傷害預防及安全文化推廣
Injury Prevention and Safety Culture Promotion

職業安全健康局
Occupational Safety & Health Council

CIC Seminar on Handling Construction Work Injury Cases and Site Safety

"Work Safely in Construction Sites – A Preventive Approach"

Dr. Winson Yeung
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Occupational Safety and Health Council

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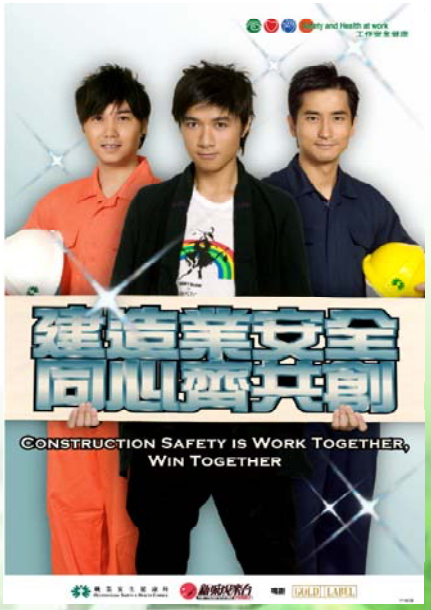
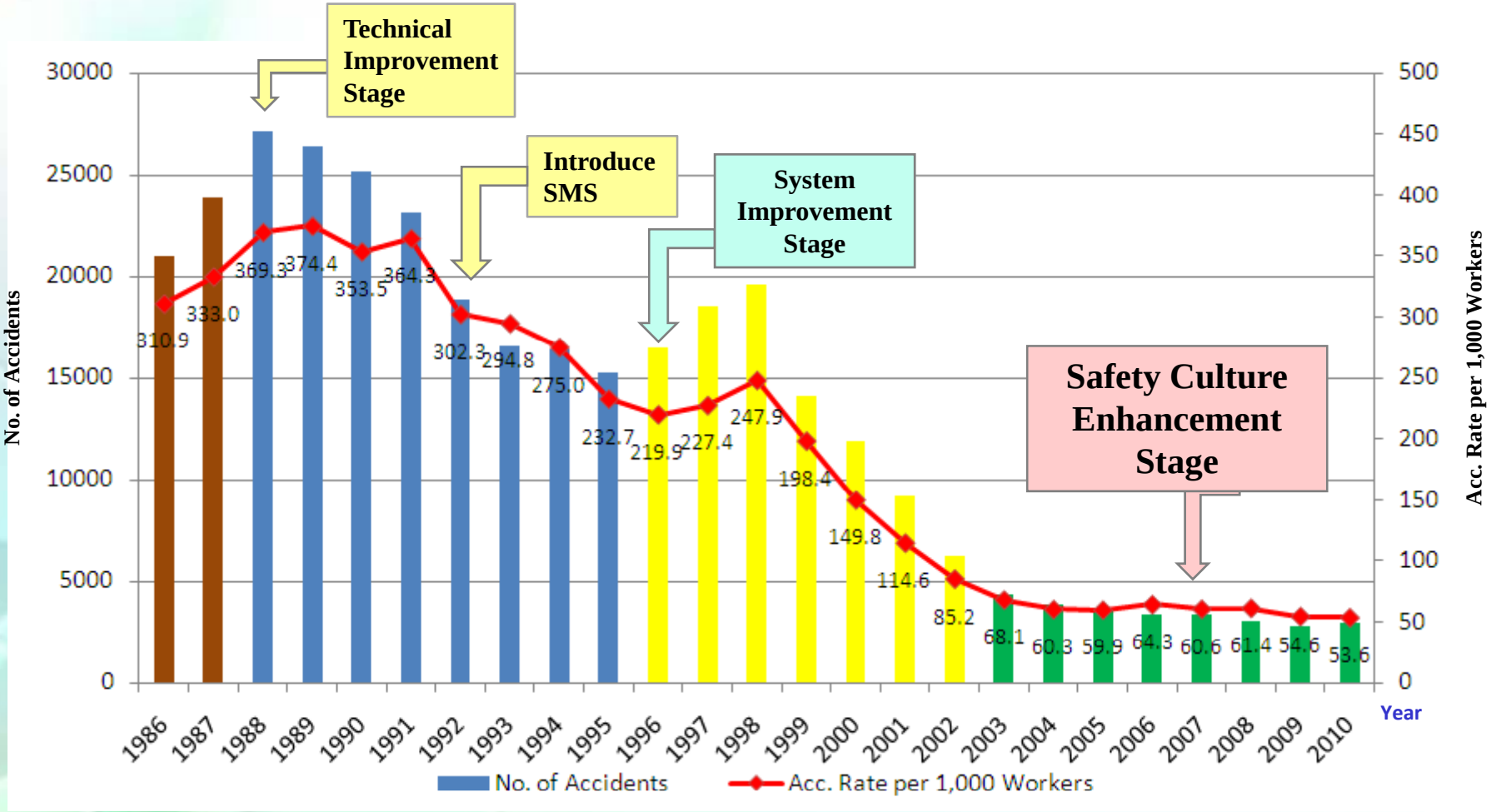
Occupational Safety and Health Council

Statutory body for promoting safety and health at work and sustaining the valuable workforce of Hong Kong



Journey to Enhance Workplace Safety Standard in Hong Kong – Safety Culture Enhancement Stage

Accident Statistics for Construction Industry In Hong Kong



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Current Problems

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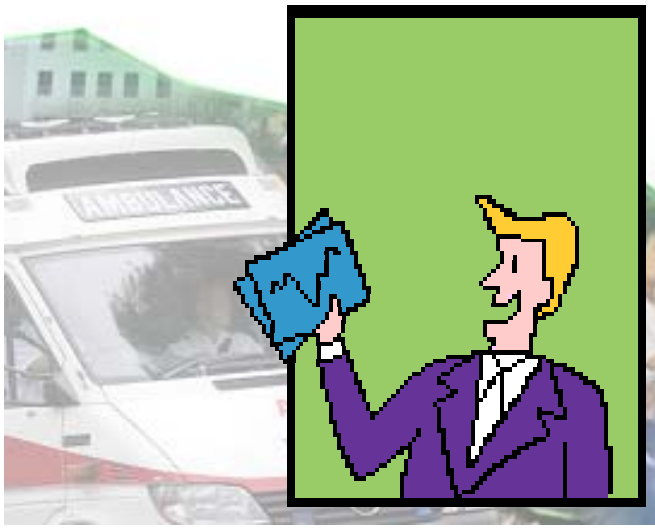
No central database for injuries

No linkage of injury data

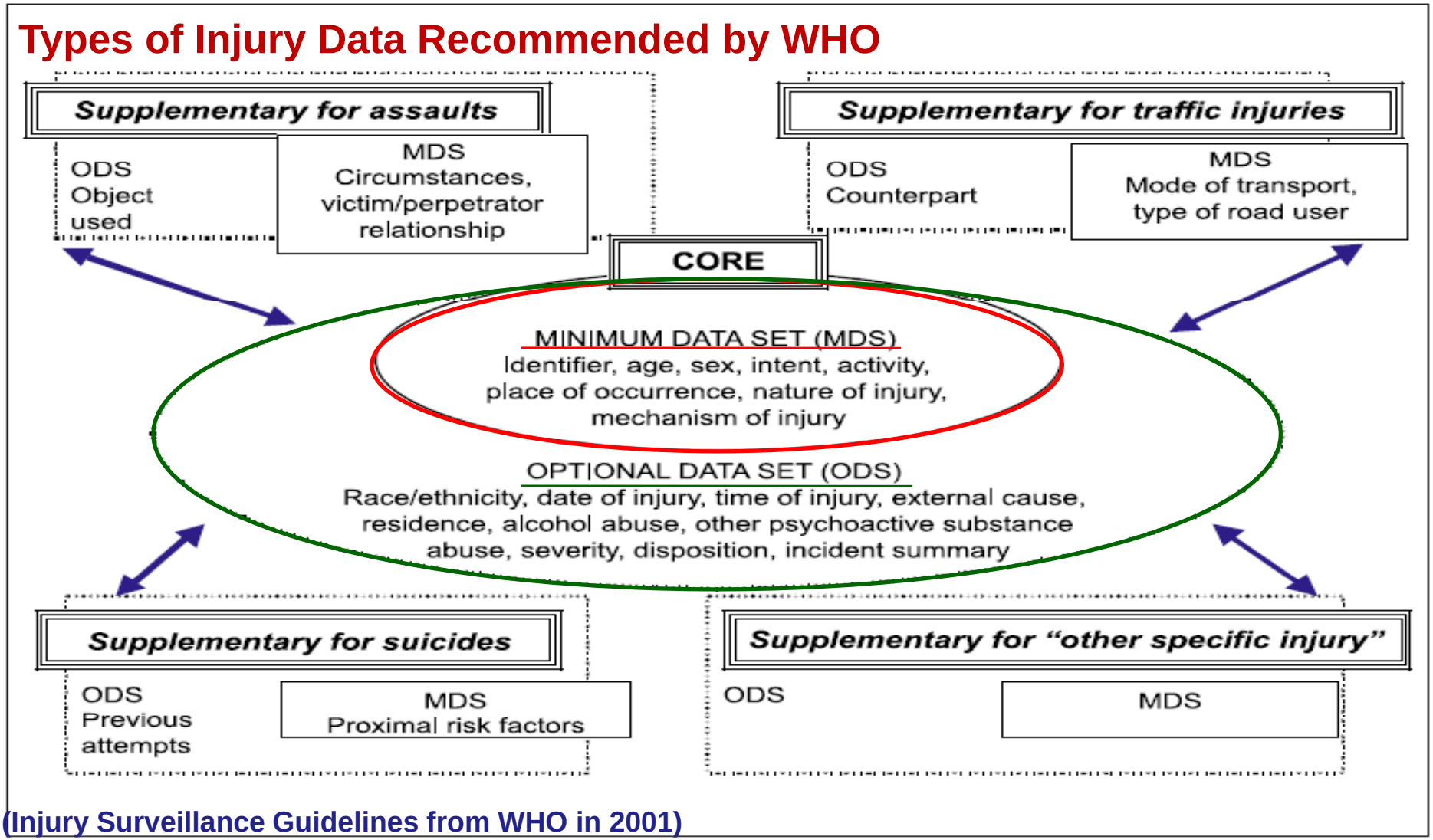
Not intended for intervention – no intent, place, activities

