



# **Decision makers in companies are driven by financial incentives: The Business Case**

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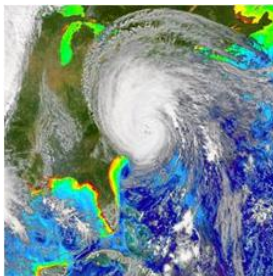
**Investing in OSH – how benefits beat the costs**

**September 17 & 18, 2014**



# Presentation Overview

- Business case: what is it?
- Review of studies on the economic effects of OSH interventions
- Tooling up OSH practitioners skills
- Guidance and tools for researchers and workplaces
- Integration of OSH and operations
- Summary and recommendations

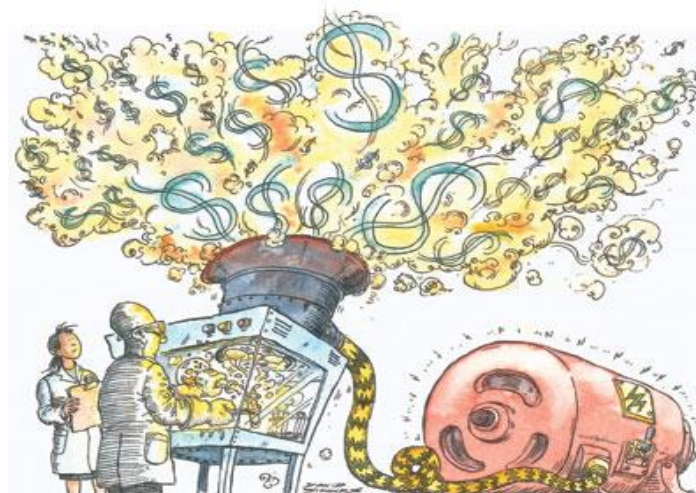


**OSH Economic Evidence  
and Business Case  
in 35 minutes**



# Business Case: What is It?

1. **Management tool** that supports planning and decision-making for an investment
2. Positions an investment decision in the **context of business objectives**
3. **Meant to generate the support** and participation needed to turn an idea for an investment/intervention into reality
4. Explains what the proposed intervention is about, how and who it will impact, each of the alternatives, the associated impacts, risks and **cost/benefit of each alternative**
5. **Provides recommendations**





# Key Features of the Business Case

- Company specific analysis
- Combines external evidence with internal intelligence
- Often about the financial bottom line but not always
- Generally prepared in advance of making an investment







# What Economic Evaluation is About

## Valuation

- Material resources
- People time
- Health

## Consideration

- Individual
- Organization
- Society

## Ultimate objective

- Maximize societal welfare





# Evidence on Economic Effects of OSH Programs (1)

## Summary of Systematic Reviews

- Several reviews synthesize evidence on economic effects of OSH
- Economic effects considered include earnings, productivity/ presenteeism, labour-market engagement, organizational performance
- Key types of programs evaluated include:
  - 1) Health promotion, disease management and wellness
  - 2) Disability management
  - 3) Ergonomics
- Synthesis studies find economic returns for enterprises are positive within a few years after implementation for most programs
- **Few full-fledged economic evaluations and quality is a concern**



## Evidence on Economic Effects of OSH Programs (2)

### Economic Impact of Health Promotion and Wellness (Lerner et al., 2013)

- Studies of health behaviours programs published 2000-2010
- **32 of 44 studies identified reporting favourable economic effects**
- Economic effects considered—health care expenses, work absences, and presenteeism
- **8 of 10 studies of sufficient quality to be included reported positive economic effects**
- 7 of 10 studies reported findings in monetary terms, 4 of which accounted for both program costs and consequences, and 2 that considered direct and indirect costs
- ***Evidence regarding economic effects is limited and inconsistent***





## Evidence on Economic Effects of OSH Programs (3)

### Mental Health Programs with Economic Evaluations (Hamberg-van Reenen et al., 2012)

- Considered programs aimed at prevention and treatment as well as return to work published between 2000-2011
- 10 studies: 4 on prevention and 6 on RTW
- All 4 prevention studies had positive returns, but only 1 RTW study
- Worksite prevention and treatment programs *might be* cost-effective
- *More high quality studies needed*







