

**Ergonomics Program Implementation
Continuum: Reducing Musculoskeletal Disorders
& Slips, Trips, and Falls in Healthcare**



**Public Services Health
& Safety Association™**
A Health & Safety Ontario Partner

Who we are...

- We serve Ontario's public service sector
- We assist over 9,000 organizations, employing more than one million workers, to achieve safer and healthier work environments
- Our highly skilled staff are located across the province, providing ready access and timely response to all our clients

Serving a broader range of sectors...

Public Services Health & Safety Association

Community & Healthcare Sector

Education Sector

Municipal Sector

Provincial Government & Agencies

Hospitals
Nursing Services
Residential Care
Community Care
Treatment Clinics
Group Homes
Universities & Colleges
School boards
Libraries
Museums & Art Galleries
Training Centres
Municipalities
Provincial Govt / Agencies
Police, Fire & Paramedics
First Nations
Conservation Authorities
Transit

Community & Healthcare Sector

Number of Clients: 7,169 clients

Schedule 2: 28 firms, less than 1% of base

Rate Groups:

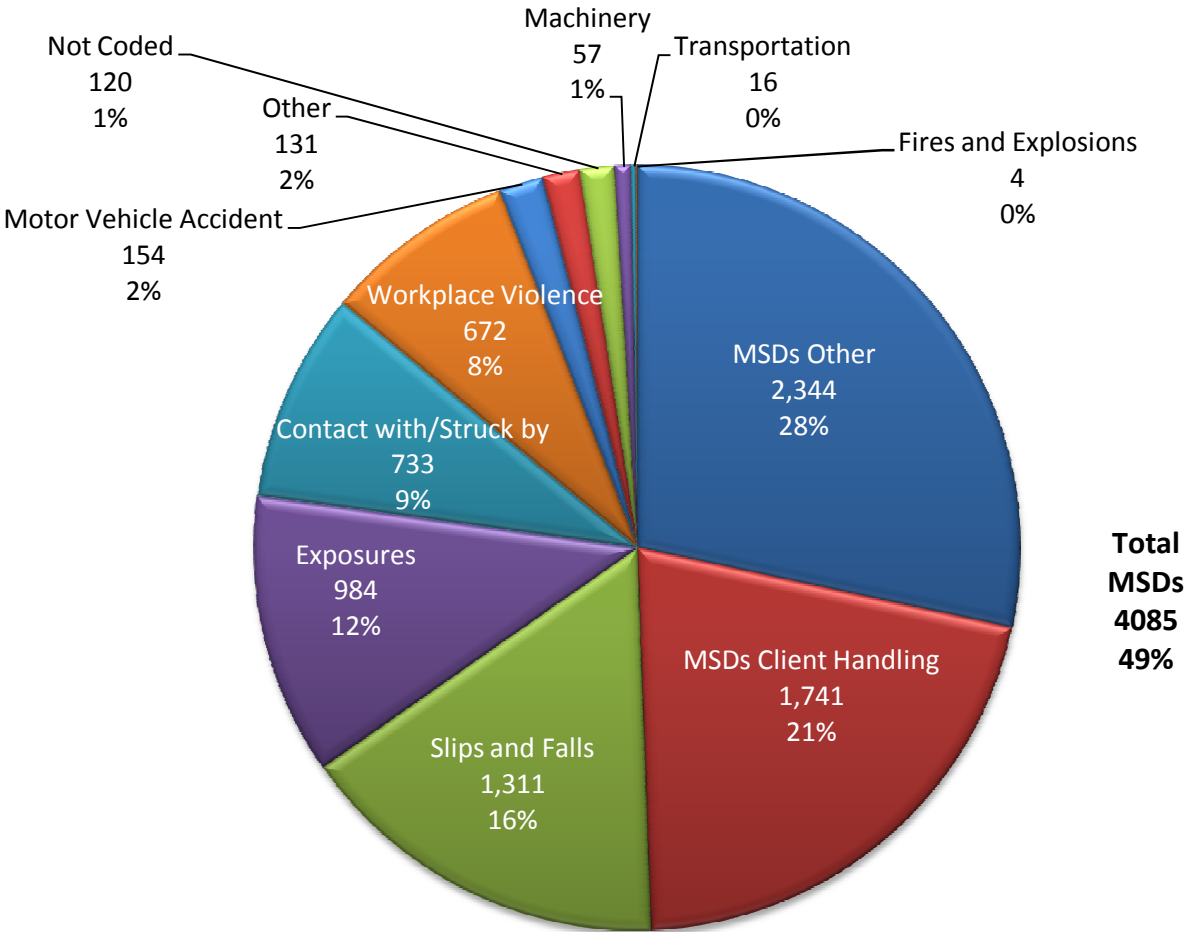
- 851: Long-term Care Homes
- 852: Residential Care Homes
- 853: Hospitals
- 857: Nursing Services
- 858: Group Homes
- 861: Treatment Clinics/Specialized Services
- 875: Professional Offices & Agencies

