



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  
Senior Consultant  
Occupational Safety and Health Council





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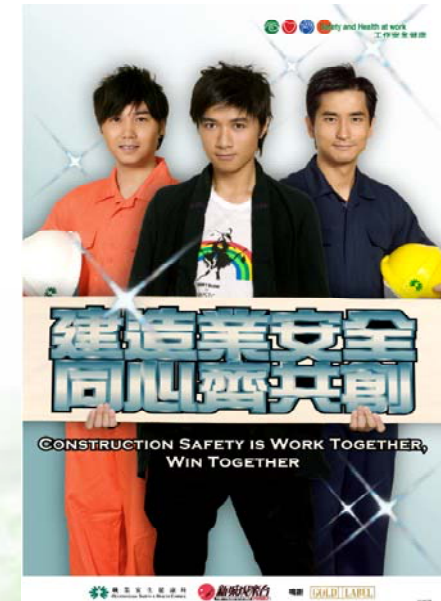


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## Occupational Safety and Health Council



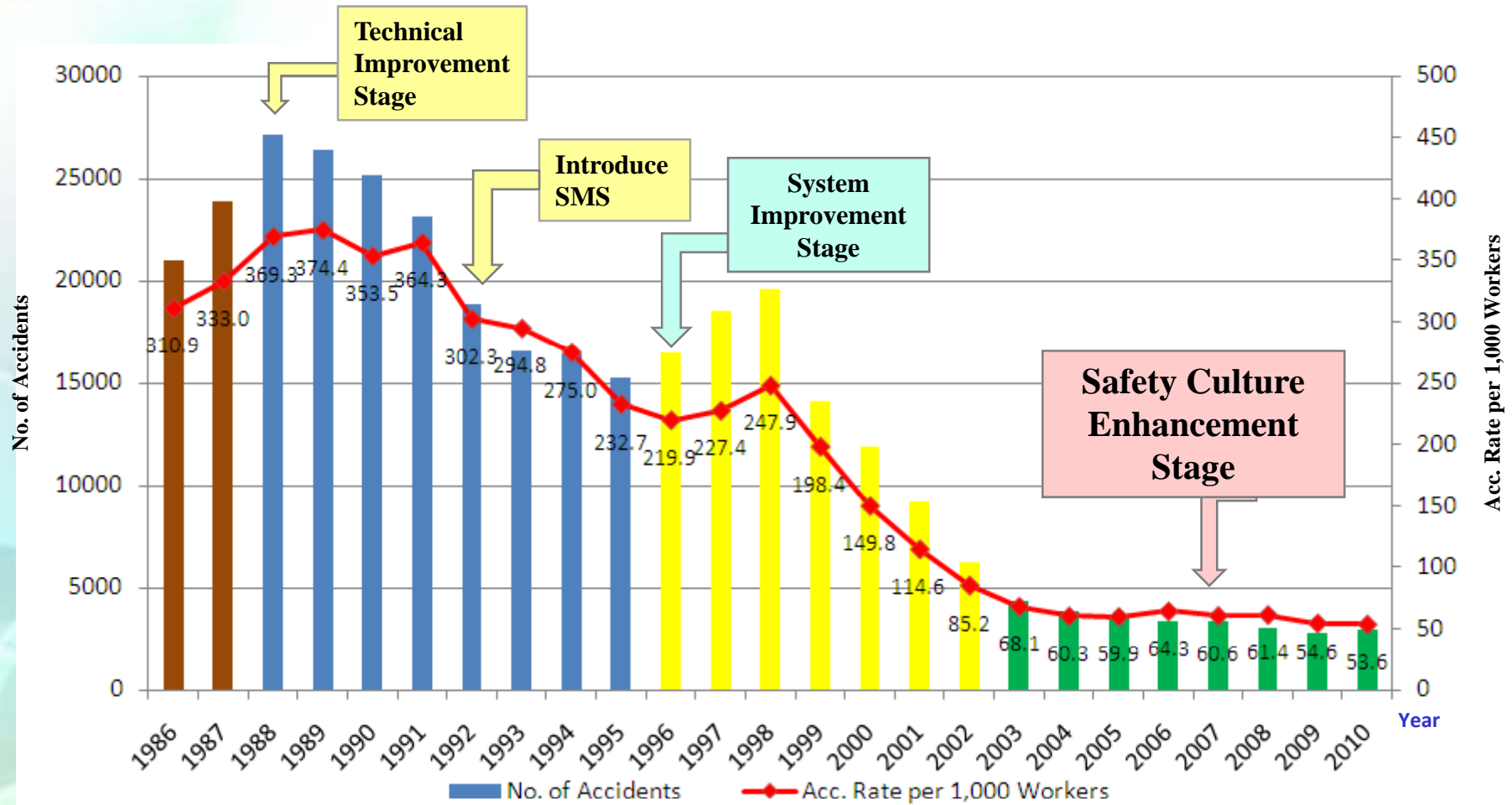
Statutory body for  
promoting safety and  
health at work and  
sustaining the valuable  
workforce of Hong Kong





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

## Accident Statistics for Construction Industry In Hong Kong





## Current Problems

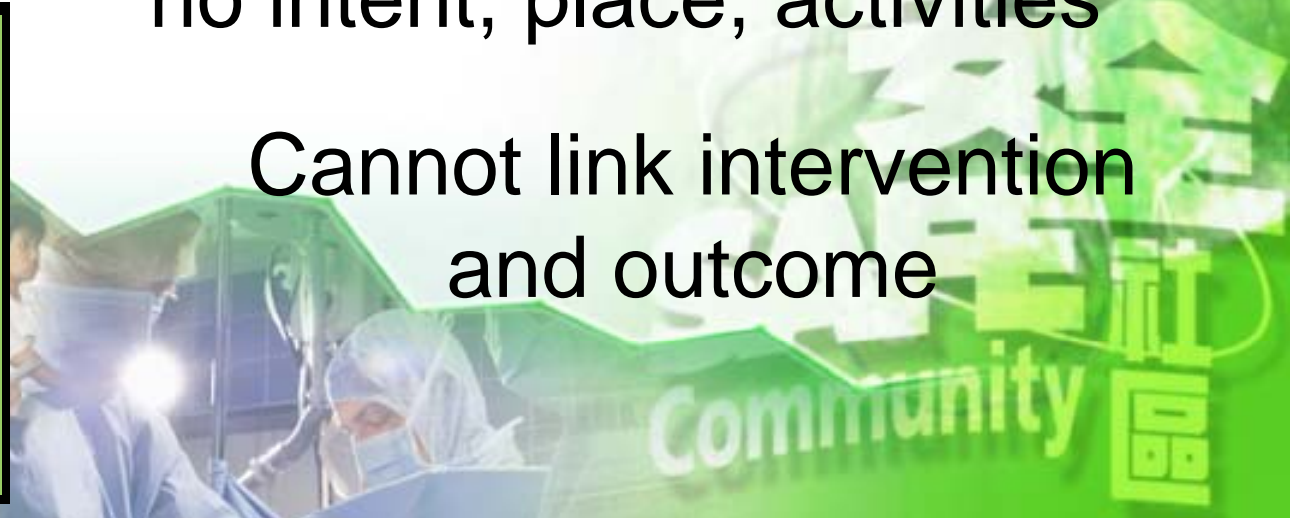
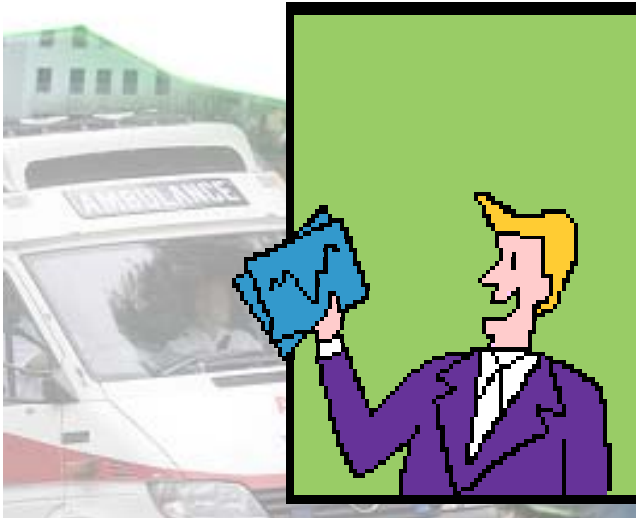