## Evidence on Economic Effects of OSH Programs (4)

### Impact of Health Promotion on Presenteeism (Cancelliere et al., 2011)

- Studies of health promotion programs published 1990-2010
- **47 studies reviewed and 14 were included**
- 4 studies considered of strong quality and 10 moderate
- **Key factors: being overweight, poor diet, lack of exercise, high stress, and poor relations with co-workers and management**
- Program components improving presenteeism: involving supervisors and managers, targeting organizational and environmental factors, screening, physical exercise during work hours, and individual tailoring.
- **10 of 14 studies showed evidence of positive effects on presenteeism**
- ***Conclusive evidence is preliminary for positive effects***





## Evidence on Economic Effects of OSH Programs (5)

### Financial impact of Nutrition and Physical Activity (van Dogen et al., 2011)

- Studies published up to 2011
- **18 studies: 13 non-randomized, 4 randomized and 1 modeling**
- Economic effects included absenteeism and medical expenses
- Calculated net benefit and return on investment from study data
- **Non-randomized studies suggest programs generate financial savings** from reduced absenteeism and medical expenses (benefit-to-cost ratios of 1.95 to 4.87)
- **According to randomized studies, programs do not generate savings**
- ***Financial returns are positive in the first years after implementation, on average***



## Evidence on Economic Effects of OSH Programs (6)

### Health Promotion and Disease Management (Pelletier, 2011)

- Studies of comprehensive health promotion and disease management programs published 2008-2010
- 8<sup>th</sup> in a series of critical reviews
- 27 new studies identified, with cumulative number amounting to 200
- New studies give further evidence of positive outcomes
- **Guarded, cautious optimism about the clinical and/or cost-effectiveness**
- Most studies are partial economic evaluations with a focus on returns to employers



## Evidence on Economic Effects of OSH Programs (7)

### OSH Business Case Synthesis (Verbeek et al., 2009)

- Studies of OSH business cases published up to 2008
- Identified 3 ex-ante and 23 ex-post business case studies
- Main benefit was avoided sick leave
- 19 studies had positive returns and 7 studies negative
- Median return was €214 per worker
- ***Need for more studies, more sound assumptions on effectiveness and inclusion of uncertainty in analyses, as well as guidelines for reporting***





## Evidence on Economic Effects of OSH Programs (8)

### Health and Safety Programs with Economic Analyses (Tompa et al., 2008 & 2010)

- Synthesized evidence on ergonomics and disability management programs published from 1990-2006
- **Identified 35 ergonomic studies and 17 disability management studies**
- **Strong evidence** in support of the financial merits of ergonomic programs in the manufacturing and warehousing sector, based on 6 studies
- **Moderate evidence** in administrative support services, health care and transportation sectors, based on 3 studies in each sector
- **Strong evidence** on the financial merits of disability management interventions in a multi-sector environment, based on 4 studies
- ***Quality of studies a concern, as well as lack of standardized reporting—emphasized need for more economic evaluation studies***



# More Evidence and Better Quality

- Few effectiveness studies included an economic analysis component
- Few randomized controlled trials (RCTs)
- Non-experimental studies generally did not control for confounders
- Many studies had short follow-ups
- Studies with economic analyses used different computational methods
- Narrow focus on workers' compensation, absenteeism, and health care expenses
- No consideration of future resource implications
- **In general, need for more comprehensive consideration of economic impacts**
- **No direct valuation of health outcomes**