Lost Time Injuries: LTI rate is 2.01, 4th highest in the province
1 fatality in 2009 (motor vehicle)

Key Issues / Challenges:

- Top 3 LTI categories (2009): MSDs (50+% from client handling), slips and falls, contact with/ struck by objects
- Fast changing and fast growing sector; total number of FTEs growing at 4% annually
- Nursing is largest occupation; the profession is 95% female; workforce is growing fast
- An aging workforce, growing workloads, increasing complexity of client care, and the fast pace of change in the sector contribute to the risk of LTIs

Health Care LTIs by Injury Type 2009



Data source: WSIB EIW Claim Cost Analysis Schema, June 2010 snapshot

MSD Prevention

- Rates of injury among healthcare workers are equal to or higher than those of workers in heavy industry and other high risk occupations
- Healthcare is considered a high risk occupation for MSD
- Cost Ontario employers \$19 billion in direct and indirect costs over the last ten years

STF Prevention –Employee/Public

- Second leading cause of accidental death, after motor vehicle collisions
- Same-level falls account for 20 – 40% disabling occupational injuries in developed countries
- Falls from a height may result in more serious injury, however, STF on the same level are more common

PSHSA EPIC

- Encompasses 3 core elements
 1. Participatory Ergonomics
 2. Musculoskeletal Disorder (MSD) Prevention
 3. Slips, Trips, & Falls (STF) Prevention
 - I. Employee & Public
 - II. Client

The strength is the “participatory” approach

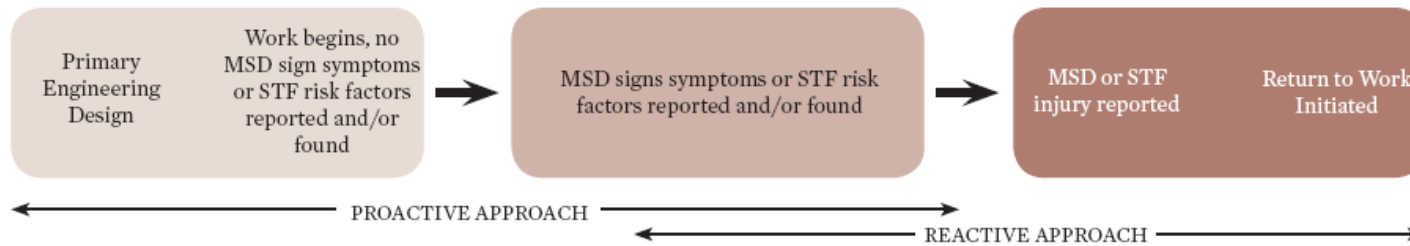
Background

- Developed by PSHSA in partnership with the Ontario Neurotrauma Foundation
- A best-practice intervention to reduce the incidence of musculoskeletal disorders and slips, trips and falls –Well Aware Program – BJC Healthcare, Missouri
- Piloted in six sites across Ontario in 2009
- Process evaluation conducted by A. Baumann of McMaster University and L. Holness of St. Michael's hospital

EPIC

- Is built on a transfer of knowledge model where the consultant imparts the knowledge to the organization for implementation, to develop self-sufficient clients (works well for hospitals and Schedule 2 firms)
- Utilizes “Implementation Science” – sustainability
- Fosters a culture of safety through the use of a participatory approach
- Continuum of ergonomic services

PSHSA EPIC



Participatory Ergonomics Approach

Facility Design Consulting

Offered at all stages of facility design and or modications to address MSD & STF hazards through direct consultation with architectural and design teams.

