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

- MSDs Other: 2,344 (28%)
- MSDs Client Handling: 1,741 (21%)
- Slips and Falls: 1,311 (16%)
- Exposures: 984 (12%)
- Contact with/Struck by: 733 (9%)
- Workplace Violence: 672 (8%)
- Other: 131 (2%)
- Not Coded: 120 (1%)
- Motor Vehicle Accident: 154 (2%)
- Transportation: 16 (0%)
- Fires and Explosions: 4 (0%)

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
Participatory Ergonomics Approach

**Facility Design Consulting**
Offered at all stages of facility design and design modifications 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

PRE-IMPLEMENTATION
- Completion of Pre-Implementation Questionnaire
- Completion of Pre-Implementation Assessment Foundation Elements with Walkabout

SENIOR MANAGEMENT COMMITMENT
- Identify Area(s) of Focus
- Identify a Champion to Lead the Multidisciplinary Steering Committee
- Identified Champion completes Readiness Checklist

ESTABLISH PROGRAM FOUNDATION
- Create Communication Plan for Organization

PROGRAM SUSTAINABILITY CYCLE
- Communicate Findings of Evaluation Framework to Senior Management and Stakeholders - Present Recommendations
- Review Evaluation Framework
- Coach Debriefing

PROGRAM EVALUATION
- Formulated Feedback
- Finalized Evaluation

PROGRAM IMPLEMENTATION
- Identify Opportunities
- Evaluation (RAI) of Identified Hazards
- Formation of Solutions
- Solution Implementation

INNOVATION & SUSTAINABILITY
- Complete Journey Elements in Pre-Implementation Assessment
- Create Change Team in Areas of Focus

PUBLIC SERVICES HEALTH & SAFETY ASSOCIATION
A Health & Safety Ontario Partner
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
Pre & Post Survey Results

Food Services Staff Safety Survey Results

Q1: Given info on how to prevent workplace injuries
   - Pre-EPIC: 66%
   - Post-EPIC: 90%
   - Yes: 95%
   - No: 5%
   - Don't Know: 0%

Q2: Given info on repetitive movements or awkward postures
   - Pre-EPIC: 48%
   - Post-EPIC: 95%
   - Yes: 95%
   - No: 5%
   - Don't Know: 0%

Q3: Given info on techniques to prevent workplace injuries
   - Pre-EPIC: 46%
   - Post-EPIC: 85%
   - Yes: 85%
   - No: 10%
   - Don't Know: 5%

Q4: Are you familiar with the term Repetitive Strain Injury
   - Pre-EPIC: 89%
   - Post-EPIC: 69%
   - Yes: 69%
   - No: 10%
   - Don't Know: 21%

Q5: Is there a way to report incidents/accidents to your supervisor
   - Pre-EPIC: 96%
   - Post-EPIC: 100%
   - Yes: 100%
   - No: 0%
   - Don't Know: 0%

Q6: Is there a way to report hazards/risks to your supervisor
   - Pre-EPIC: 96%
   - Post-EPIC: 100%
   - Yes: 100%
   - No: 0%
   - Don't Know: 0%

Q7: Are hazards, incidents and accidents promptly investigated
   - Pre-EPIC: 46%
   - Post-EPIC: 67%
   - Yes: 67%
   - No: 19%
   - Don't Know: 14%

Q8: Are corrective actions implemented in a timely manner
   - Pre-EPIC: 44%
   - Post-EPIC: 80%
   - Yes: 80%
   - No: 20%
   - Don't Know: 0%

Q9: Are there opportunities to discuss workplace concerns
   - Pre-EPIC: 84%
   - Post-EPIC: 86%
   - Yes: 86%
   - No: 4%
   - Don't Know: 10%

Q10: Are your concerns about improving safety seriously considered
    - Pre-EPIC: 71%
    - Post-EPIC: 58%
    - Yes: 58%
    - No: 13%
    - Don't Know: 29%

Q11: Are you aware of changes that have been implemented
     - Pre-EPIC: 64%
     - Post-EPIC: 67%
     - Yes: 67%
     - No: 19%
     - Don't Know: 14%
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 is 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?