Cannot link intervention and outcome



User Requirements (Define Data Needs)

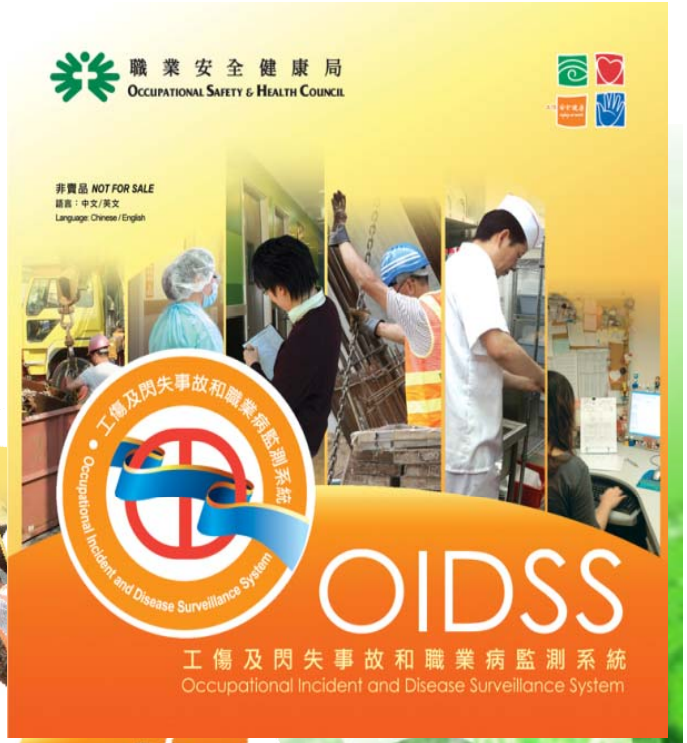
Types of Injury Data Recommended by WHO



(Injury Surveillance Guidelines from WHO in 2001)

Workplace Injury Surveillance System

- The Occupational incident and disease surveillance system (OIDSS) developed by the Occupational Safety and Health Council have three major functions – **record accident and incident cases** (including near miss) happened in workplaces, assist the **completion of forms for notification** of accidents and occupational diseases to Labour Department, and **generate statistics and charts** for workplace incident and disease surveillance



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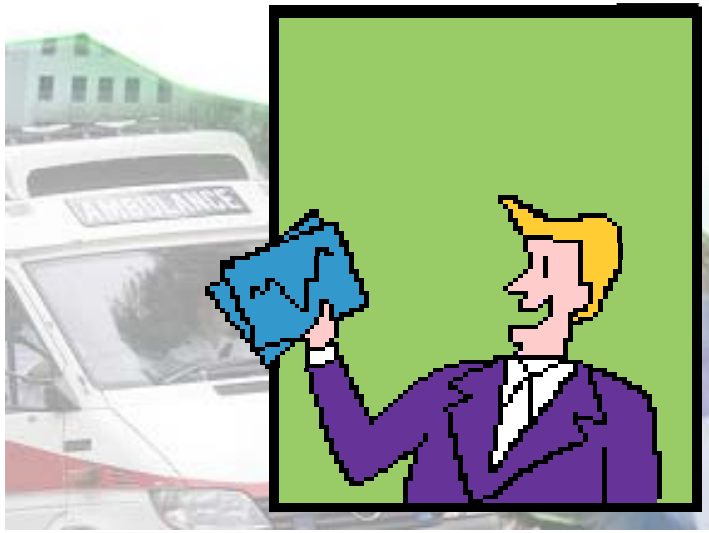
Target Users

For individual workplace and organization

- Construction companies, property management companies, schools, residential care homes, etc.



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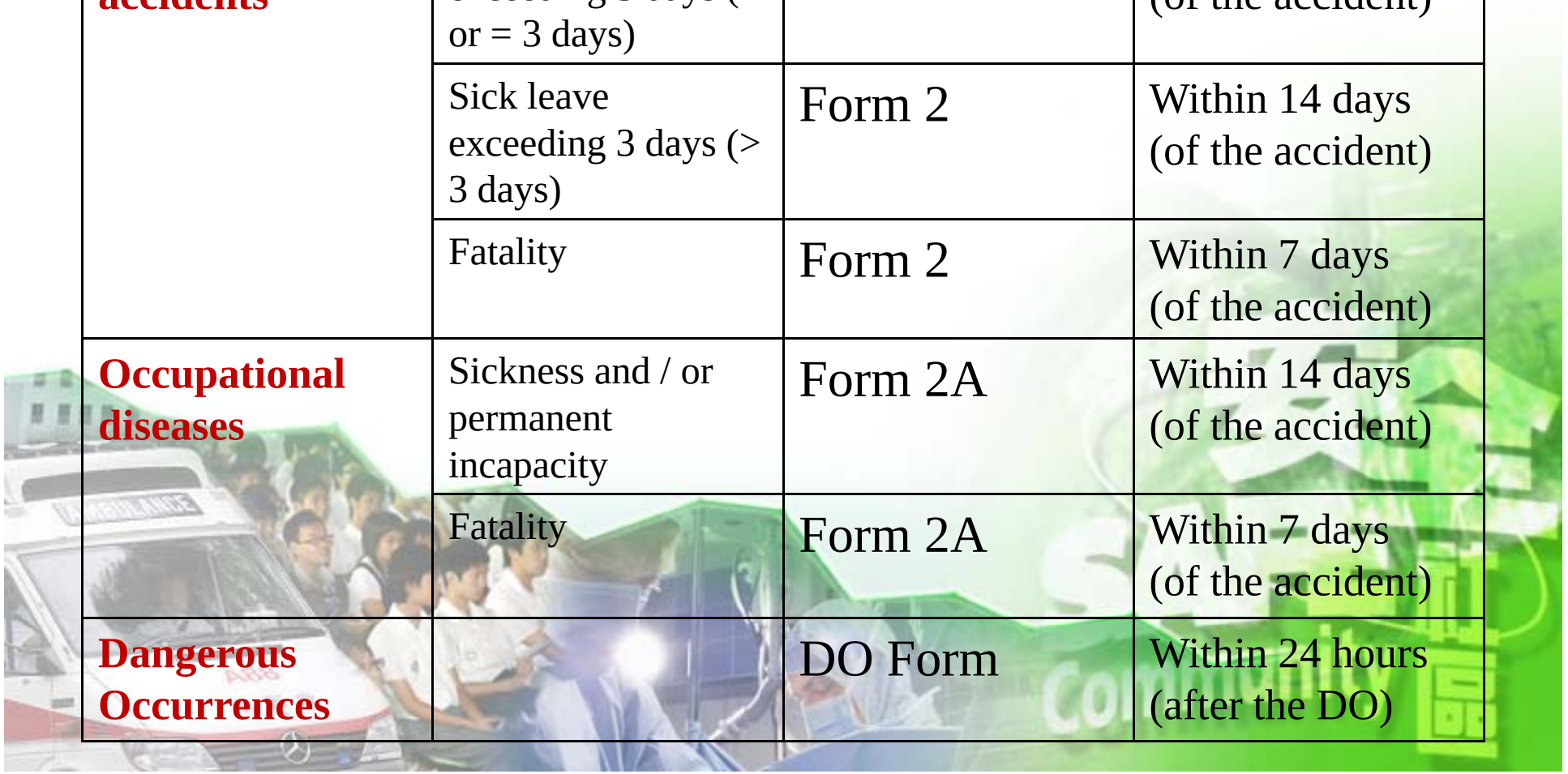
Accidents reportable under the Employees' Compensation Ordinance (Written)

