



# Building a case for SB-specific OHS research and intervention priorities in Québec : a work in progress

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# Presentation outline

Québec OHS system

Litterature overview

Building a case :

- Measure
- Describe
- Interventions in SBs

Proposal

Conclusion



# Québec OHS system

Canada (2016) : population 36 M

Québec (2016) : population 8 M, active labor force 4,5 M

business locations counts 255 989

**95 % small businesses (SBs) (<50) 33, 1 % of If**

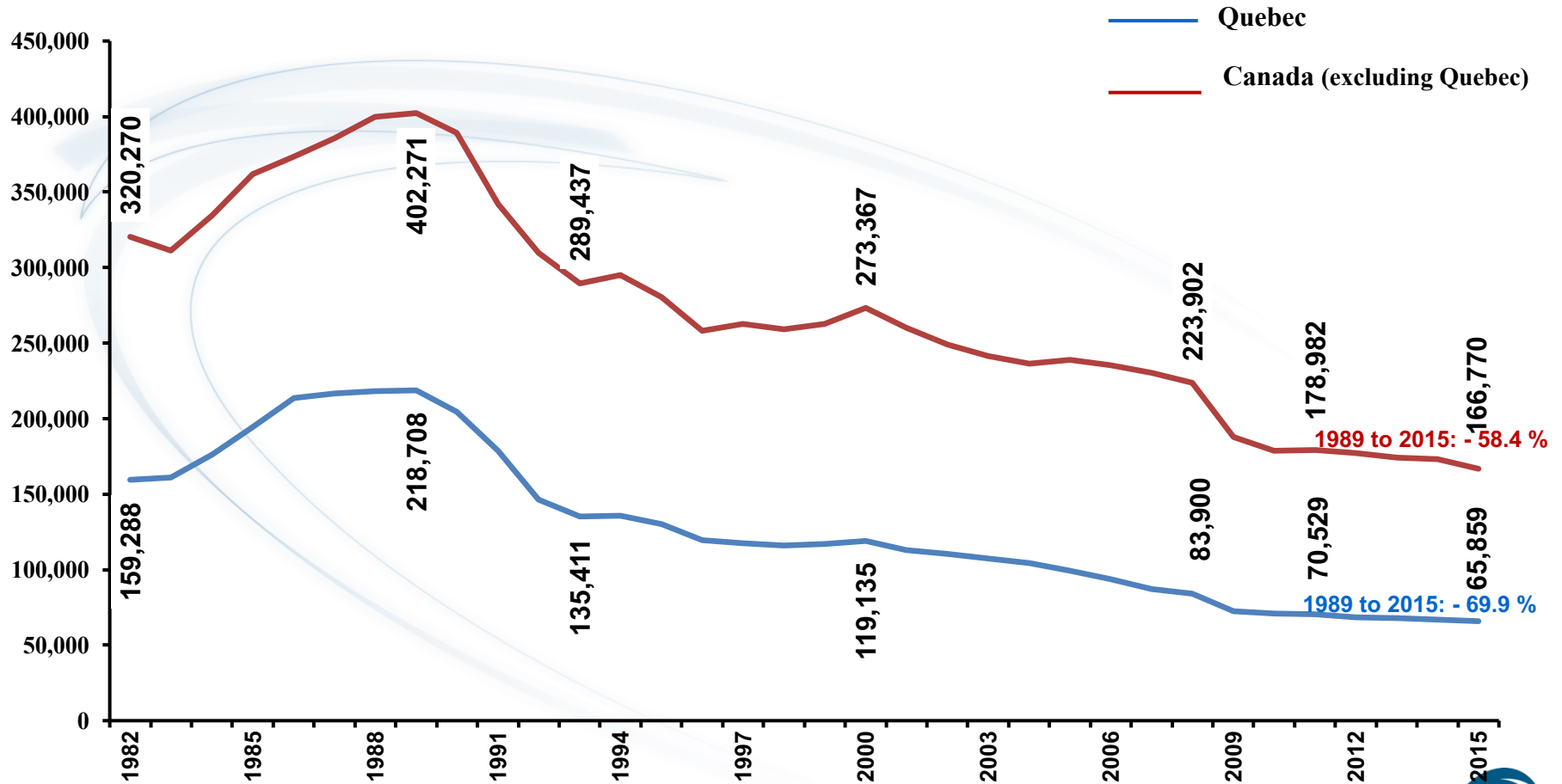
Work, Health, OHS : provincial jurisdiction

Québec OHS System :

