



The Social and Economic Consequences of Workplace Injury and Illness

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The Presentation

❧ Methodology

❧ Summary of findings from case studies on leptospirosis



Reasons for the Research

- ❧ **Wider impacts** of workplace injury/illness have **not been examined**
- ❧ **NZ lacks good, complete information** on full impact of workplace injury/illness on society
- ❧ This is an **exploratory study** that has tried **to fill in these gaps**
- ❧ **Information** on impacts of workplace injury/illness in society **could reduce burden of society**
- ❧ **Consequences** include even those that are **hard (and sometimes impossible) to measure** (e.g. ability to enjoy life, estranged relationships, etc.)



Study Objectives

- ❧ **To explore the social and economic consequences** of workplace injury and illness for injured and ill employees, their families, the workplace, and the community
- ❧ **To identify key characteristics** that determine social consequences
- ❧ **To inform investment in health and safety** in the workplace
- ❧ **To identify the ‘hidden’ costs** of occupational injury and illness.

Study Objectives (Cont.)

- ❧ **To inform future research projects**
- ❧ **To inform illness and injury prevention activities** (by the Government, employers, and employees), e.g. cost-benefit framework
- ❧ **To provide input into** the development, implementation, and evaluation of **prevention/intervention programmes**

Research Questions

- ❧ What are **the main social consequences** of workplace illness and injury and **how can they be identified and avoided?**
- ❧ What are **the key characteristics** that shape the social consequences and economic costs? (e.g. gender, ethnicity, age, family status, injury/illness type, location, etc.)



Research Questions (Cont.)

- ❧ What is the **nature and extent of the financial costs** (for example loss of income, medical costs) of workplace illness and injury and **how can these be valued in economic and social terms?**
- ❧ What are the **links between social consequences and economic costs** of workplace illness and injury?

Case Study Approach

The case study approach involves triangulating data from a range of sources by,

- ❧ **Analysis of OSH and ACC data and existing research reports**
- ❧ **Economic costs** from respondents
- ❧ Analysis of “stakeholder” **interviews with specialists** in relevant fields
- ❧ **Semi-structured interviews** with the injured or ill employee, their family, work mates, and, if appropriate, OSH and health professionals who were involved



Case Study Approach (Cont.)

- ❧ **Illustrates the multiplicity of economic costs** borne by the community (the depth and breadth of costs).
- ❧ **Shows the human perspective** as part of comprehensive insight into consequences
- ❧ **Can be used as a learning process for communicating the extent of costs** and implications of unsafe work practices

Research Process

☞ Data sources

- **Literature review**
- **Semi-structured interviews** with 15 injured/ill persons, families, employers, involved medical and govt. personnel
- **OSH and ACC files**

☞ Selection criteria

- **Age** – range of ages were included in the study

Research Process (Cont.)

- ***Family status*** – employees who had economic dependants within the family unit, and those who did not
- ***Socio-economic status*** – including occupation, income, and education, both those in low and those in the high status
- ***Gender*** – males and females
- ***Nature of workplace accident or conditions/environment*** – persons with occupational illnesses and work-related injuries



Research Process (Cont.)

- ***Work status following accident*** – employees who had been unable to return to the same occupation/job/employer, and those who were able to
- ***Time of accident/NODs notification/exposure*** – was between 1993 and 2001.



Research Process (Cont.)

🌀 Workshops

- To develop analytical framework
- To analyse data
- To develop and analyse emerging themes

🌀 The **Expert Group**

🌀 **Report writing and consultation**

🌀 **Dissemination** - on website, relevant stakeholders, research community, OSH organisations, different fora, wider media

Research Process (Cont.)