No central database for injuries

No linkage of injury data

Not intended for intervention –  
no intent, place, activities

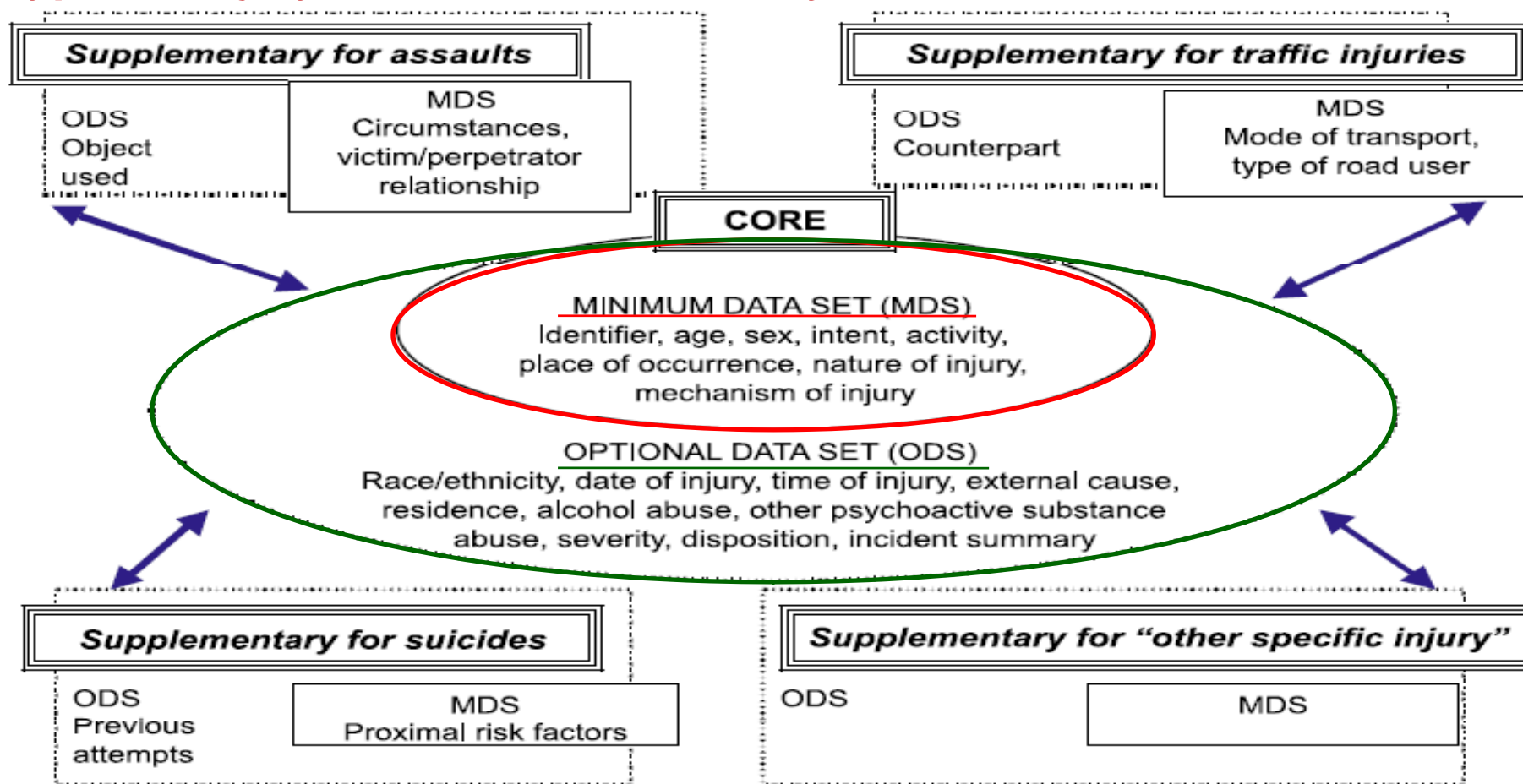
Cannot link intervention  
and outcome





## User Requirements (Define Data Needs)

### Types of Injury Data Recommended by WHO



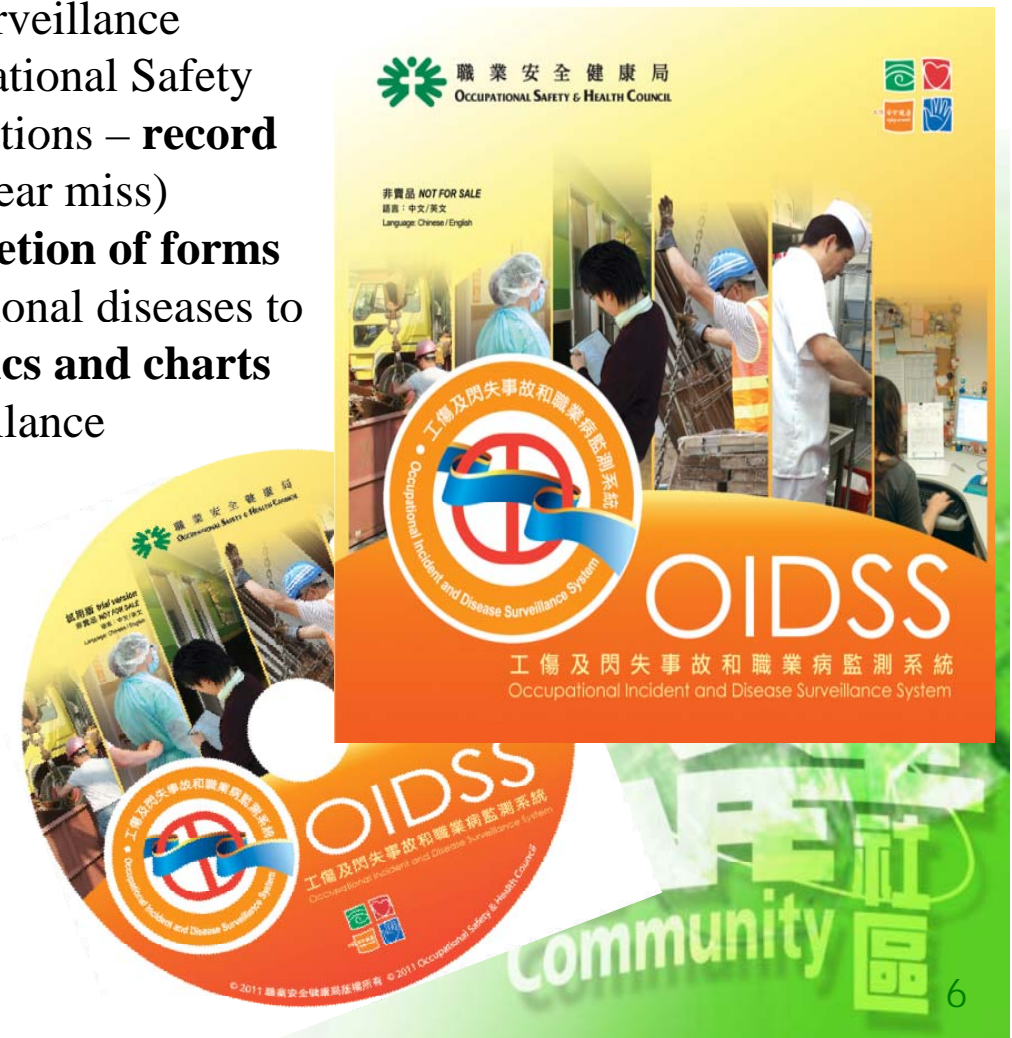
(Injury Surveillance Guidelines from WHO in 2001)



