

Assessing Risk

Assessing Risk of Workplace Back Injuries

The WSIB statistics continue to show that the prevalence of low back injuries in the workplace is a concern. Large efforts have been dedicated to developing methods to assess the physical demands associated with manual material handling (MMH) tasks. Ergonomists currently evaluate MMH tasks for injury risk using one or more of the following approaches:

Approach	Description	Assessment Tool
Biomechanical	Measures forces on the low back and joint strength	NIOSH Lifting Guidelines
Work Physiology / Metabolic	Measures muscle fatigue, heart rate and oxygen consumption to evaluate energy expenditure	Watbak Garg Metabolic Equations
Psychophysical	Measures worker's perceptions of forces and fatigue	Snook MMH Tables
Epidemiology	Measures injury statistics	Mital et al, 1993