It was a participatory study with participants being consulted with and kept informed throughout



Risks and Limitations

- ❧ Limitation of using case study approach is the **small sample size** (but depth rather than ability to generalise)
- ❧ **Limitations to self-reporting**
- ❧ Risk of **data being too ‘tortured’** (data qualitatively analysed and required in-depth, iterative process of analysis)
- ❧ Team consisted of **mainly female members** (only 2 out of the 10 members were male) - could have influenced information being provided



Key Findings

- 🌀 **Visibility vs invisibility** of the condition
(injury vs illness)
- 🌀 Relationship between **cause and consequences**
- 🌀 **Over-arching themes**
- 🌀 **Support**



Key Findings (Cont.)

- ❧ **Relatively minor failures** lead to big accidents
- ❧ **Commonalties between cases but also individual and situational factors** in the accidents
- ❧ Accidents have **huge consequences and they ripple out**
- ❧ Some costs and consequences are **non-recoverable, on-going, and forever.**

The Consequences of Occupationally Acquired Leptospirosis

- ❧ Subset of main OSH/ACC study
- ❧ Undertaken as part of MASSRE
- ❧ Objectives and methodology were the same as main study
 - Interviews only with ill worker and OHN
- ❧ Focused on social, health, psychological and economic consequences of Leptospirosis

Data collection

- ❧ Semi structured interviews with 9 men and 1 woman: Taranaki, Canterbury, BOP, Hawkes Bay
- ❧ Farmers, meat workers, truck drivers
- ❧ Lasted between 45 minutes and 3 hours
- ❧ OSH and ACC files

FINDINGS: Health Effects

I spent the night shivering, I had five blankets on me and I was as cold as an iceblock. My teeth were chattering. Half an hour later I was sweating, like you could see it dripping off me... oh my God, I don't want to go back there, it was horrible

FINDINGS: Workplace

- ❧ Time off work between one week and four months
- ❧ Need for light duties generally not recognised by employers
- ❧ Improvements to avoid future exposure occurred in two workplaces.

FINDINGS: Social effects

- ❧ Fatigue had huge impact on participants and their families
- ❧ Effect possibly increased by lack of understanding of symptoms
- ❧ Shock to families of acute symptoms

- ❧ *It was very hard on my wife because I was totally useless at home. I would sit in my chair or go to bed. Basically when I went home, I couldn't do much. She had to do everything for the kids and still go to work.*
- ❧ *For a long time he didn't feel up to working on the farm. At one stage I didn't think he was even going to get off the sofa. (Wife of participant.)*
- ❧ *Sometimes I would get as far as the pig pen and that was it, and she'd have to spend time going and feeding the animals.*

- ❧ *I was a mess for about three days. I couldn't eat and the phone drove me crazy...it was the worst experience of my life. (Wife of participant)*
- ❧ *The second time he went in, he was really, really ill... and I thought 'if you get through this and you are going to have to dialyse, my life is going to be hell and so is yours because you won't cope'...I could envisage what would be ahead. (Wife of participant)*
- ❧ *My wife was worried that I was going to die...I even had some of my friends from here come to see me down in Wellington as they didn't think I was coming back, as we didn't really know what it was at that stage.*

FINDINGS: Psychological Consequences

- ❧ Depression due to physical effects of leptin and lifestyle changes

FINDINGS: Economic Effects

Personal Cost

☞ Greatest cost was drop in income

- Ranged between \$80 and \$7800

☞ GP costs

- Ranged between \$60 and \$900

☞ Prescriptions

- Between \$60 and \$500

Illness experiences exacerbated by a number of variables

- ❧ Participants found it difficult to gauge the physical symptoms of leptospirosis
- ❧ Participants had little control over when they returned to work
- ❧ Employers poorly understand the health and safety systems required to manage occupationally acquired leptospirosis
- ❧ Employers actions impact on the experiences of workers

Illness experiences exacerbated by a number of variables

- ❧ Employers appear unaware of the need to provide light duties for employees upon return to work
- ❧ There is a lack of knowledge of Leptospirosis in some areas of the medical community
- ❧ Most participants knew little about the compensation system