# 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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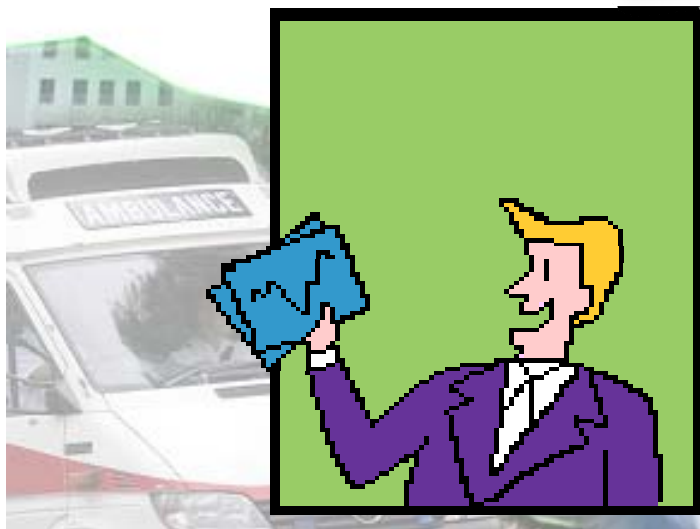


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## Target Users

For individual workplace and  
organization

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



Community





## Accidents reportable under the Employees' Compensation Ordinance (Written)

Nature of Cases	Result of Accident and Incident	Statutory Form to be Used	Reporting Period
<b>Work-related accidents</b>	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)
<b>Occupational diseases</b>	Sickness and / or permanent incapacity	Form 2A	Within 14 days (of the accident)
	Fatality	Form 2A	Within 7 days (of the accident)
<b>Dangerous Occurrences</b>		DO Form	Within 24 hours (after the DO)





# 傷亡率 Injury Rate

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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 (呈報的職業傷亡數字 X 1,000)

(Injury rate per 1,000 workers)

每年平均受僱人數

5. 每一千名工人計的致命率 (死亡數字 X 1,000)

(Fatality rate per 1,000 workers)

每年平均受僱人數



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## 缺勤意外嚴重率 Accident Severity rate

每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:

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



## 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



## Print Forms for Notification

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

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

OIDSS (1.08)

enGLISH 中文

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Occupational Safety & Health Council

Form Selection Page

**B. Print / Export**

Injury Case Number.:  Search

Name.:  Search

Accident Type .:  Search

Accident Date:  (e.g. 2011-1-31) Search

**Search result:**

Injury Case Number	Name	Accident Type	Date of data inputted
--------------------	------	---------------	-----------------------

[Back to the Index Page](#)

This site is best viewed with resolution 1024 x 768, IE browser 6.0 or above, Flash Player 9.0 or above.

文件1 - Microsoft Word

FORM 2A  
EMPLOYEES' COMPENSATION ORDINANCE  
(CAP. 282)  
SECTION 15  
NOTICE BY EMPLOYER OF THE DEATH OR INCAPACITY OF  
AN EMPLOYEE DUE TO OCCUPATIONAL DISEASE

To the Commissioner for Labour

I declare that the information given in this form is, to the best of my knowledge, true and accurate.

Signature: \_\_\_\_\_ (for and on behalf of the employer)

Name (in block letters): CHAN TAI MAN

Position: Manager

Date: 25/05/2011 Chop of Company (Note 1)

A. Particulars of the employee

Name of employee (Surname first) <u>Chan Siu Man</u>		Identity Card/Passport No. <u>A123456(7)</u>
Telephone No. <u>16381638</u>	Fax No. <u>16381438</u>	Address <u>Room 1808, 18/F, Big House, 88 Fat Fat Street, Tsuen Wan</u>
Date of Birth <u>04/11/1989</u> Day/Month/Year	Sex <input checked="" type="checkbox"/> Male <input type="checkbox"/> Female	Occupation <u>Associate Professionals</u>
An apprentice		



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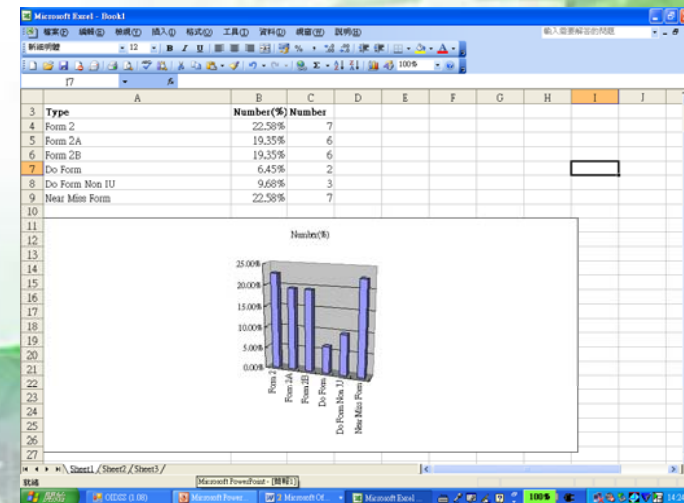
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## Generate Charts (Form 2, Form 2A & Form 2B Statistics)

- 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

OIDSS (1.00)  
Occupational Incident and Disease Surveillance System  
Form Selection Page 11  
Calculate

Frequency Rate  
1. Data Input Date Range: From 2011-1-1 To 2011-5-25  
2. Report: (Overall) Number of entered cases  
3. Type of Chart: (Overall) Number of entered cases  
Print  
Cross Tabulation: (Form 2) Occupation of employee, (Form 2A) Type of disease, (Form 2A) Result caused by disease, (Form 2A) Total number of sick leave days of employee, (Form 2B) Number of days of temporary incapacity, (Do Form) Type of dangerous occurrence, (Do Form Non IU) Type of dangerous occurrence, (Near Miss Form) Place of accident, (Near Miss Form) Type of accident, (Near Miss Form) Severity of potential accidents that near miss may result in.



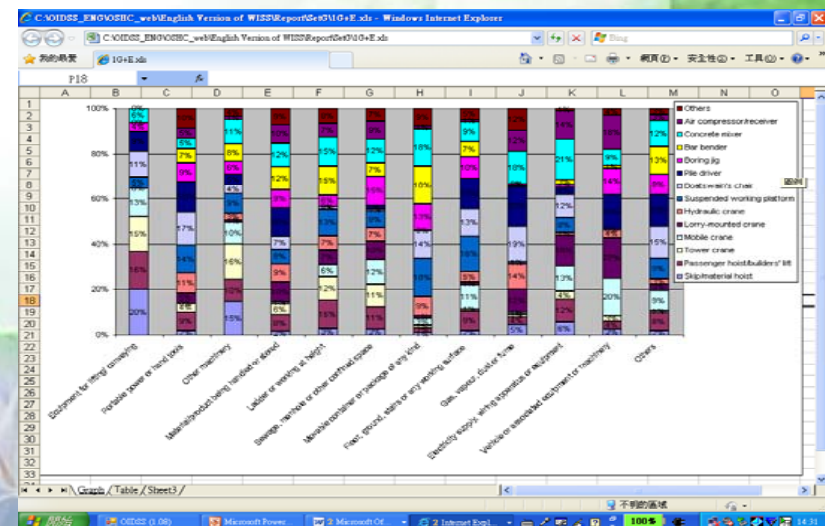
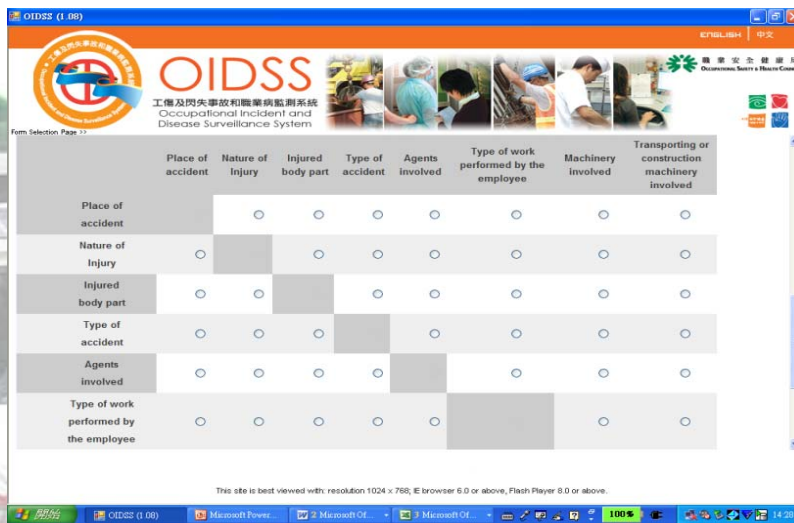
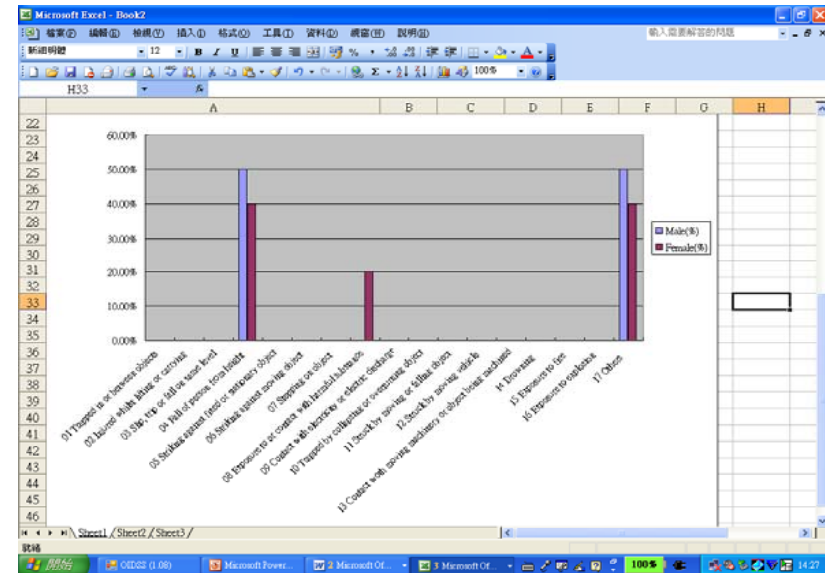