Physical Demands Description (PDD)

An objective overview of all essential and non-essential job tasks; detailing physical, psychosocial, and environmental demands.

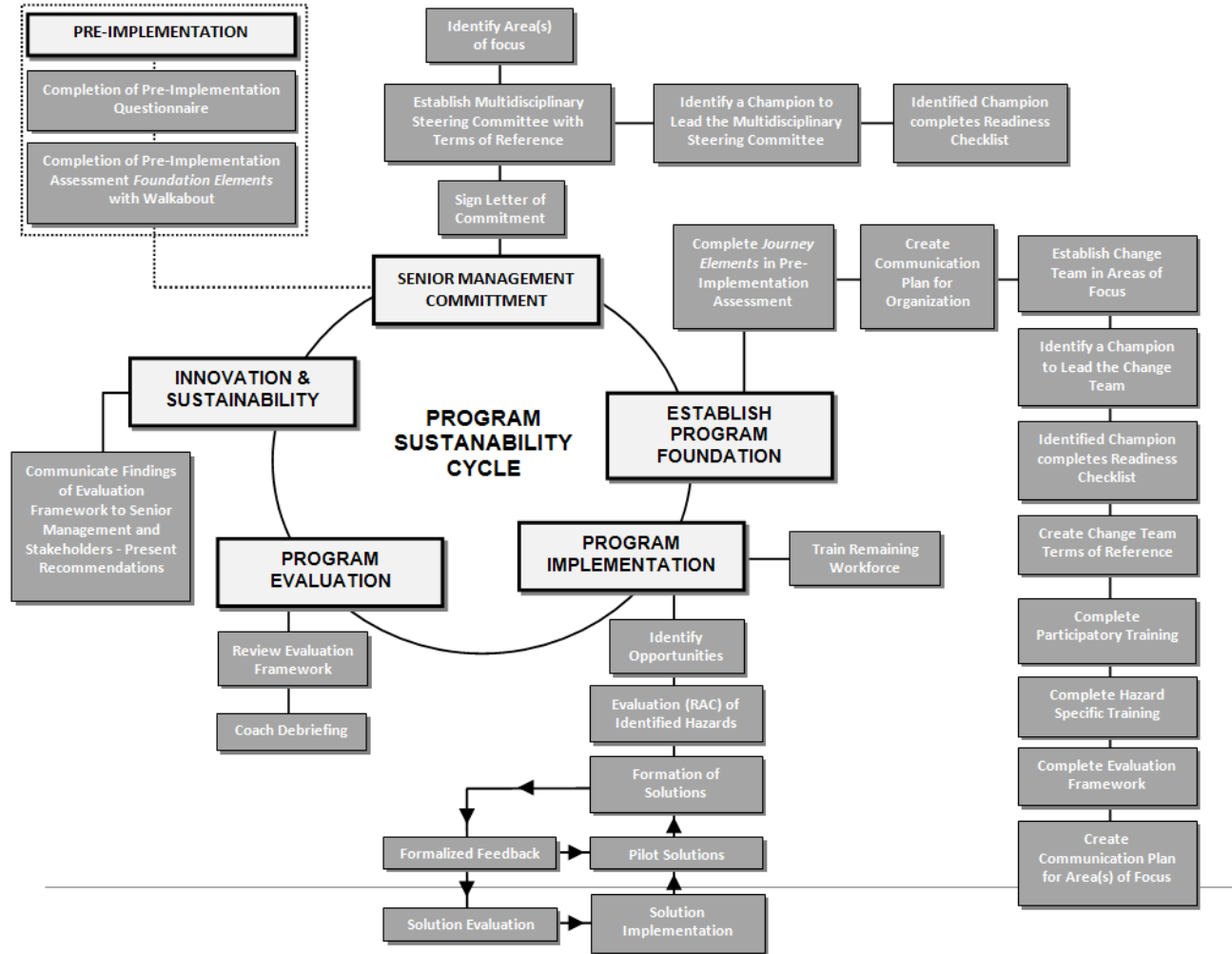
Workplace Assessment

An in-depth assessment involving the identification of quantification of MSD & STF risk factors including recommendations for control