Nature of Cases	Result of Accident and Incident	Statutory Form to be Used	Reporting Period
Work-related accidents	Sick leave not exceeding 3 days (< or = 3 days)	Form 2B	Within 14 days (of the accident)
	Sick leave exceeding 3 days (> 3 days)	Form 2	Within 14 days (of the accident)
	Fatality	Form 2	Within 7 days (of the accident)
Occupational diseases	Sickness and / or permanent incapacity	Form 2A	Within 14 days (of the accident)
	Fatality	Form 2A	Within 7 days (of the accident)
Dangerous Occurrences		DO Form	Within 24 hours (after the DO)



傷亡率 Injury Rate

1.呈報的職業傷亡數字 (No. of reportable occupational injuries)

2.死亡數字 (No. of fatalities)

3.平均僱用人數 (Average no. of persons employed)

4.每一千名工人計的傷亡率 $\frac{\text{(呈報的職業傷亡數字 X 1,000)}}{\text{每年平均受僱人數}}$

(Injury rate per 1,000 workers)

5.每一千名工人計的致命率 $\frac{\text{(死亡數字 X 1,000)}}{\text{每年平均受僱人數}}$

(Fatality rate per 1,000 workers)

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缺勤意外嚴重率 Accident Severity rate

每一十萬工時計的缺勤意外嚴重率的計算方法為：

$$\frac{\text{損失工作日數字}}{\text{每年平均工作時數}} \times 100{,}000$$

Accident severity rate per 100,000 man-hours worked is calculated by:

$$\frac{\text{Number of lost days due to injuries}}{\text{Average number of man-hours worked each year}} \times 100{,}000$$

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An Example of Accident Record

Case: While working on a working platform, an employee twisted his ankle and fell 3 m onto the ground

- Section J - ***Nature of injury***: *Sprain & strain (box 14);*
- Section J - ***Part of body injured***: *Ankle (box 55);*
- Section K - ***Type of accident***: *Fall of person from 3 m (box 04);*
- Section L - ***Agents involved:*** *Ladder or working at height (box 05);*
- In the **description of the agents** indicated:
  - A platform constructed of a plank which measured 5 m long by 2 m wide and by 5 mm thick

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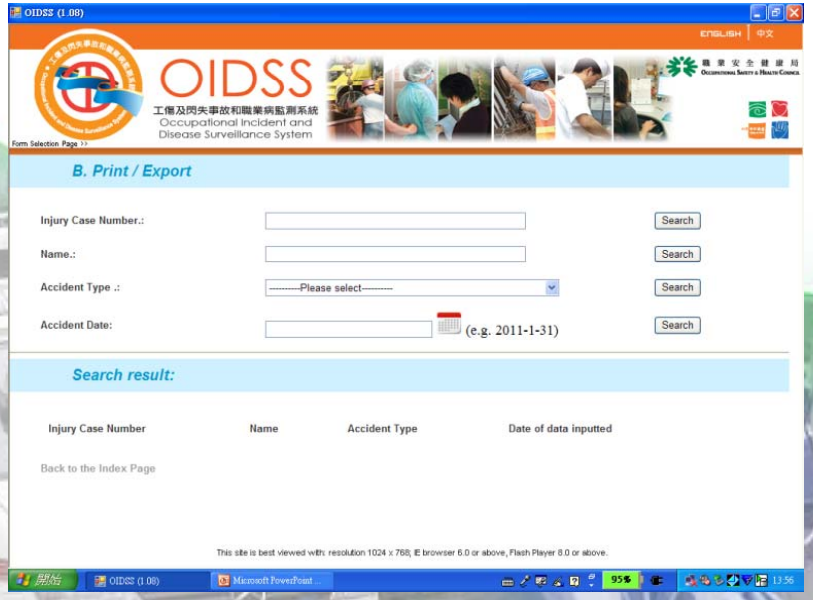
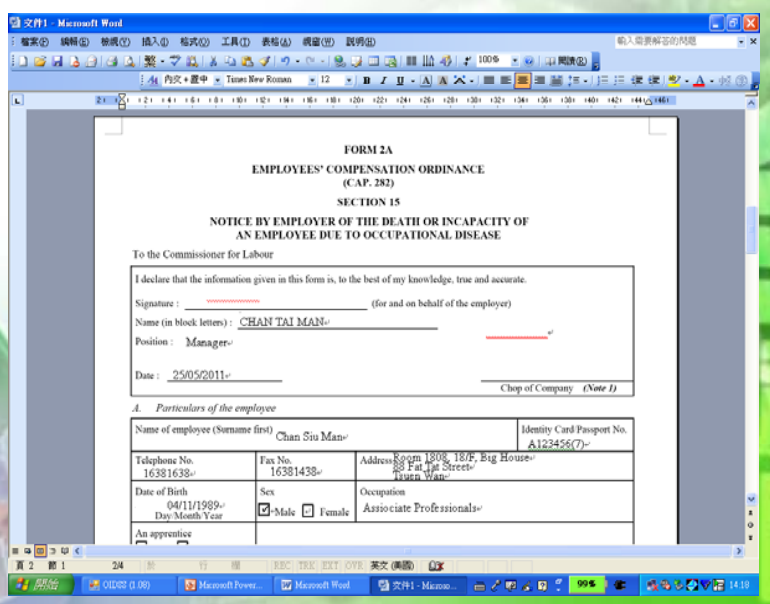
Print Forms for Notification

Print the hardcopies of following forms for submission to Labour Department:

- Form 2
- Form 2A
- Form 2B
- DO Form





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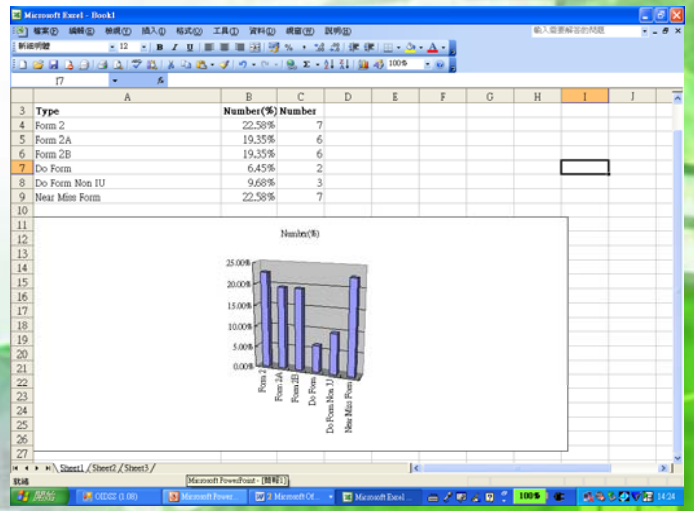
Generate Charts (Form 2, Form 2A & Form 2B Statistics)

- Number of Entered Cases
- Form 2 Statistics:
  - Age of employee
  - Occupation of employee
  - Total number of sick leave days of employee
  - Place of accident
  - Nature of injury of employee
  - Type of Accident
- Form 2A Statistics:
  - Age of employee
  - Occupation of employee
  - Type of disease
  - Result caused by disease
  - Total number of sick leave days of employee
- Form 2B Statistics:
  - Number of days of temporary incapacity