# 傷害預防及安全文化推廣

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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

1. Understand the conceptual framework of injury prevention

Definition and typology of unintentional and violent Injuries

2. Assess injury data sources and describe the injury problem

Identifying strengths and weakness of injury data sources and size the problem

3. Build a coalition to support the injury surveillance system and prevention strategies

Identify the partners to include In a coalition to support the injury surveillance system

4. Determine the appropriate methodology for the surveillance system

Determine events, data elements, type of surveillance and data collection instruments

5. Define and develop an analysis plan for the surveillance data

Calculate indicators, demographic and environmental characteristics

6. Use injury surveillance data to inform injury prevention

Use data to identify preventable injuries, high - risk groups and most appropriate interventions

7. Define an evaluation plan for the surveillance system and monitor prevention strategies

Apply the criteria to evaluate the surveillance system



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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**”

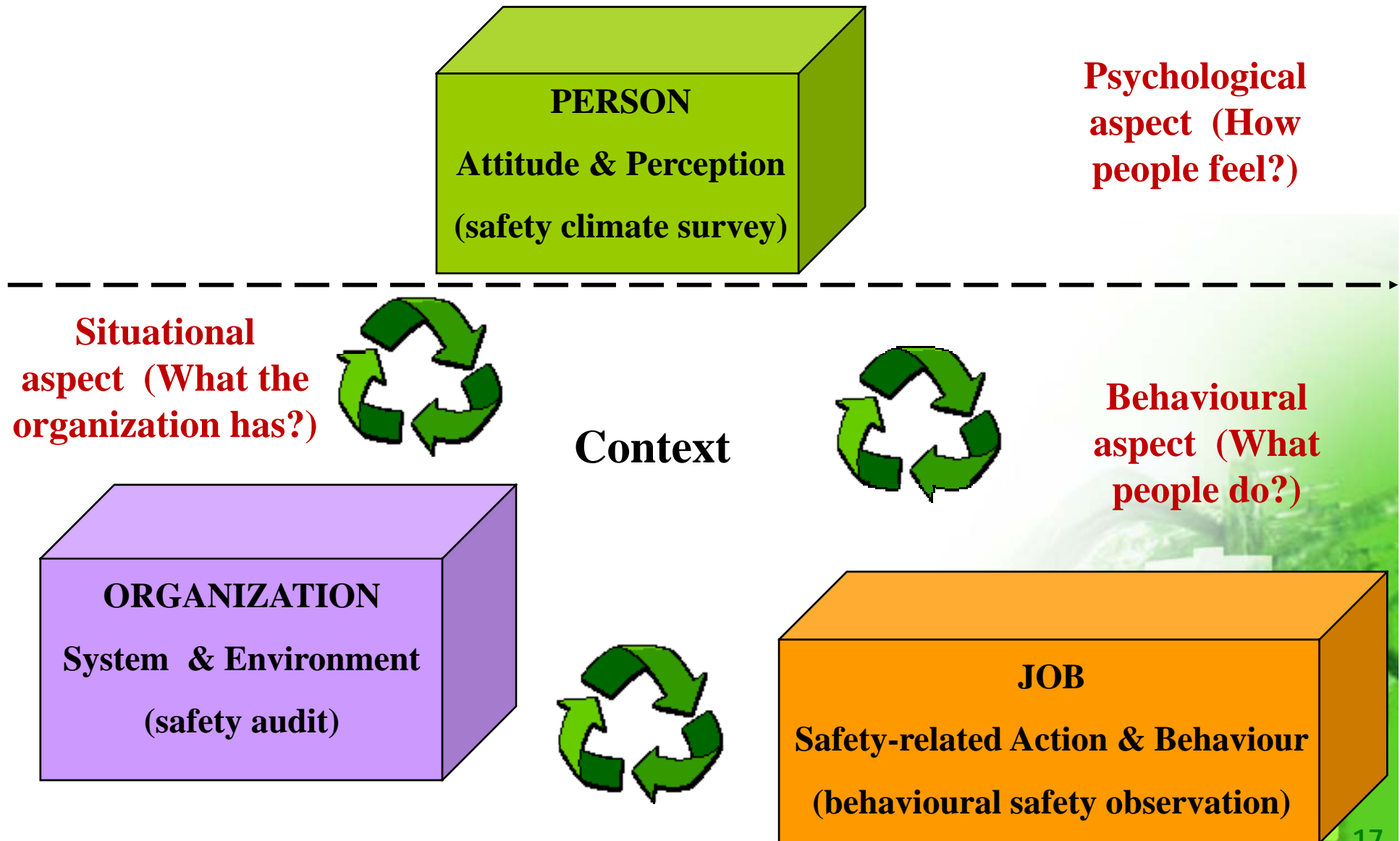
(Source: Literature review from 27

definitions in academic papers from 1980 to 2009)



