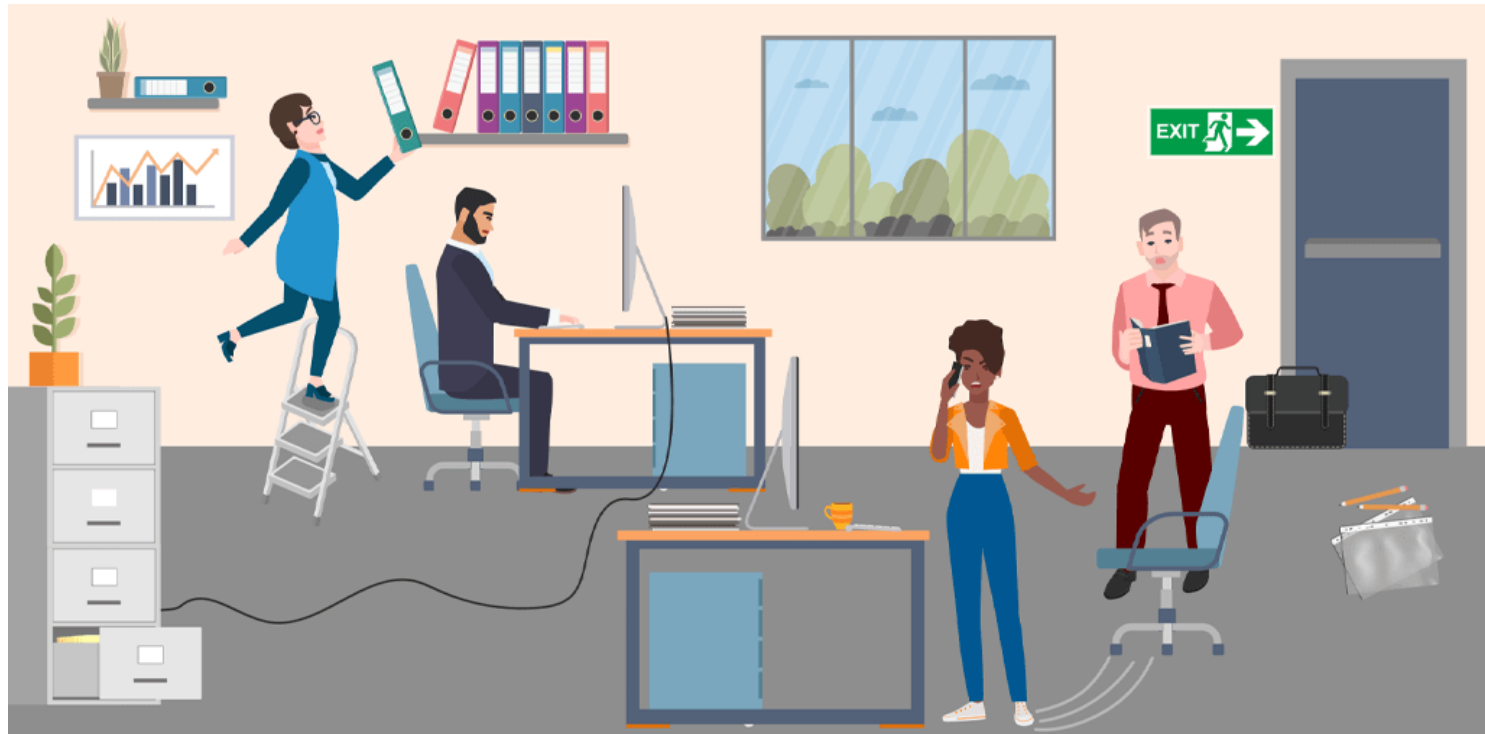


Office and General Safety

Dr. Paul Hunt, Director of Safety



What is Safety?

- Preventing real people from really getting hurt
- Sensible controls for real risks
- Enabling, not hindering



Presentation Plan

- Risks and Accident Trends in HKU
- Managing Risk and Safety Legislation – How is Safety Law Relevant to Me ?
- HKU Safety Policy and Safety Responsibility
- Hazard Spotting
- Some less obvious risks in general workplaces
- Role of Safety Office







You will probably get away with most things once ...