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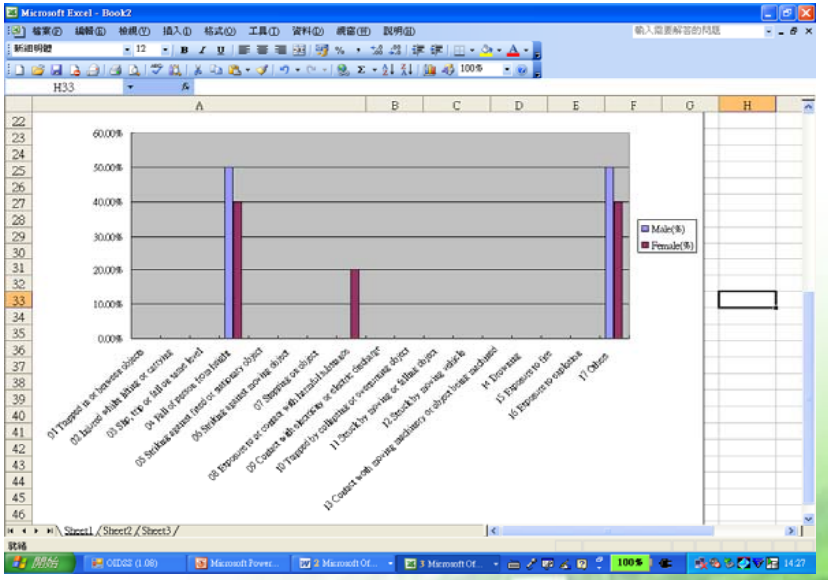
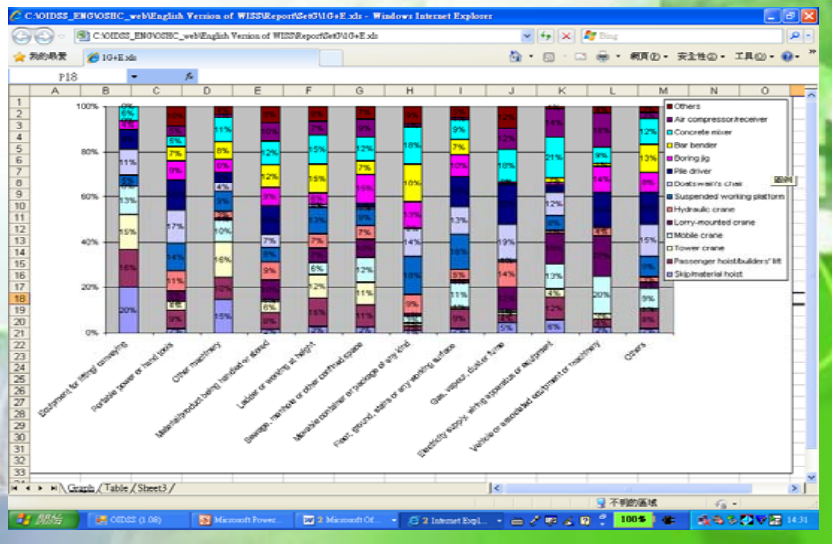
Generate Charts (DO Form, Near Miss & Cross Tabulation)

- DO Form Statistics:
  - Type of dangerous occurrence
- Near Miss Statistics:
  - Place of accident
  - Type of accident
  - Severity of potential accidents
- Cross Tabulation





Linkage of Injury Surveillance to Injury Prevention Program

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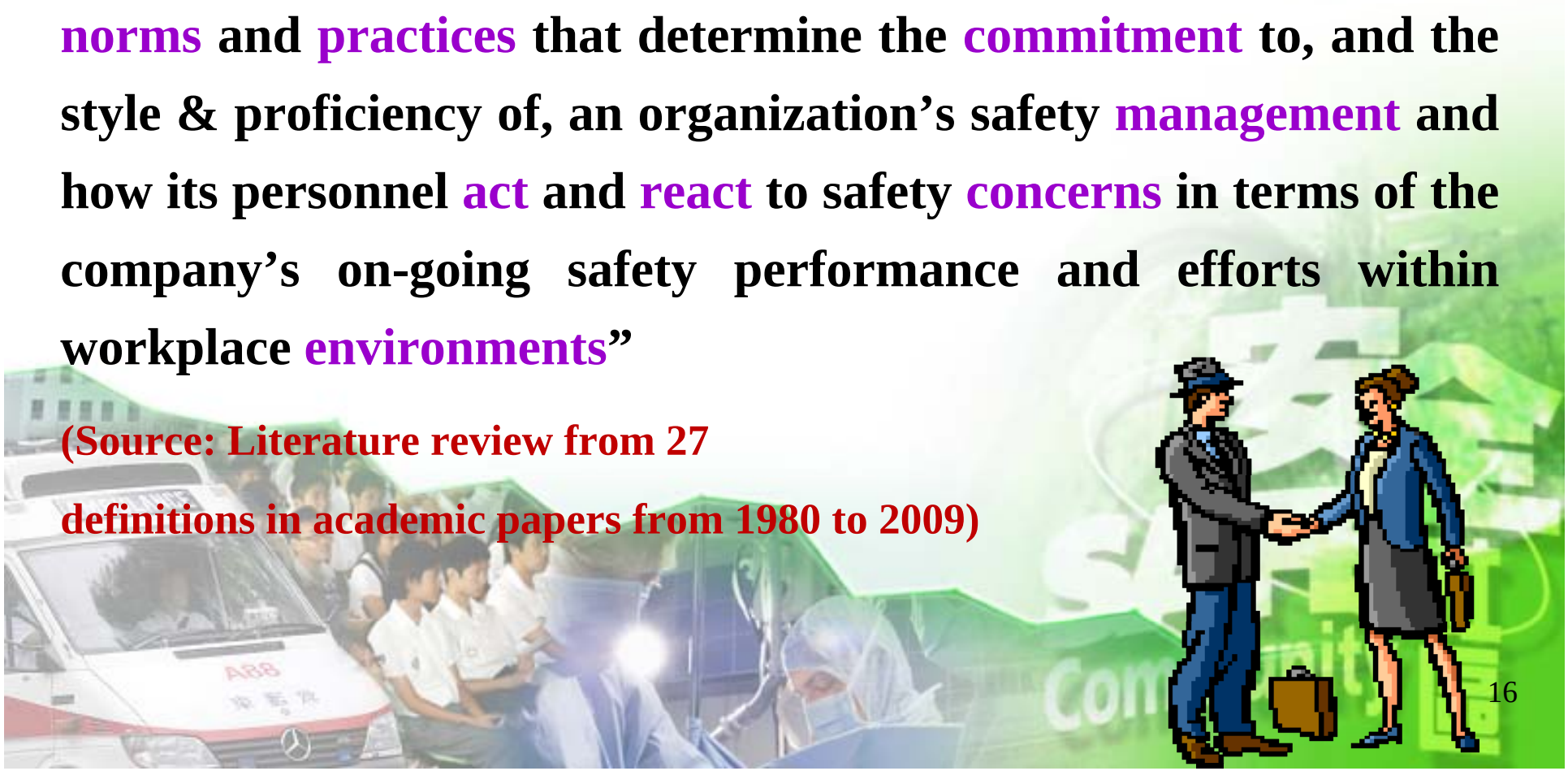
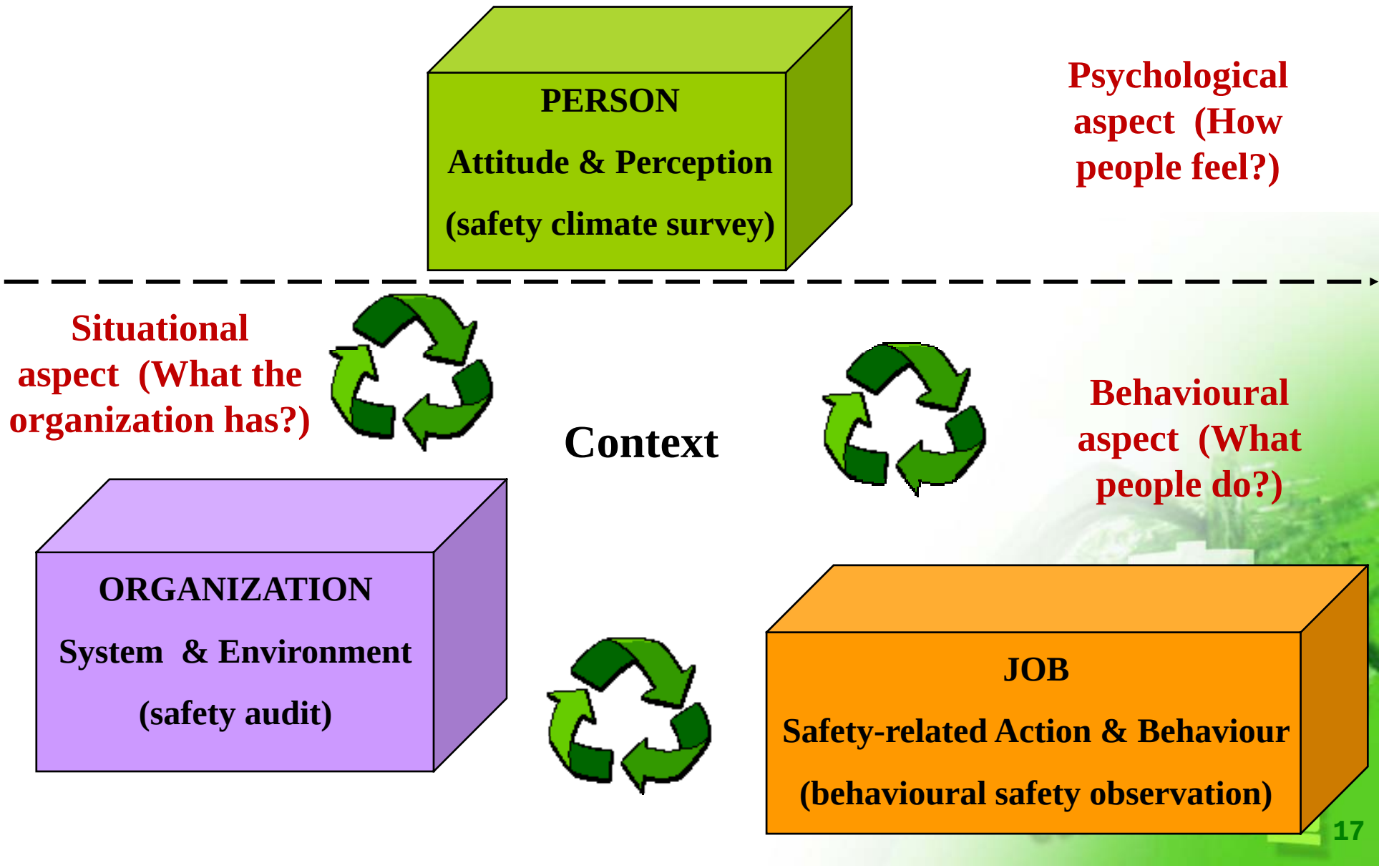
What is Safety Culture?