MSD & STF Prevention Training

Prevention training intended to teach organizations how to identify, assess and control MSD & STF hazards throughout the workplace, emphasis will be placed on integrating MSD & STF prevention into the overall health and safety program.

EPIC Program Sustainability Cycle



Why EPIC?

- Training alone will not impact an LTI reduction (Nelson & Baptiste, 2006; Peled 2005; Stuck & Menzel, 2007)
- Prevention of work-related injuries in healthcare rests in implementation of ergonomic assessments and improved ergonomics (Nelson & Baptiste, 2006; Peled 2005; Stuck & Menzel, 2007)
- Hignett (2001) reported a 33% decline in manual handling tasks and 36% decline in MSD injuries over a 5-year period through an ergonomic program based on a risk assessment approach - included a focus on patient, worker, environment, and organizational factors.
- Uses a Participatory Ergonomic Approach

Why a Participatory Ergonomics Approach ?

- PE is the involvement of people in planning and controlling their own work activities, with sufficient knowledge and power to influence both processes and outcomes in order to achieve desirable goals
- IWH systematic review found that 11 of the 12 studies reported a positive effect on health outcomes associated with PE interventions (Rivilis et. al 2007)
- Successful ergonomic interventions that adopts a worker-centered approach will create a permanent reduction in risk factor exposure leading to a work environment that is safer, more effective, less stressful and ultimately in good health (McAtamney & Corlett 1992).
- Interventions that utilize a participatory approach report a positive effect on health outcomes and a means to shift organizational safety culture
- Fosters the IRS in an organization

West Park's EPIC Program



West Park at a Glance

- Three programs of care (487 beds)
 1. Rehabilitation
 2. Complex Continuing Care
 3. Long-term Care
- Annual revenue \$91 million
- Our people: 900 employees,
75 medical staff
250 volunteers



West Park at a Glance



- Accreditation Canada
 - Received 3- year award February 2011
- 2011 Employer Award Recipient:
 - Greater Toronto Area Top 100 Employers
 - Ontario Hospital Association Quality Workplace Award – Gold Level
- Designated RNAO Best Practice Spotlight Organization
 - Implemented 13 BPG's including the Healthy Workplace Best Practice Guideline

VISION

Exemplary care inspired by innovation and exceptional performance.

MISSION

We enhance lives, inspire hope and encourage independence through caring relationships, leading practices, specialized services and partnership.

VALUES

Excellence
Respect
Trust
Collaboration
Accountability



STRATEGIC PRIORITIES WEST PARK WILL:

- Lead in specialized rehabilitation, complex continuing and long-term care, driven by quality, safety and innovation
- Advance teaching, learning, research and the application of new knowledge
- Be a great place to work for staff, physicians and volunteers
- Meet evolving healthcare needs through innovative programs, expertise, facilities and technologies that promote integrated health service delivery
- Build the financial capacity to thrive.



**WEST PARK
HEALTHCARE CENTRE**

The Journey Begins...2009

- **Steering Committee**
 - Executive Sponsorship
 - Team Leader of the Change Team, Co-chair of JOHSC, Safety Coordinator, Food Services Manager, Director of Human Resources, Occupational Therapist, Manager of Occ. Health and Safety, Director of Operations and Logistics, Director of Programs
 - PSHSA Consultant provides support
 - Monthly meetings: approved area of focus; developed and approved draft terms of reference, action plan and raising of awareness of progress
- **Focus: Food Services Department:**
 - Existing Quality of Work Life Committee champions the change
 - Frontline Food Services Associates (FSA) takes the role of team lead and liaises with Steering Committee
 - Supported by manager, a supervisor, two other frontline FSAs, and PSHSA Consultant
 - Developed and implemented with support from Steering Committee
- **Collaborating to share knowledge and develop action plan:**
 - PSHSA, Steering Committee and Change Team
 - Participants receive education about participatory ergonomics and MSDs
 - Terms of Reference incorporates key performance measurements
 - Communication Plan: who, what and when to communicate
 - PSHSA conducts work observations; Change Team surveys to determine key areas of discomfort and culture of safety; recognition, assessment, control measures and evaluation of hazards; Steering Committee provides feedback and removes barriers

Discomfort Survey...