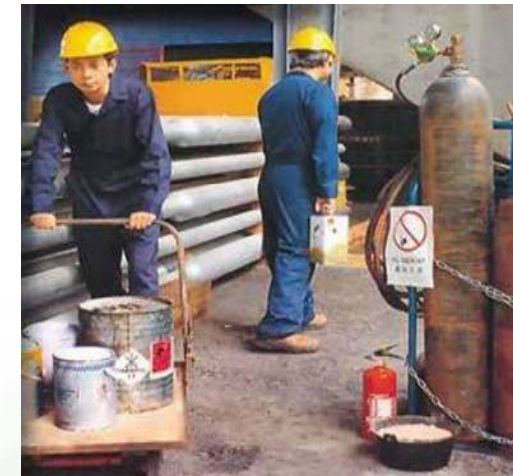


# Conceptual Model of Safety Culture Enhancement



## 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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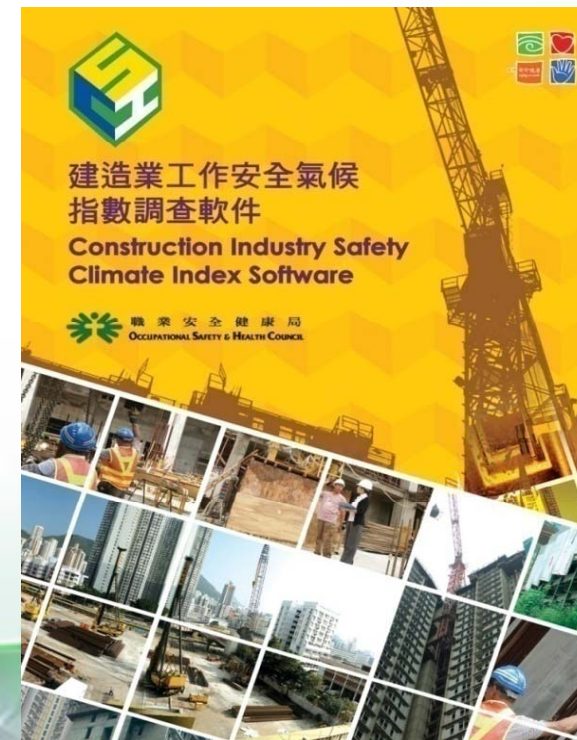
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## Tools for Safety Climate Index Measurement

- OSHC and Tsinghua University jointly develop the “Construction Industry Safety Culture Index Software”



2006

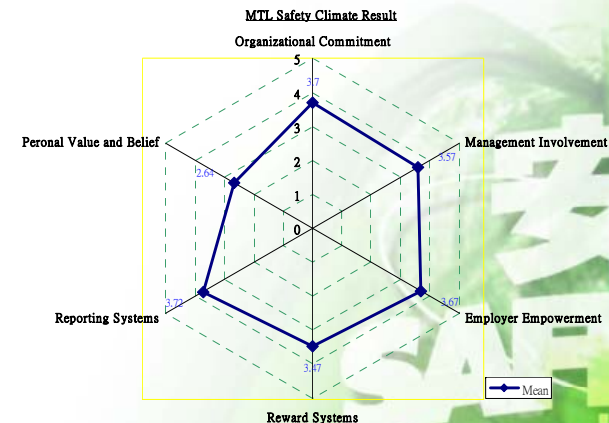
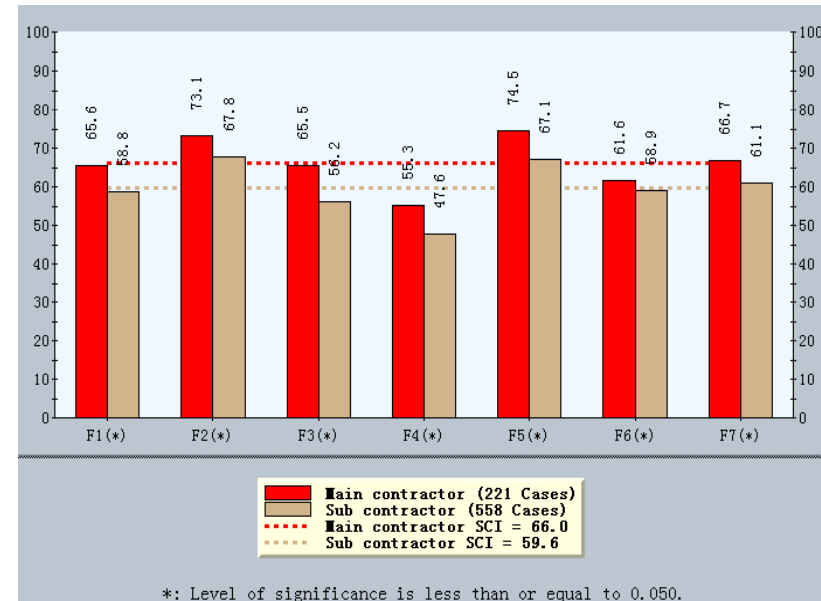


2008



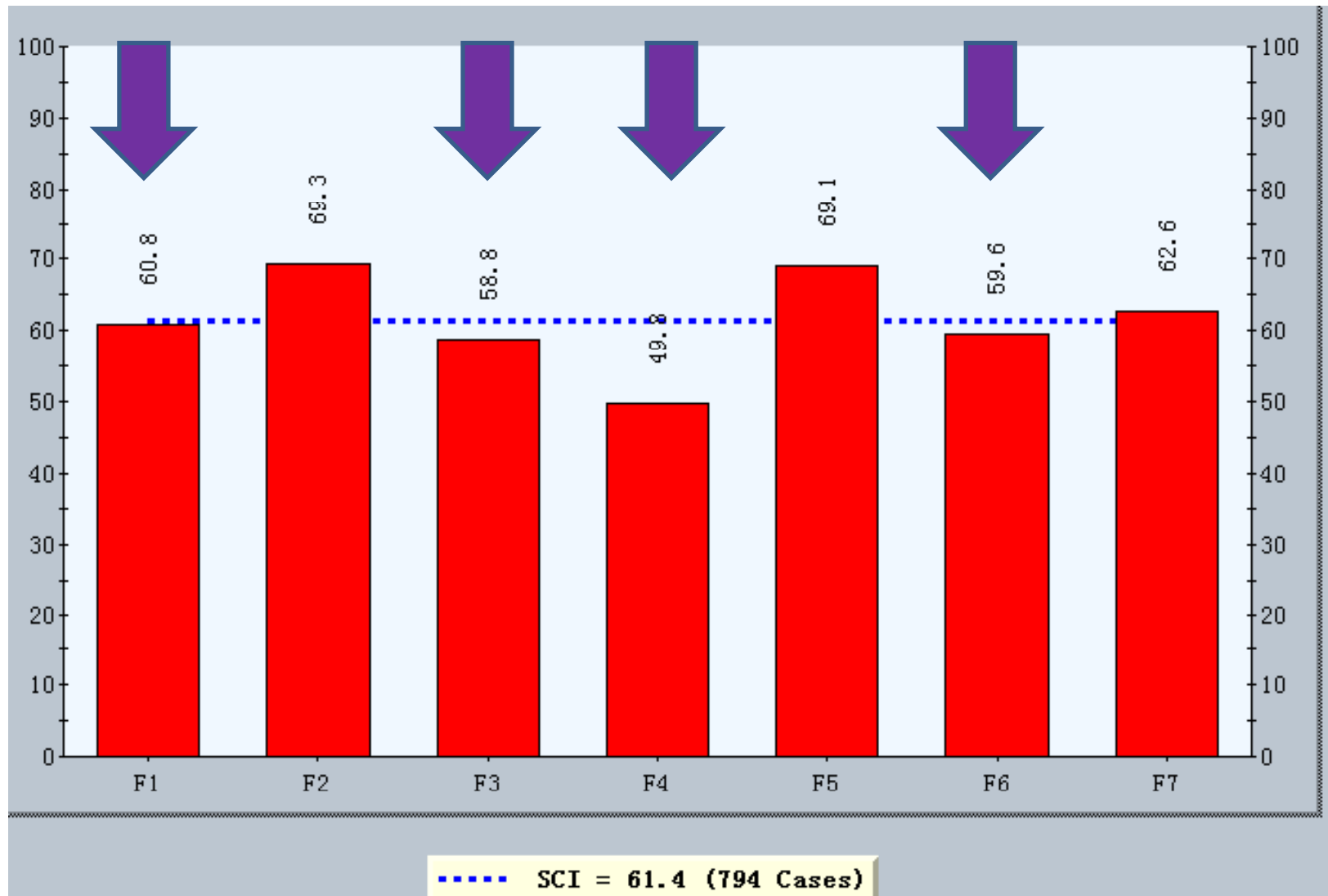
# Latest Version on 7 Contributing Factors of SCI Survey