"The product and assembly of individual and shared group beliefs, attitudes, values, perceptions, pattern of behavioral norms and practices that determine the commitment to, and the style & proficiency of, an organization's safety management and how its personnel act and react to safety concerns in terms of the company's on-going safety performance and efforts within workplace environments"

(Source: Literature review from 27 definitions in academic papers from 1980 to 2009)



Conceptual Model of Safety Culture Enhancement



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Safety Climate Survey in Construction Industry

- **Council conducted safety climate survey for construction industry in 2000 using the HSE model**

- **Target groups in the survey are managers, supervisors and frontline employees**

- **641 participants from 14 construction sites joined the survey in Year 2000**

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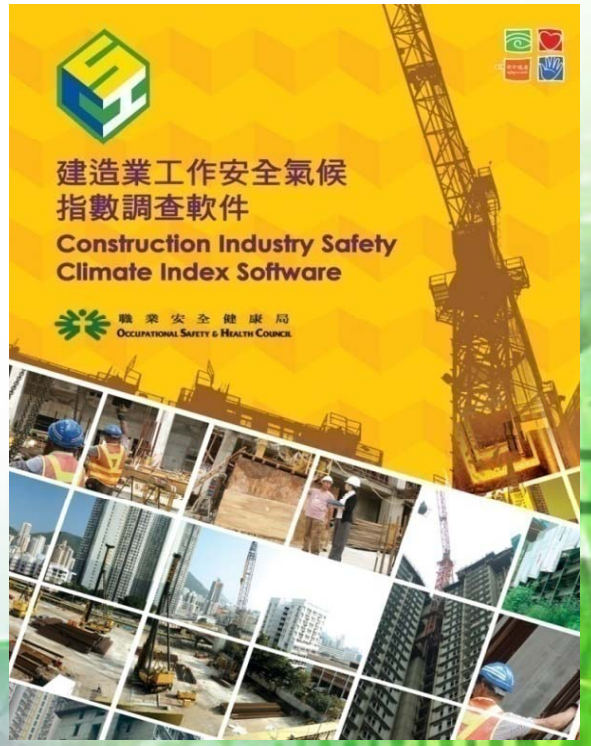
Tools for Safety Climate Index Measurement

- **OSHC and Tsinghua University jointly develop the "Construction Industry Safety Culture Index Software"**