- **OHS Legislation:**
  - Prevention → LSST (RLRQ, chapitre S-2.1)(1979);
  - Compensation and RTW → LATMP (RLRQ, chapitre A-3.001)(1985)
- **CNESST** (Québec's Commission for standards, equity and health and safety in the workplace): labor standards, inspection, funding, compensation, rehabilitation, RTW
- **Bi-partite system** (B of G: employer associations and unions ): priorities, planning, \$
- **Partnership** with public health actors, paritary sector associations, safety mutuals
- **IRSST** the largest OHS research center in Canada
  - **partner of NIOSH**, WHO collaborator, member Sheffield and PEROSH groups
  - private non-profit organization
  - tri-partite scientific committee: orientations, funding

# OHS in Québec: Evolution from 1982 to 2015

## Number of accepted injuries with time-loss compensation, Québec and Canada (excluding Québec), 1982-2015



Source : Association of Workers' Compensation Boards of Canada (AWCBC)

# OHS System: Consultation and Mandate

## Consultation with stakeholders, OHS partners, researchers

Early 2017, preparation for IRSST 2018-2022 research agenda

- Employers and union representatives from all industrial sectors
  - Team workshops with OHS researchers and practitioners
- **OHS management in SBs a major topic of concern**
- OHS culture, management, role of owner-manager
  - Lack of internal resources, difficult access to external services
  - New labor force issues: aging, immigrant and temporary workers, labor force shortages
- **IRSST Mandate: Status report and research agenda proposal for SBs**
- Build a case
  - Convince stakeholders about priority and pertinence of SBs agenda
  - Propose agenda for improved prevention and RTW interventions

## IRSST Team Collaboration :

- Labs
  - Chemical and Biological Hazard Prevention
  - Mechanical and Physical Risk Prevention
  - **Sustainable Prevention and Work Environment**
  - **Rehabilitation and Return to Work**
- Approaches: multidisciplinary, multi-method, fieldwork, participation of stakeholders, employers and workers

# OHS research on SBs : Literature overview

## 1. Measure risk in SBs: evaluate, compare > intervention priorities, effects

Frequency, severity

## 2. Describe determinants of OHS : explain risk in SBs > orientations, targets

Internal : workers, employers, perceptions, work conditions, isolation, resources, insecurity

External: SE factors, resources in OHS system, networks

## 3. Intervene on risk factors in SBs > facilitate and support change : prevention, RTW

**What ?** Priorities, targets???

number of SBs, diversity, dispersion, general and specific needs

**How?** approaches, programs, strategies costs, duration and complexity of interventions, evaluation of results

**Who?** Resources, social and technical expertise, budget, partnerships

**SBs present enduring, unresolved challenges to OHS systems for both prevention and return to work**

# Building a case





# Measure

## Invisibility of SBs in Québec OHS compensation and RTW data

- Number of employees not accounted for in compensation claims, data
- Long-held conception of similar work conditions and OHS profile regardless of number of employees
- Risk: rates vs numbers: **small N of accidents yet high rate in SBs?**
- **Obstacle to establishing priorities and appreciating effect of OHS interventions on risk**

## OHS practitioners: qualitative info (*Champoux, Brun, 2010*):

- **Risk level in SBs is high, due to faulty control of risks**
- Workers are more exposed than in larger work settings
- Improvements in OHS conditions take more time
- **Difficult to transfer practical knowledge into strategic planning**

# Measure: Quantitative data on OHS in Québec SB's

- Secondary analysis of OHS compensation data (2004-2006) :

**Estimate number of employees** : employer annual aggregate remuneration and average annual remuneration for industrial sectors, and income replacement data (*Duguay Busque Boucher 2012*)

- Frequency-gravity indicators (FGI) , gravity indicators:
  - **Estimated standardized ratio FGI SB / MLB : 1,58 (average), significant sector variations**
  - **Estimated Average number of lost days: 67% higher in SB relative to MLB**

- Formal CNESST investigations of serious and fatal accidents 2006-2008

N 116; 40% all fatalities 2006-2008 (*Champoux unpublished data*)

- **62% of fatalities in SBs VS 34% labor force in SBs**
- High frequency of serious, fatal accidents in SBs

- EQCOTESST Québec survey on work and employment conditions, occupational health and safety (*Champoux Prudhomme 2017*)

- **N small, accidents rare, difficult to quantify risk by business size**
- No global association between business size and accidents frequency or perception of health status
- **MSD frequency, business size effect** in association with:  
gender, age, education, prof cat, industrial sector, duration of employment, job insecurity, part-time work, unionisation, physical constraints such as load handling, efforts, standing posture, and cumulative physical constraints