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

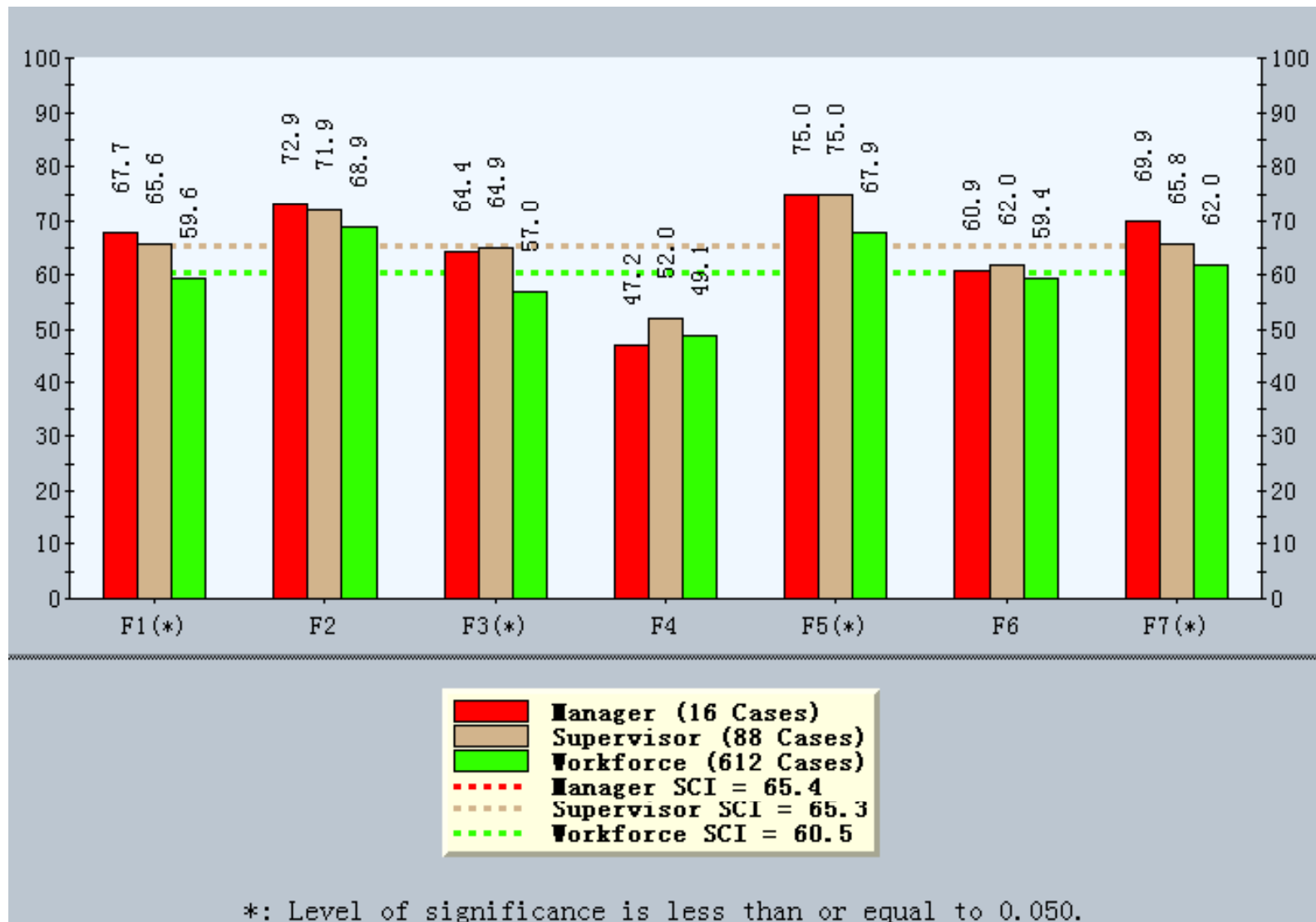


Total: 38 questions

# Overall Safety Climate Index of the Sites Participated in the Survey

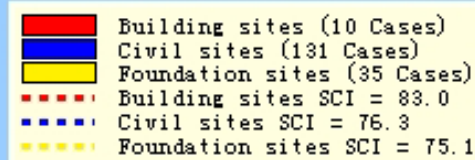
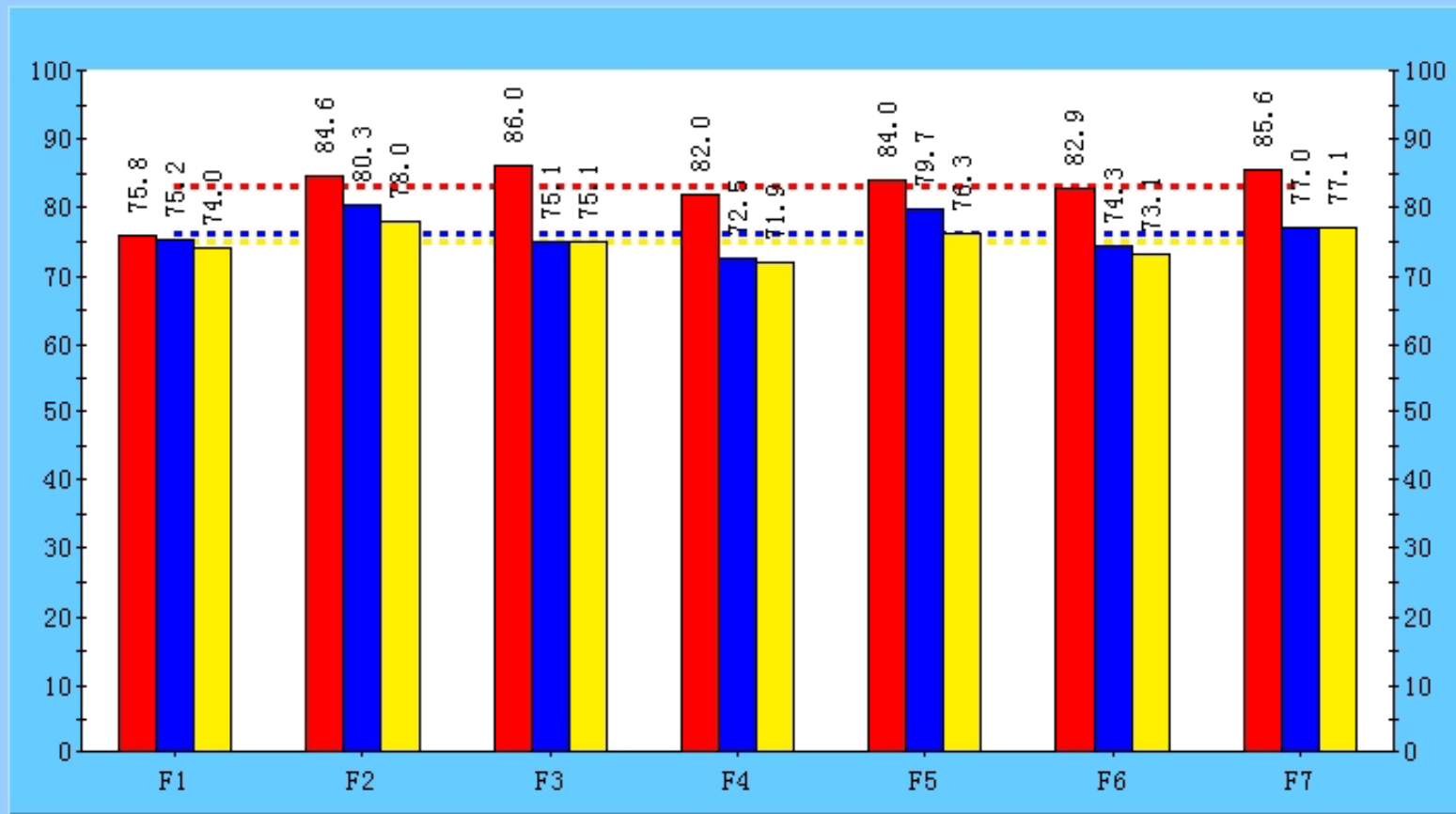