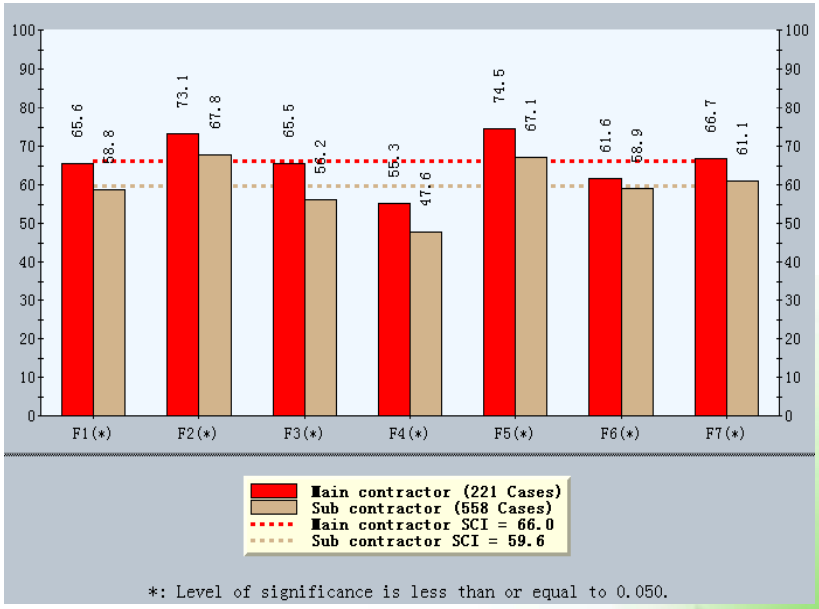
2006

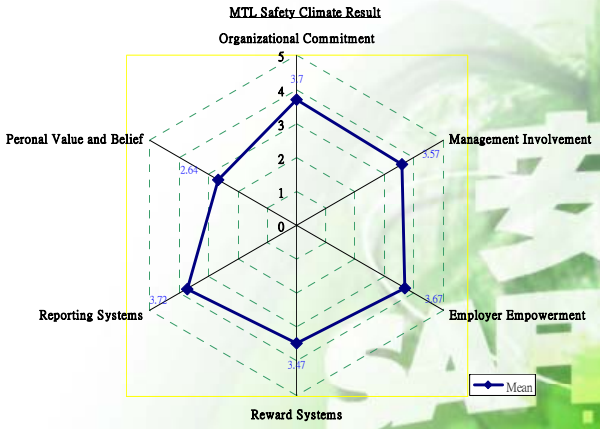


2008

Latest Version on 7 Contributing Factors of SCI Survey

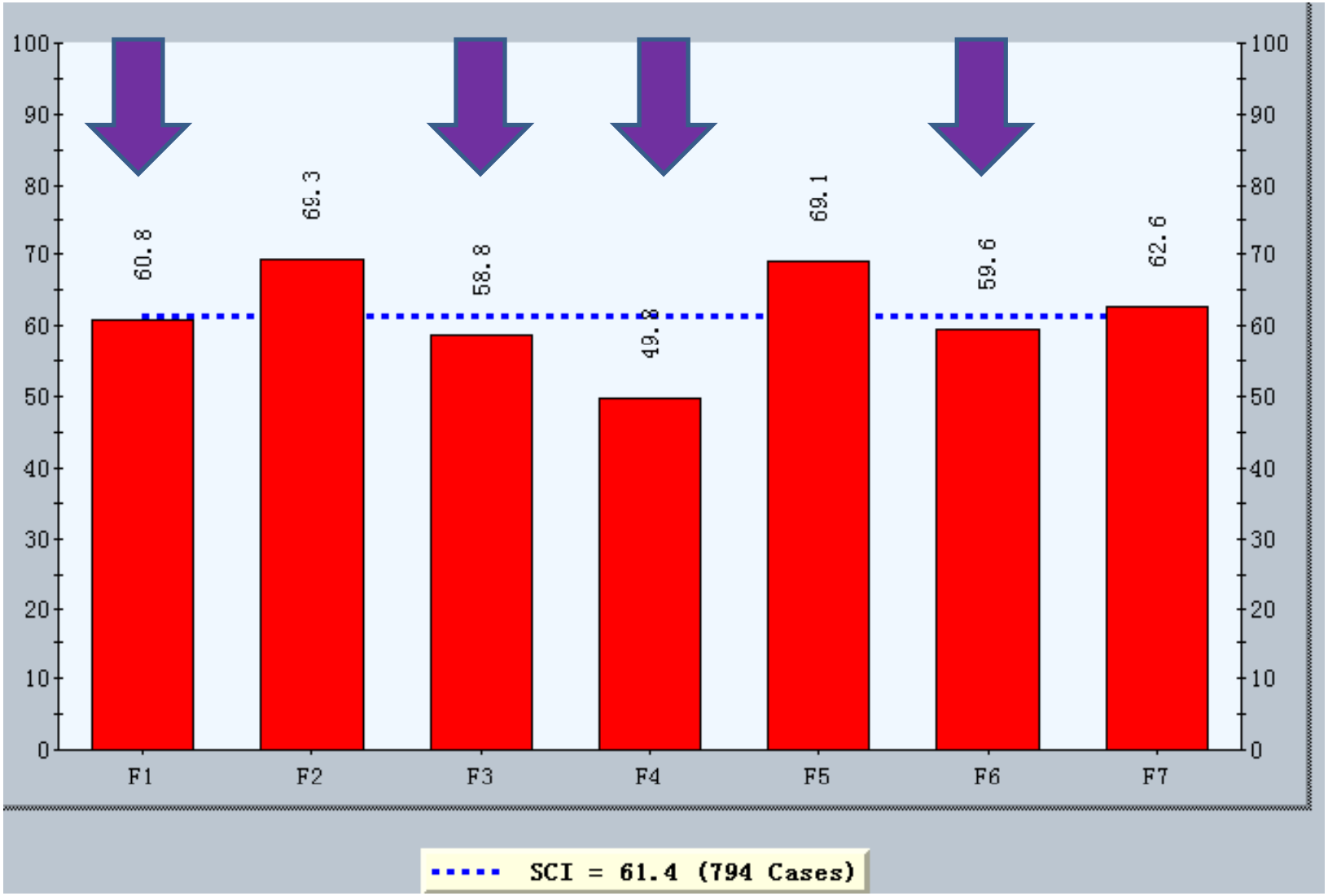
1. Commitment and concern for OSH by organization and management
2. Resources for safety and its effectiveness
3. Risk taking behavior and perception of work risk
4. Perception of safety rules and procedures
5. Personal involvement in safety and health
6. Safe working attitude and workmates' influence
7. Safety promotion and communication



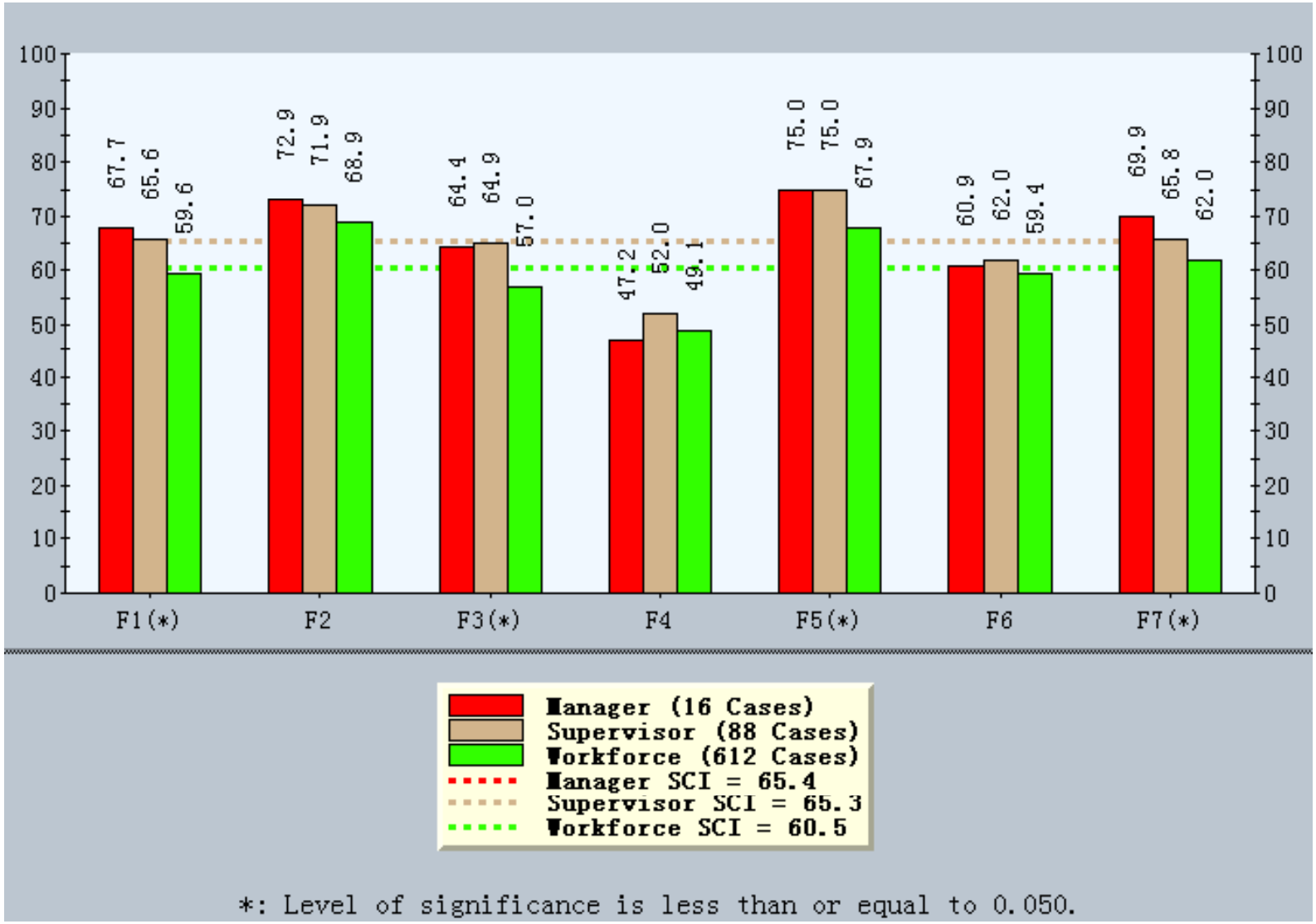


Total: 38 questions

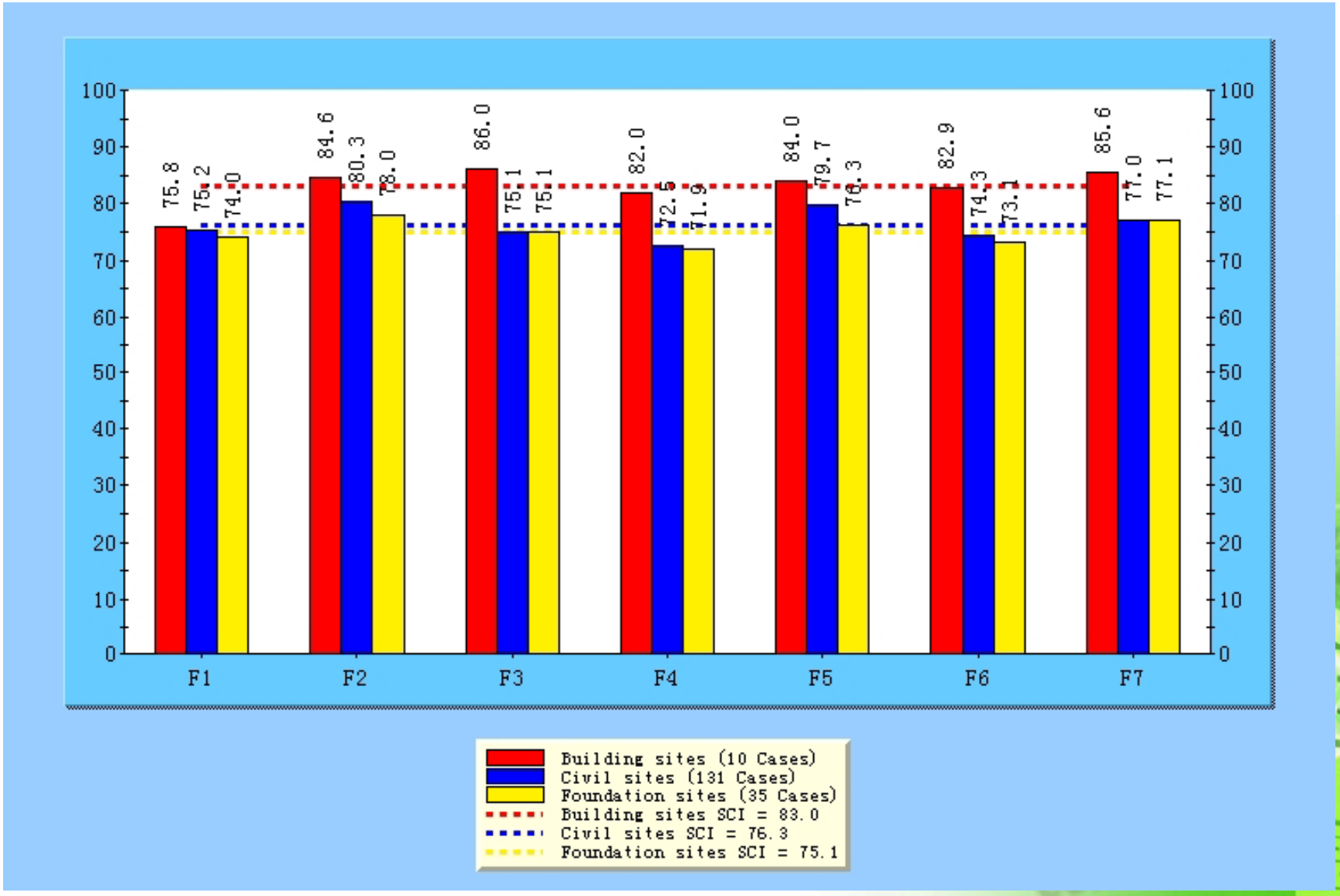
Overall Safety Climate Index of the Sites Participated in the Survey