# Describe : Internal risk factors

Exposure / Work  
conditions

SBs workforce:  
multiple factors  
of vulnerability

Economic  
constraints and  
capacities in SBs

OHS  
management



# Describe : Internal risk factors

## 1. Exposure/Work conditions

- EQCOTESST Québec survey *Secondary analyses (Champoux, Prud'homme 2017)*

**Objective:** Compare SB (<50) to MB (51-199), LB (>200)

### Significant differences between SB and MB, LB workers

- **Physical constraints of work** affecting OHS in SBs (proportions exposed, frequency of exposure)
  - Handling of heavy loads, standing position, strenuous work using tools, machinery or equipment, vibration and noise levels
- **Cumulation** of high intensity physical demands of work, especially back and upper limbs
- **Industrial sectors for SBs:** services, retail, restauration and accommodation, arts, primary industries, public services, construction
- Work related health inequalities known to vary mostly with physical work constraints, which mask effect of socio-economic variables such as business size
  
- **Exposure to shown/probable human carcinogens** (solar radiation, night work, diesel exhaust fumes, wood dust, ionizing radiation, etc.) found in industrial sectors and occupations significantly associated to SBs (*Labrèche et al. 2017*)

# Describe: internal risk factors

## 2. SBs workforce: multiple factors of vulnerability

**Significant differences between SB and MB, LB workers** (EQCOTESST Québec survey Secondary analyses)

- **Worker characteristics** : young, little education and experience, manual and mixed jobs, skilled and non-skilled manual work
- **Employment characteristics** : low seniority, insecurity, low pay, no union, no breaks, rare paid holidays or sick days

**Immigrant workers** (Côté 2014; Prudhomme et al. 2017; Gravel et al. 2013)

- **Increasing numbers** , both metropolitan areas and regions (temporary workers)
- **Difficult integration into workforce**
  - Linguistic , cultural obstacles
  - Unskilled workers or over-qualified, unprepared:
  - Overqualified workers 43% among migrants vs 29% among natives
- **Over-represented in SBs**
  - Ethnic enterprises, or employed via agencies
- **Specific risks**: Hazardous work conditions, no training, difficult communication
- **Uninformed about rights** and services, insecure jobs, weak joblink
- **No measure of risk level available** Qualitative info from OHS practitioners, social services

# Describe: internal risk factors

## 3. Economic constraints and capacities in SBs *(Champoux Brun 2010)*

### Employers' and employees' largely shared views:

- Legislated OHS objectives, individual and collective responsibility
- Risk perception, prevention, compliance
- Individual, informal approach to risk management : expertise and judgment of employee
  
- Financial constraints, competition, irregularity of contracts, insecurity
- Preoccupation with cost reduction
- Survival of the company and jobs
- Stress on flexibility, adaptation to insecurity of contracts, frequent production changes

### Practitioners opinion:

- OHS problems rarely linked to breakdowns or unexpected errors
- Decision-making : short-term criteria and benefits
- Operation at limit of standards and good practices
- Conformity to norms: improvisation, circumvention, objections, perception of negative impact of productivity

### ➤ **Conflicting objectives:**

- **Safety values**, compliance to norms
- Flexible approach, risk perception, reducing costs, **keeping business alive**

# Describe: internal risk factors

## 4. OHS management

- **Distinctive representations, practices and difficulties in SBs** (*Champoux Brun 2003*)

Main obstacles to OHS improvement : Costs, insecurity, priority to production, lack of training  
Employers in charge of OHS management, risk identification and control, generally satisfied

- **Prevention activities, more frequent if also benefit production:**

Risk identification, inspection, maintenance

**OHS management activities rare** : OHS committee, training, risk audit, accident investigation

**Formal participatory structures** : absent 95%

- **Return to work management:** (*Côté 2014; Côté et al. 2017*)

Mostly documented in LBs (*Durand et al. 2017*)

SBs: Small N jobs, **limited possibility** rotation, alternative jobs, light work

**Limited resources** for risk evaluation, adaptation work stations, training, communication

**Limited obligation:** Legally protected joblink 1 year in SBs (vs 2 years >20)

- **Significant OHS management differences between SBs and MBs, LBs, and within SBs**

# Describe: external risk factors

**“Upstream” perspective on OHS in SBs** : look beyond attributes of the workplace and those who work there (*Eakin Champoux MacEachen 2010; Champoux Baril Beauvais Brun 2013; Champoux Brun 2015; Côté 2014; Côté et al 2017*)

- **Socio-economic factors** economic system, globalisation, industrial structure, subcontracting, unionization
- **OHS structures and processes** (regulations, policies, services, resources, professional practices)
  - **Invisibility of SBs, little influence on OHS system**, underrepresented in interventions
  - **Conceptions and strategies designed for large businesses, homogeneous unionized workforce**
  - **Policy of self-reliance** and reduced services for work milieux
  - **Cost control**, service and inspection constraints
  - **Limited institutional resources**
  - **Separate structures, disconnect** :Inspection and Rehabilitation-RTW services, CNESST, O. Health, Sector Ass., Safety Mutuals
  - **Conceptions and codes of practice** for first line OHS practitioners
- **Misalignment with resources, work conditions and social relations of SBs**
- **Effect on the management of ill health and injury in SBs, for both prevention and RTW**
- **Limited efficacy in interventions**