Identified areas of discomfort
4 questions
68% response rate
Engaged staff to generate solutions
Allowed for general comments

**EPIC Project
West Park Healthcare Centre Food Services Employee Survey**

Please complete the following survey and return to any member of the "Change Team" on/or before November 11, 2009. Your participation in this initiative is extremely valuable and greatly appreciated. If you have any question regarding the EPIC project or this employee survey please contact one of our "Change Team" members.

Question #1

Identify and rank the top 3 work activities or tasks that create the greatest discomfort (e.g. numbness, cramping, tingling, aching, stiffness, cramping, etc.) for you during an average work day.

1. _____
2. _____
3. _____

Question #2

Identify with a check mark (v) where you feel discomfort as well as the level of discomfort for an average work day in the chart below.

Body Part	Right Side	Left Side	Level of Discomfort		
			Severe	Moderate	Mild
Neck					
Shoulder					
Elbow/Upper Arm					
Wrist/Hand					
Thigh/Knee					
Lower Leg/Foot					
Upper/Mid Back					
Lower Back					

Question #3

What do you think are the contributing factors or reasons for your discomfort?

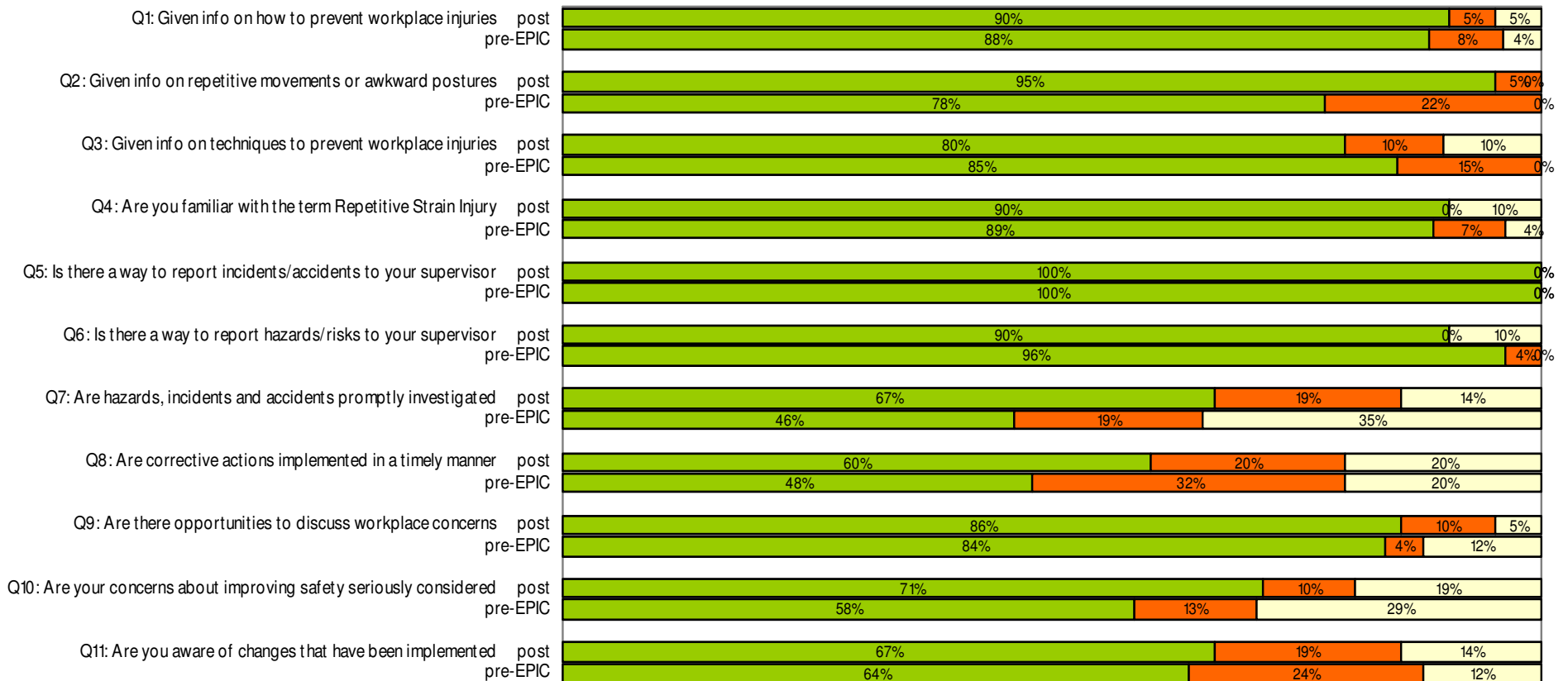
Question #4

What do you suggest could be done to the process, equipment, environment or work activities or tasks to eliminate your discomfort?

Comments:

Pre & Post Survey Results

Food Services Staff Safety Survey Results



■ YES
 ■ NO
 ■ DON'T KNOW

Achievements: Strengthening the Safety Culture

- Observations/surveys/dialogue identify dishroom as key area of focus:
 - Push/Pull creates the greatest discomfort in the lower back; contributing factors: workload, repetitive movements, posture
 - Greater awareness of prevention of MSDs required; ongoing
 - Circle back to staff regarding hazards identified, implementation of control measure and evaluation
- Build & sustain momentum; create quick wins:
 - Engage staff in the identification of solutions, evaluation and re-evaluation
 - size of wheels on carts changed; New carts purchased
 - Re-coating floor to enhance its slip resistant ability