Results of Safety Climate Index for Different Staff Levels



Comparison of SCI by Types of Work



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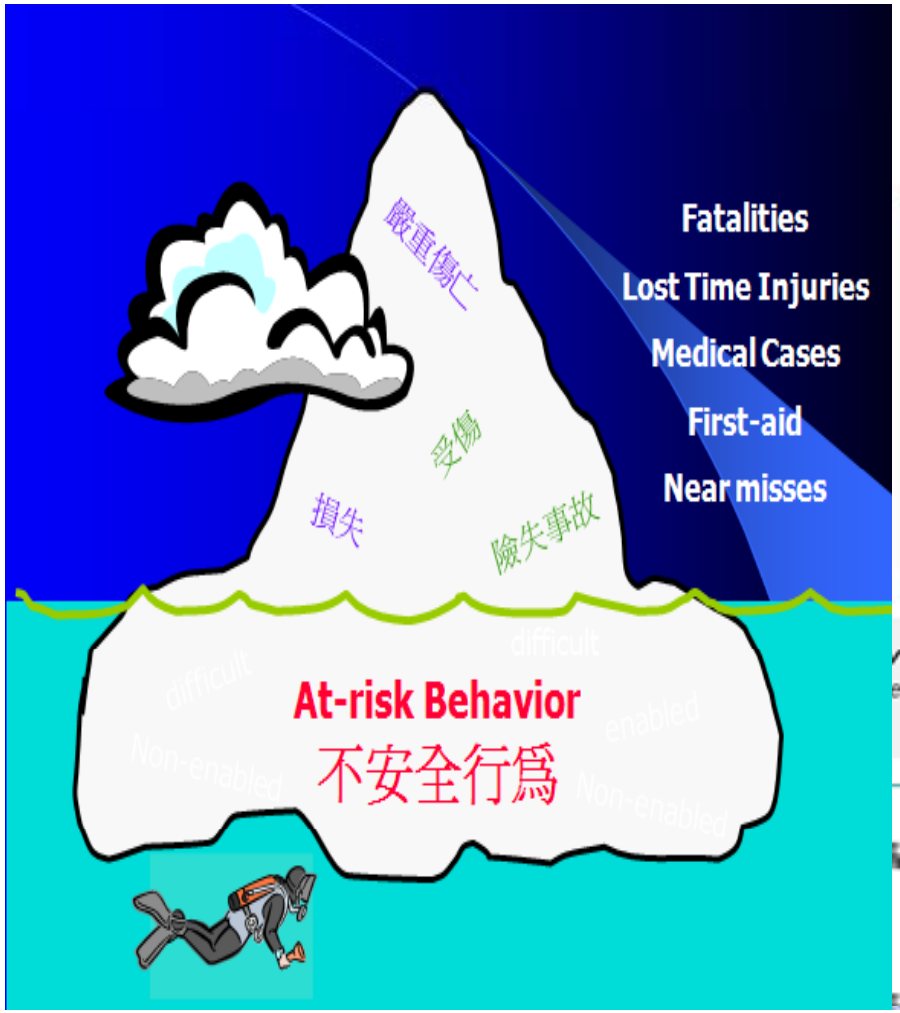
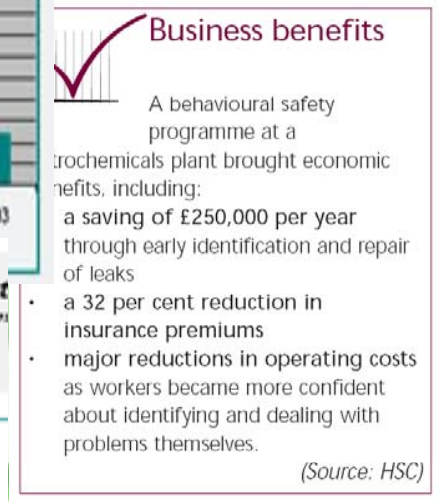
Work Safety Behaviour (WSB) Program

It is well documented that WSB can improve safety performances as well as productivity





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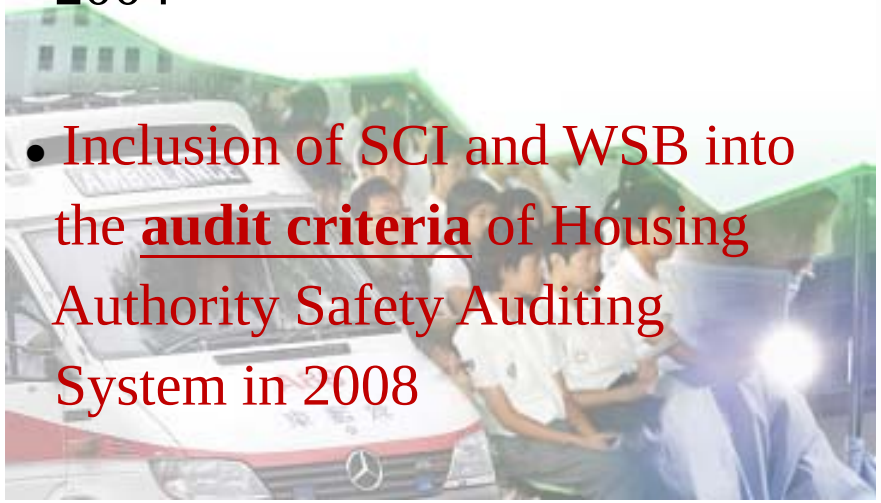
"Work Safety Behaviour" Pilot Scheme

- OSHC partnered with 7 **Construction Companies** to form a **'Work Safety Behaviour Program"** Task Group' in 2003

- WSB was incorporated into **Safe Working Cycle Program** in 2004



- Inclusion of SCI and WSB into the **audit criteria** of Housing Authority Safety Auditing System in 2008