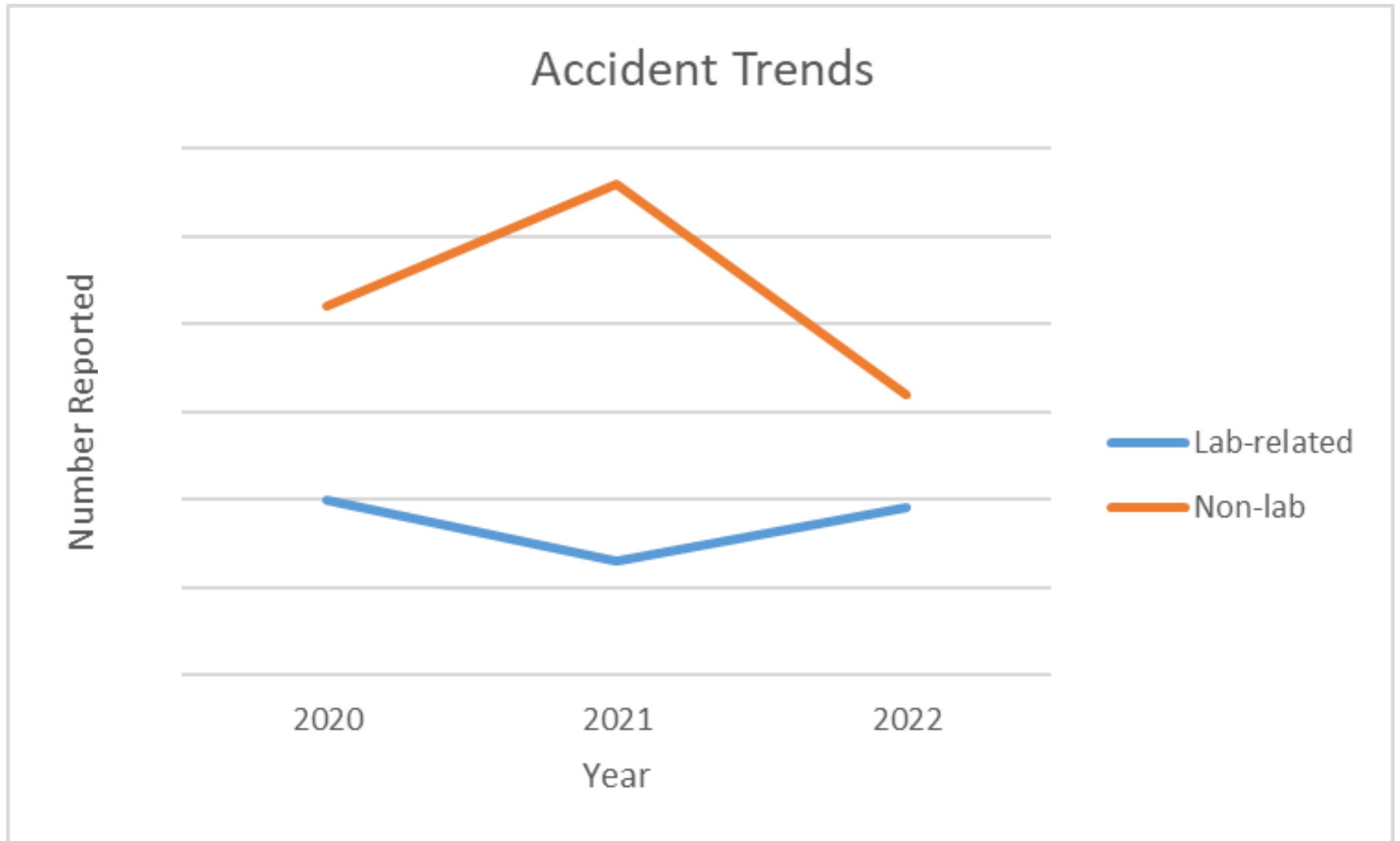


Risk in Safety Terminology

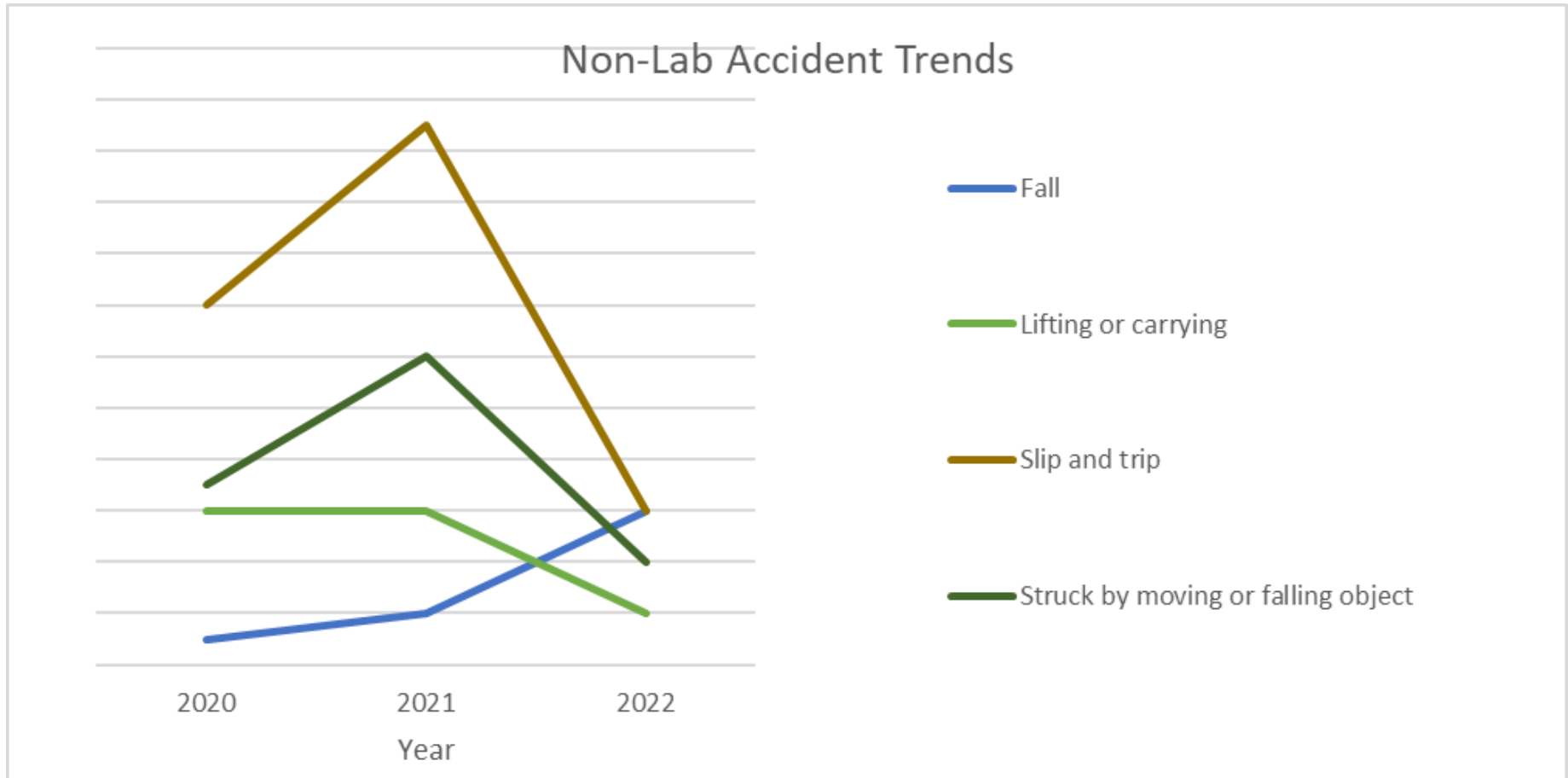
- Risk = chance of accident x severity of consequences
- Severity = severity of injury x number of people affected
- Relatively few things are instantly lethal every time
- But if you perform a high risk activity often enough, your luck will eventually run out
- Generally things are done repeatedly
- Perform a low risk activity very often, could eventually cause significant harm to someone



Overall Frequency of Reported Accidents



Top 4 causes of reported non-lab accidents in HKU



Risk cannot be eliminated

Getting the balance right



Safety Legislation

- Defines “Duty of Care” concept
- Defines statutory responsibilities of different persons in ensuring H & S.
- As well, other codes and standards may exist in law
 - for example Factories and Industrial Undertakings Ordinance CAP 59
- Risk Assessment is a key feature.



Why “Duty of Care” ? Aberfan colliery disaster 1966

- Legislation cannot foresee every risk, but people can
- Coal mining spoil tip collapsed onto a village in South Wales after heavy rain, engulfing the village school
- 116 children and 28 Adults killed
- Spoil tip had been constructed on top of a natural spring and had been in use for years
- Numerous warnings had been given beforehand about potential danger, none heeded





Aftermath

- Mine operated by National Coal Board
- Public enquiry but ultimately no prosecutions
- In 1966 Numerous laws relating to safe conduct of mining operations existed at time, but
- All related to conduct BELOW Ground
- No specific duty under the law relating to spoil heaps, so NO criminal prosecution



Aftermath

- Law was changed in 1974 - Health and Safety at Work Act (HSWA) introduced
- