Occupational Disease Surveillance
“Until we have a well developed and robust national view of injury - including occupational illness and disease - then we will be well off the mark in terms of effective prevention strategies. Simply stated, limited resources require intelligent targeting, and intelligent targeting must be driven by quality information.”

Hon Margaret Wilson, CPHR Occupational Health Symposium 2004
Occupational Disease Surveillance System

1. Collection of cases of the disease of interest over time in a standardized way over time
2. Integration of the notified data into a central database
3. Analysis of the data to identify high risk populations, risk factors, trends over time etc.
4. Dissemination of the findings to relevant stakeholders to inform policy and practice
5. Further data collection and analysis to monitor the effectiveness of interventions resulting from the surveillance data
6. Interpretation of the findings (taking into account data gaps and other limitations)

Sim, 2004
Even advanced established market economies have fragmented reporting systems:

- In most countries, a range of data sources is used to estimate the burden of occupational disease, such as death records, hospital records, workers’ compensation claims, cancer registries, workplace records, surveys and sentinel reports (Leigh et al, 1999; Driscoll et al, 2005).
- While there is agreement that enhanced data collection for occupational diseases should be a priority, it is generally agreed that no single data source, or even solution, has been identified that can provide an accurate picture of the extent of the problem in any country.
Barriers to effective surveillance

- Lack of expertise to manage and administer surveillance systems
- Inadequate hazard/exposure assessment
- Data ownership and access issues
- Knowledge gaps
- Reporting
- Primary purpose of data collection
- Standardisation, accuracy and integrity and work related fields
NOHSAC Recommendations

- Establish an expert group
- Establish an independent unit for the surveillance of occupational disease and injury
- Establish an independent agency for the surveillance of occupational disease and injury
- Establish an integrated concept driven occupational disease and injury surveillance system (ODISSY) within the independent agency
Concept Driven Surveillance

- The surveillance system should be concept-driven rather than data-driven, i.e. the unit should decide what data is required and then ensure that the appropriate data is collected, rather than simply collating data that is collected by various agencies for other purposes.

- An effective surveillance system will utilise data from multiple sources and agencies (i.e. mortality, cancer registrations, hospital admissions, NODS registrations, ACC claims. There must be a commitment from all other government agencies.

- Characteristics of the system would include high sensitivity, specificity, representativeness, timeliness, simplicity, flexibility, and acceptability.
The overriding goal of any workplace health and safety system is to prevent occupational diseases and injuries. Much of the discussion around health and safety focuses on outcomes rather than current exposures in the workplace.

Ongoing exposure surveillance systems are needed to enable preventive action earlier than is usually possible when monitoring occupational disease and injury.

This is particularly true when there is a long latency between exposure and the occurrence of the resulting disorder, as is the case with many work-related diseases such as occupational cancer.
Current Exposure Data

• The lack of current data for occupational exposure means we cannot:
  – develop accurate risk assessments for occupational diseases
  – effectively target and support prevention activities or develop effective preventive policies
  – evaluate the effect or efficiency of interventions or OH&S management
  – identify trends in OH&S and changes over the years
  – identify awareness of and compliance with legal requirements