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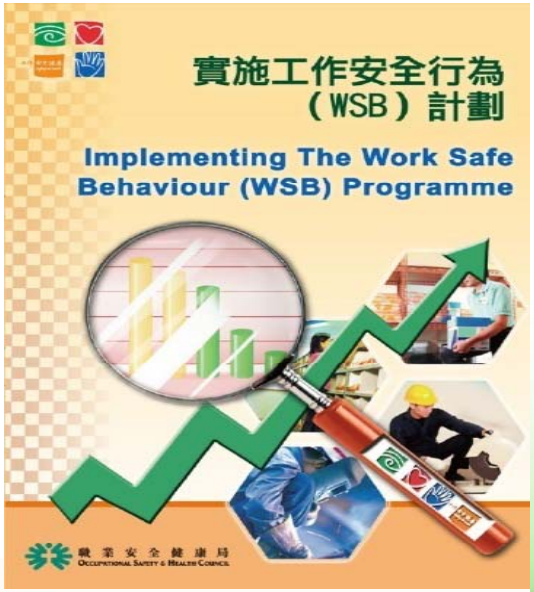
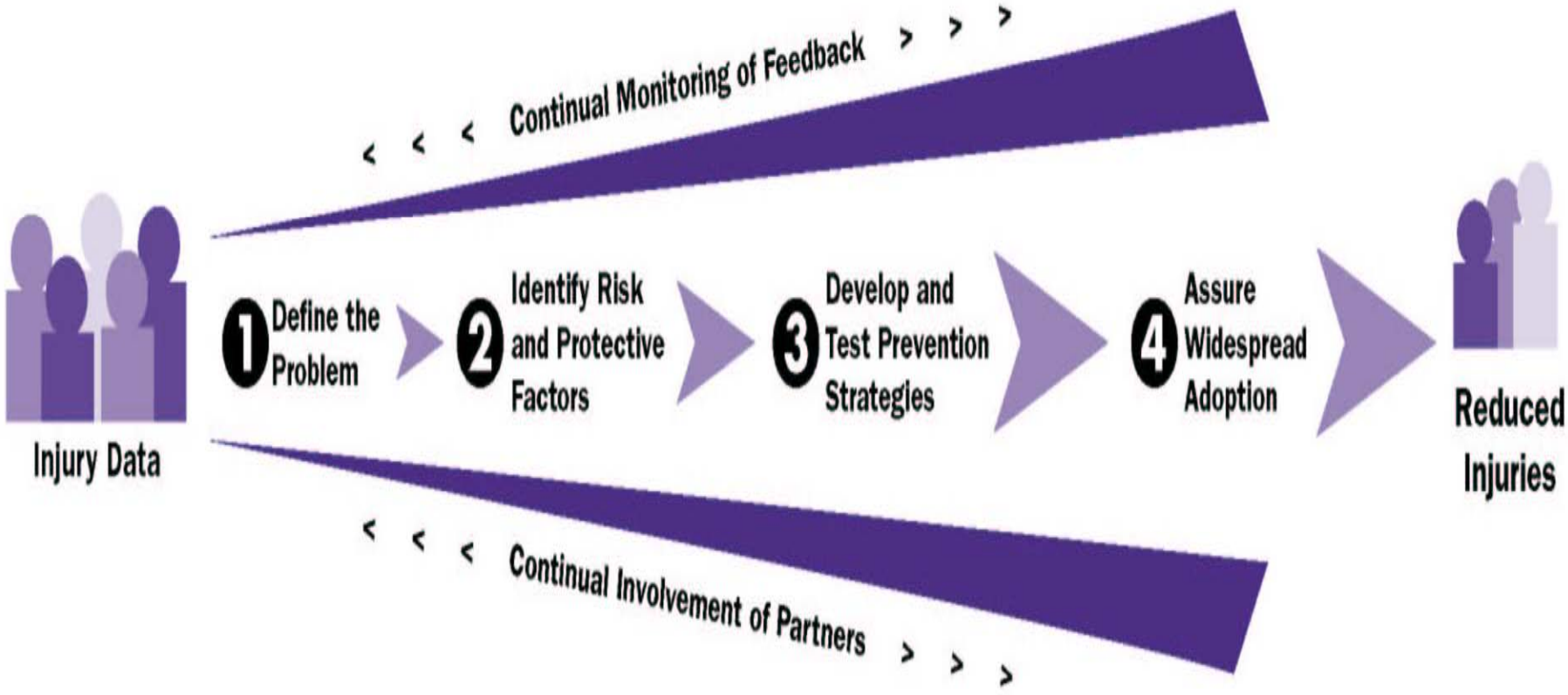
Work Safety Behaviour Kit



- OSHC developed the **“Work Safety Behaviour Kit”,** for use by the industry to grasp the technique for identification of workplace behavioural problems and formulation of corrective measures

- WSB adopts an **‘anonymous and non-condemn’** approach that involves both managements and employees in identifying unsafe behaviours with aims to **promote a collaborative** and **problem-solving culture**

Conclusion (1) – Well use of Injury Data to Develop Injury Prevention Program



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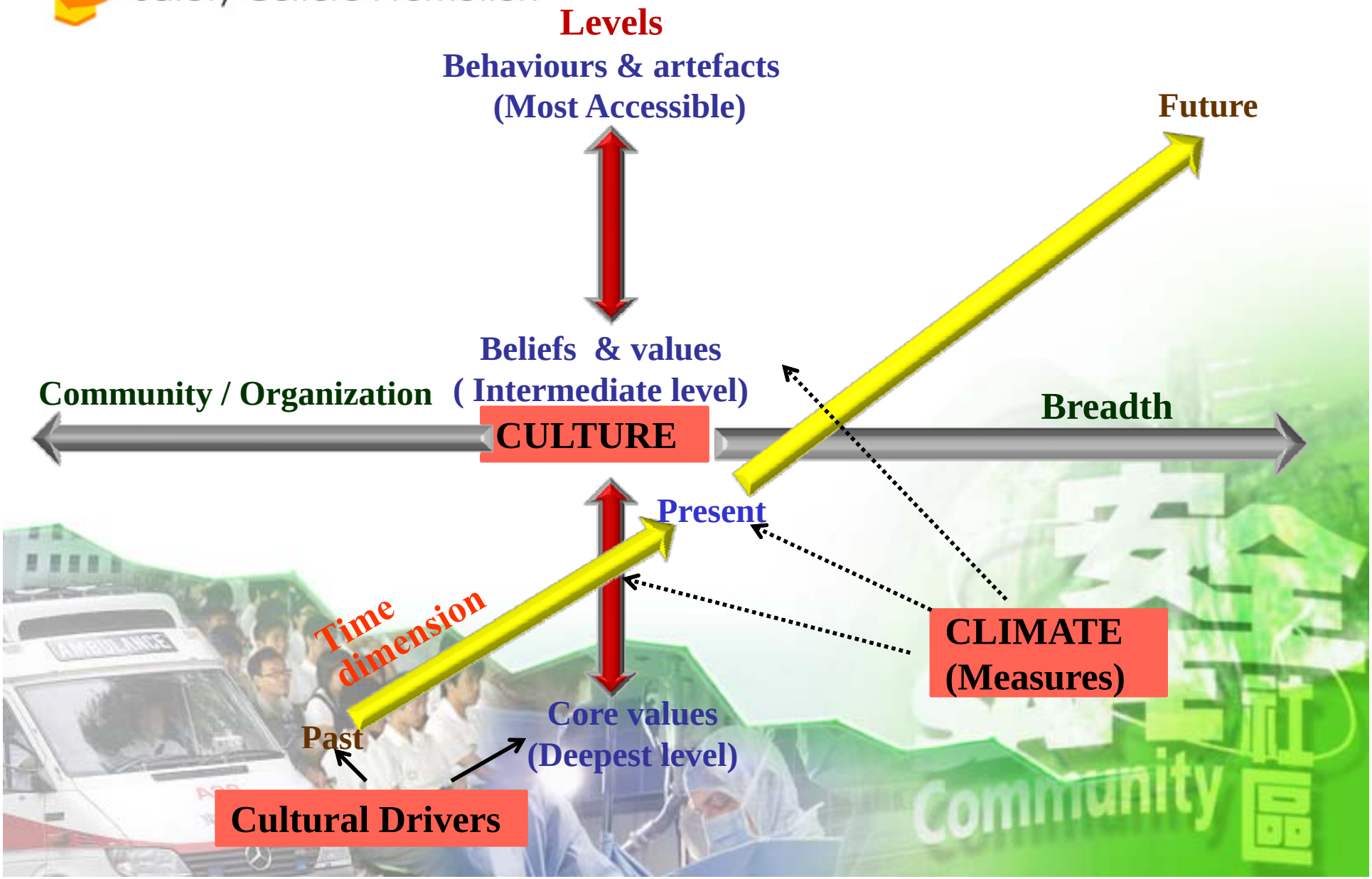
Conclusion (2) – Cultivation of Site Safety Culture



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Manifesto for Safe Communities

"Safety – A Universal Concern and Responsibility for All"

"Only through concerned multi-sectoral efforts involving international organizations, national and local governments, and private and non-profit educational, social and economic groups can accidents and injuries be prevented and controlled. Such efforts are needed to ensure a safe community for all citizens."

Chair
Leif Svanström
leif.svanstrom@phs.ki.se

**(First World Conference on Accident and Injury Prevention
World Health Organization
Stockholm, Sweden
17-20 September 1989)**

1st WORLD CONFERENCE ON ACCIDENT AND INJURY PREVENTION 1989

Thank You

工作安全健康
Safety at work

職業安全健康局
Occupational Safety & Health Council

安全社區支援中心
Affiliate Safe Community Support Centre
中國香港 Hong Kong SAR, China

A SAFE COMMUNITY

安全社區
Community