 - Rotation of positions
 - on-site OT educates staff on proper posture and back care; annual refresher
 - posters act as 'mind your back' reminders;
- Increased commitment from Food Services staff; remind each other about hazard prevention; increased hazard awareness

The Journey Continues...2011

- Steering Committee, PSHSA Consultant and Food Services Change Team collaborate to develop a sustainability plan to:
 - Strengthen and sustain internal responsibility system
 - Anchor the new approaches in the culture of safety
 - Transfer knowledge of key principles of a participatory ergonomics approach
- Frontline Change Champions to advance a safety culture and foster creative problem solving:
 - ‘Safety is everyone’s responsibility’
- Acknowledge and celebrate successes; encourage risk taking; remove barriers

“To create an avalanche, you need to make it snow one snowflake at a time”(anonymous)

WELL MR TARZAN, I'M SORRY TO SAY
YOUR WORKPLACE HAS A LONG LIST OF
HEALTH AND SAFETY VIOLATIONS.
LET'S START WITH THAT VINE
AND THIS PLATFORM
WITH NO
RAILING.



Evaluation Findings

- “Now everyone is taking responsibility to reduce risk”
- “Developed more awareness of safety and hazards”
- “EPIC is about engagement of frontline staff and finding solutions”
- Participants were “more engaged” in advancing a COS and safety was becoming the “way of working” at the organization
- “We saved a lot of steps and learned how to do things with less wear and tear on our bodies”
- “We have a role in identifying hazards and taking initial steps to prevent incidents”
- “Tools and activities were very helpful, particularly the Physical Demands Analysis Tool, Ergonomic Assessment and Staff safety Surveys”

Summary

- EPIC supports WSIB directives – Priority Hazard (MSD, Falls); High Impact Claims; 7% reduction in LTIs; 5% reduction in all claims
- EPIC Incorporates Fidelity Features:
 - Injury prevention strategy that will impact an immediate & sustainable LTI reduction;
 - Evidenced-based and designed to meet the priority safety needs of clients;
 - Effective and efficient - transfers knowledge to the organization
 - Fosters IRS

QUESTIONS ?

COMMENTS ?