# Prevention Interventions in SBs

## Global Objectives:

Global approach : values, legislation, institutions, information, persuasion, training  
Principles of responsibility, self-regulation, financial incentives

## OHS management and exposure / work conditions objectives :

**Participatory approach:** worker participation OHS committee, safety reps

**Risk prevention approach:** Legislation, regulations, standards, financial incentives, inspection, public and private expertise

## Obstacles:

- OHS Participation: voluntary
  - Social context in SBS: low skills, insecurity, turnover, immigrant workers, subcontracting, agencies
  - Tripartite work relations: ambiguity on responsibility
  - Work conditions, exposure: tied to financial capacity
  - Majority SBs sector rate vs personalized rate
  - **Limited internal capacities, limited efficacy, low sustainability, slow progress**
  
  - Costly professional services, consultants
  - Limited institutional OHS resources for interventions
  - Large number of SBs, important needs
  - SBs underrepresented in inspections
  - Delay of preliminary inspections, demise of periodic control visits
  - Inspections, control visits following serious accidents, complaints, narrow mandate
  - Irregular control of conformity to norms, integration of migrant and temporary workers
  - **Limited external capacities, limited efficacy, low sustainability, slow progress**
- **SBs workers: same legal OHS rights, but different access**

# Rehabilitation and RTW interventions in SBs

## Objectives:

- Rehabilitation and safe and sustainable RTW
- Maintain employability, autonomy of worker
- Retain skills, experience in businesses
- Reduce premium costs to businesses and compensation costs for the OHS system

## Approach:

- Rehabilitation: compensation, health care, front line services
- RTW: legally protected joblink, expert services, progressive return, adapted work

## Obstacles:

- Low qualifications, limited adaptability of workforce
- Few available positions, short contracts, changing production and insecurity
- **Limited OHS management resources**

- RTW resources, services
- RTW more difficult for SBs workers (*Baril Martin Lapointe Massicotte 1994*)

- 1 year legally protected joblink in SBs : **compensation all injuries: 105 days average**  
**rehabilitation cases (9%): 598 days average (2012-2014)**
- Problematic access for agency workers

- **Business size : risk factor for unemployment and chronicity**

➤ **SBs workers: same legal RTW right but different access**

# IRSST SBs research proposal 2018-2022

## Summary:

- Risk level is high in SBs
  - SBs are different from MBs and LBs, have specific needs
  - General approaches : low efficacy, can result in differential access to rights for SBs workers
- Obstacles to prevention and RTW –rehabilitation, same internal and external factors :
- Work conditions
  - Workforce characteristics
  - Economic constraints
  - OHS management
  - Ill-adapted institutional approaches

## **SBs present enduring, unresolved challenges to OHS systems for both prevention and return to work**

### PROPOSAL

- Maintain global persuasion approaches
  - Measure, describe: maintain efforts, multiple sources
  - Interventions: Focus on SBs specific characteristics and needs
- **Focus on workplace interventions targeting SBs**
- **Re-direct institutional intervention resources to SBs, SBs-specific services**

# IRSST SBs research proposal 2018-2022

## ➤ **SB-specific workplace interventions : combine prevention and rehabilitation-RTW objectives**

- Target SBs-specific sector, occupations, workforce with documented high-risk factors
- Target SBs workers at risk of prolonged disability
  
- Develop pilot-projects in SBS
- Multimodal interventions for targeted risks
- Early interventions by occupational health teams
- Collaboration: Prevention and RTW teams, Occupational health teams, paritary sector associations, inspectors, other social partners

## ➤ Advantages for SBs managers, workers;

- Early interventions, follow-ups: increased prevention and RTW efficacy
- Adapted services, counsel and expertise : cost control
- Sustainable development and prevention, consider all determinants of activity
- Protection of human resources, skills

## ➤ Advantages for OHS personnel:

- Maximize efficiency
- Sustainable actions
- Improve equal access to right and protections

# Conclusion

## **Building a case for SBs-specific agenda:**

- Pertinence and priority criteria
- Convince decision makers and stakeholders
- Propose and test an approach

## **Cumulative results:**

- Combination of quantitative and qualitative data
- A step-by-step, patchwork process
- Consultation with shareholders and partners
- Agreement with international research on SBs

➤ **A work in progress!!!**

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