# Results of Safety Climate Index for Different Staff Levels





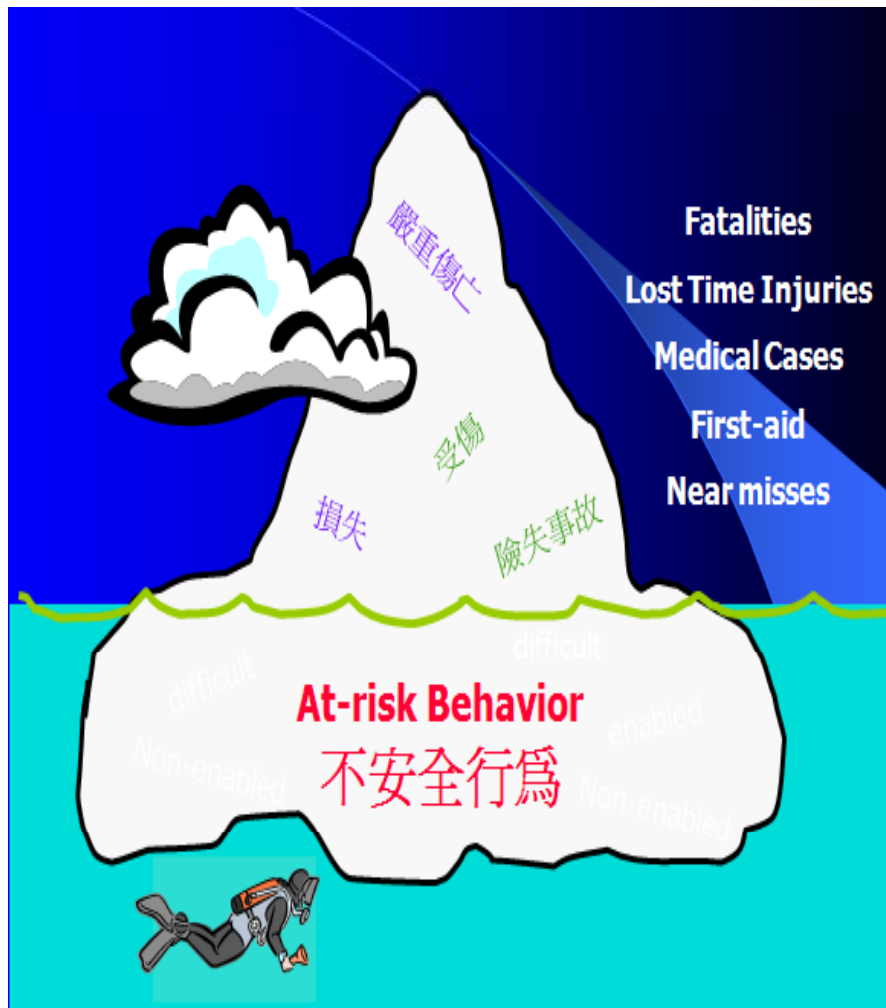
# Comparison of SCI by Types of Work





# Work Safety Behaviour (WSB) Program

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



**HEALTH & SAFETY BENEFITS**

Chep UK's lost time incident rate has fallen from around 44 per 1,000,000 hours worked in 1999 to 11.8 in 2003

Year	Frequency Rate
1998	44
1999	30
2000	24
2001	18
2002	14
2003	11.8

**BUSINESS BENEFITS**

Improved productivity – helped by a reduction in the number of work days lost through injury falling from 550 in 1999 to 301 in 2003

**Business benefits**

A manufacturing company with 1,400 staff introduced a behavioural safety programme and gained:

- improved productivity – the number of work days lost through injury per year dropped from 550 to 301 in four years
- improved public image – the company's managers have given presentations at major behavioural safety conferences
- staff development – many observers have improved communications and IT skills and greater confidence.

(Source: HSC)

**Business benefits**

A behavioural safety programme at a petrochemicals plant brought economic benefits, including:

- a saving of £250,000 per year through early identification and repair of leaks
- a 32 per cent reduction in insurance premiums
- major reductions in operating costs as workers became more confident about identifying and dealing with problems themselves.

(Source: HSC)

