in the mini-poster and larger poster useful?*

- **83%** of those participated in this study, suggested that they found posters useful for **training, educating,** and “**reminding**” their workers about hazards.
- They also found it to **be easy to understand** and liked the **visuals and design** of the posters.
- For employers that did not find the poster helpful, they often said that it was common sense, already knew it, or it did not apply to their business.

## Small Businesses Feedback:

Will you make any changes or plan to change anything in your workplace after reviewing this material?

- About **40%** of those participated in this study, suggested they would make changes in their workplace, this generally included **putting up the poster, embedding it into their health and safety training, and rearrange how contents are stored.**
- The main reasons why an employer would not change this practice were that they were **already aware of these concepts, already had a good H&S program, already had an ergonomist assess the work, or that poster they received was not applicable to their workplace.**

# **2019**

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## Evaluation of Quick Start Guideline



# Evaluation Study

Goal: To evaluate the uptake and effectiveness of Quick Start Guideline in improving MSD hazard recognition and elimination of hazards.

- Summer Student Outreach Program (MOL)
- H&S Association partnership?
- Small business Groups?



# Thank You!

- 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.

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