# Why are Companies not Embracing the OSH Business Case?

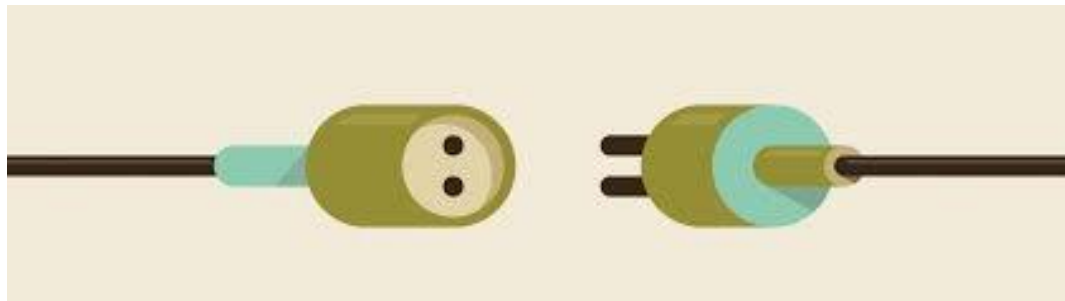
Two in-depth interview studies undertaken in Ontario over the last few years to better understand how economic evaluation information is used in OSH decision making

- Manufacturing and service sectors (20+ interviews)
- Hospital and long-term care sectors (25+ interviews)



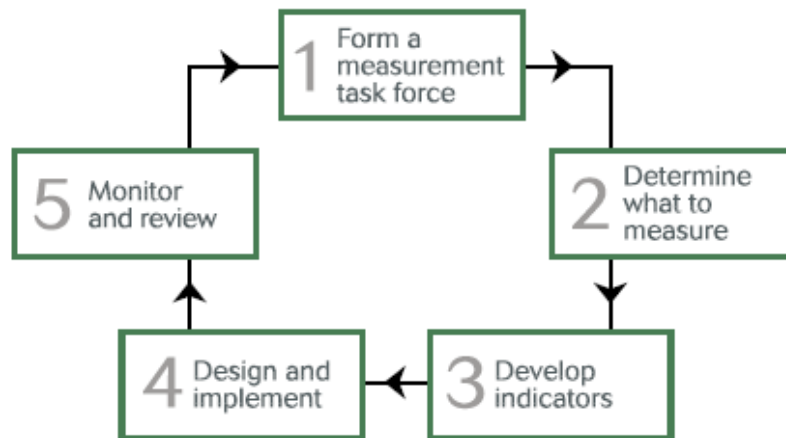
# Findings from In-depth Interviews with OSH Managers

1. Lack of economics evaluation training in OSH departments
2. Data collection systems often not in place to undertake computations
- 3. Disconnect between OHS, HR and operations**
4. Time constraints—OSH departments often under-resourced
5. Not clear where to get external information and support



# Bridging the OSH-Operations Divide

- OSH managers lack data or access to data on output, productivity and human resources
- **OSH not integrated into the management information systems**
- As a result, OSH managers have poor understanding of organizational impacts of OSH investments



**Economic Evaluation Training Workshop  
Recommendation to OSH Managers**  
**Ensure OSH impacts are incorporated  
into organizational performance  
indicators by joining or starting a  
measurement task force!**



## International Efforts by Global Reporting Initiative (GRI)

- GRI promotes a sustainable global economy by providing organizational reporting guidance
- Health and safety performance is part of “corporate sustainability reports”
- Objective is to move health and safety performance measurement from traditional lagging indicators to an integral part of an organization's external overall corporate reporting

***How many organizations currently mention OSH in their annual report?***



[www.globalreporting.org](http://www.globalreporting.org)







# Developing Tools for Workplace Decision-Making

- Started with a systematic literature review of workplace OSH interventions with economic evaluations
- Developed a methods text for OSH researchers
- Continued with software for workplace parties
  - Ontario manufacturing and service sectors
  - BC health care
  - Manitoba multi-sector with training videos
- Licensed to France
- Created issue briefing for EPRI
- Developed full-day training workshops for OSH managers
- Planning a portfolio of case studies with business case guidance and supporting app





# Summary and Recommendations

- Growing body of literature on the economic effects of OSH programs
- Key types of interventions evaluated: health promotion, disease management and wellness; disability management; and ergonomics
- Between 65-80% of studies found positive returns for the organization
- Quality issues need to be addressed in next generation of literature
- ***More investment needed in tools and training for OSH managers to ensure better uptake of evidence***



**Message to OSH  
Intervention Researchers**  
***Invite an economist to  
your next program  
evaluation planning  
meeting!***



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