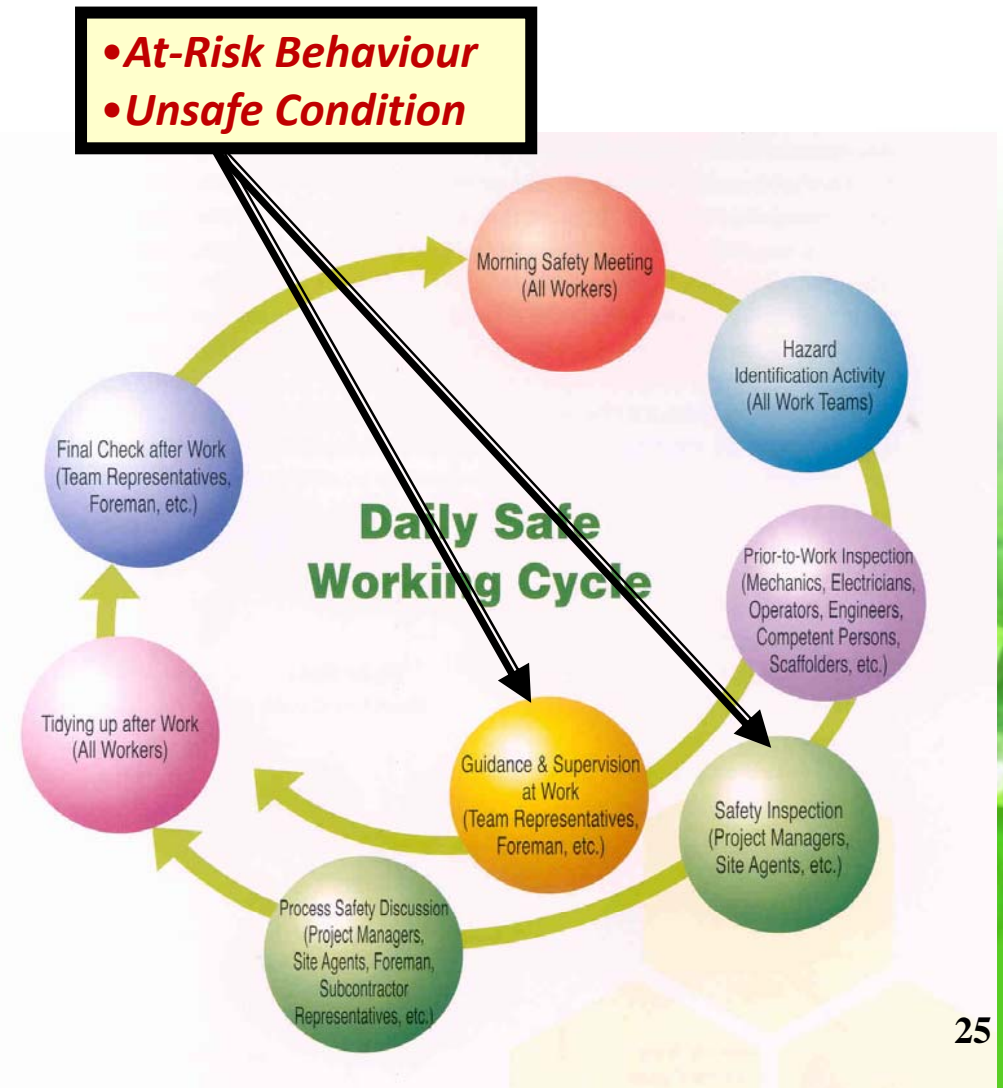




## “Work Safety Behaviour” Pilot Scheme

- 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**

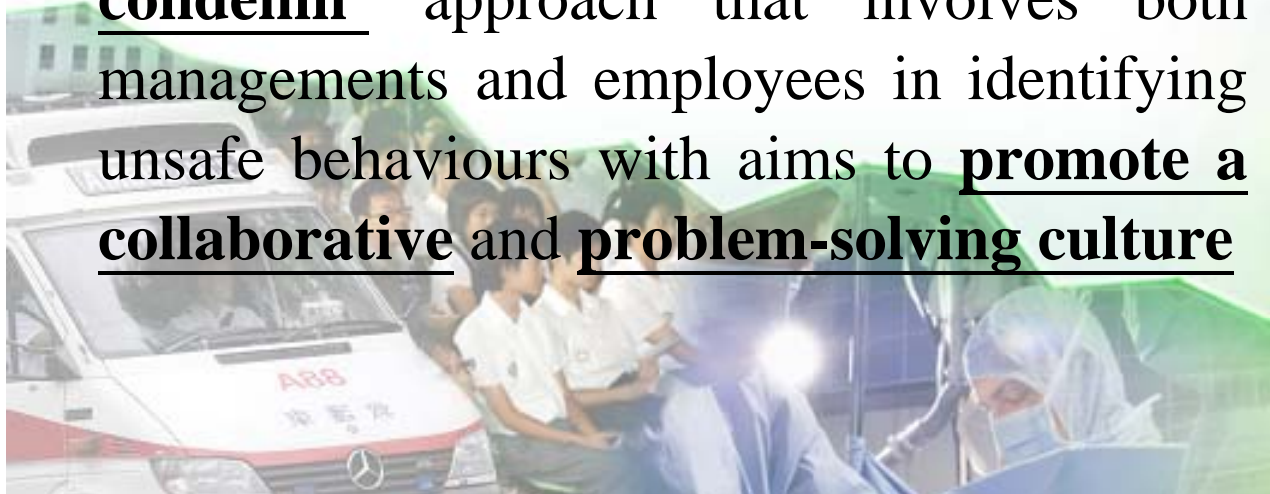
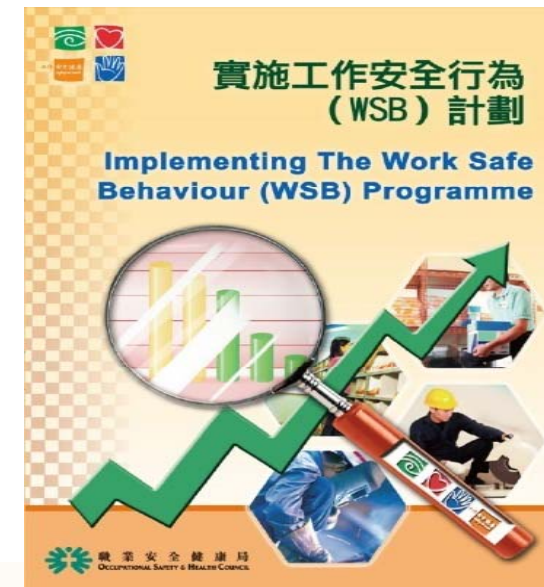




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# Work Safety Behaviour Kit

- 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**

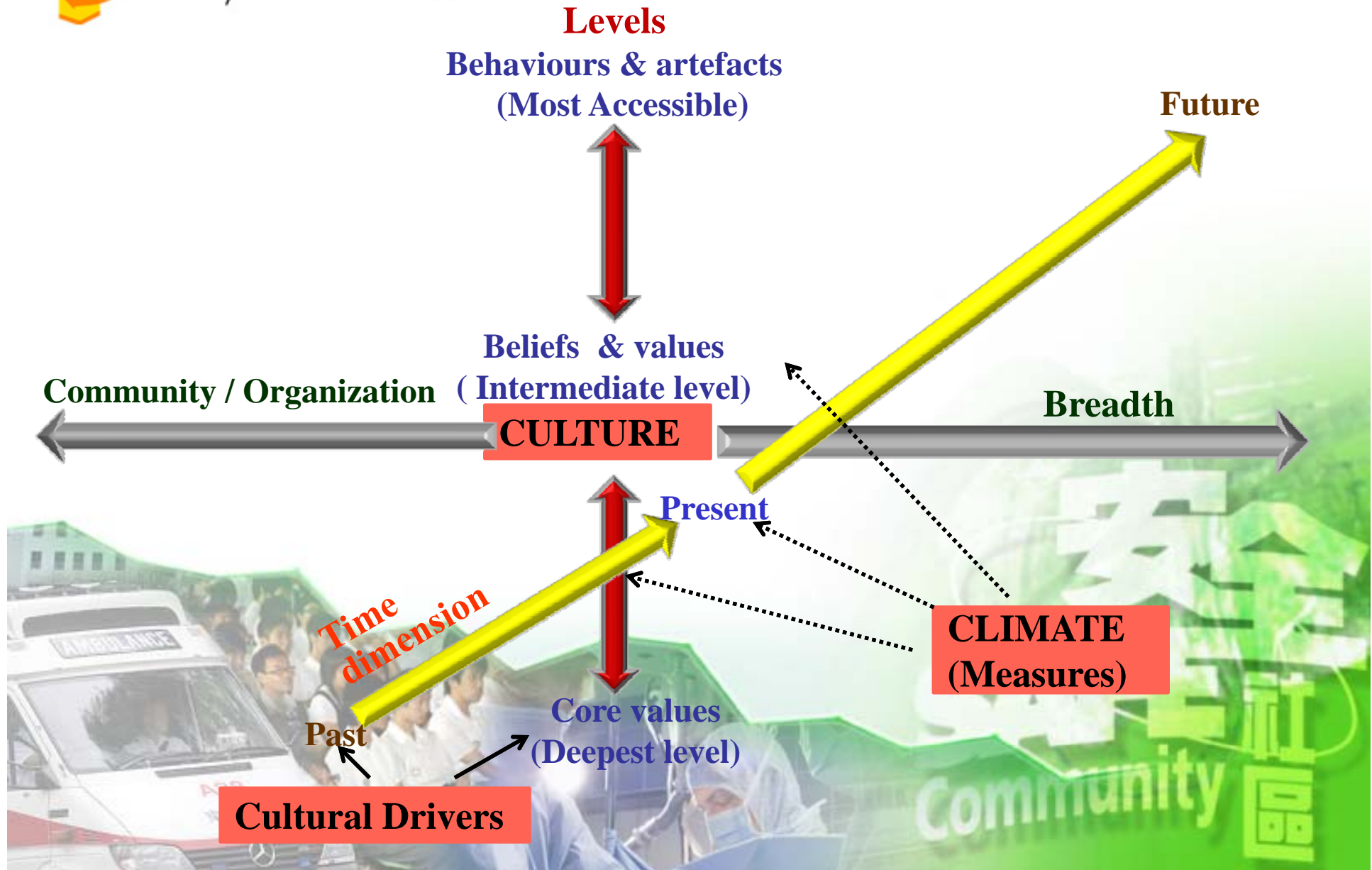


# Conclusion (1) – Well use of Injury Data to Develop Injury Prevention Program





## Conclusion (2) – Cultivation of Site Safety Culture





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# Manifesto for Safe Communities

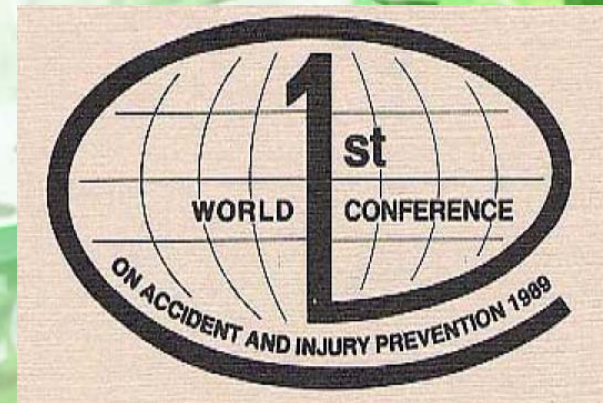
## *“Safety – A Universal Concern and Responsibility for All”*

*“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.”*



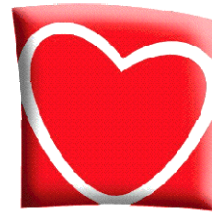
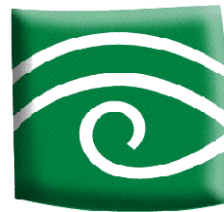
Chair  
Leif Svanström  
[leif.svanstrom@phs.ki.se](mailto:leif.svanstrom@phs.ki.se)

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





# Thank You



工作 安全健康  
*Safety at work*



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

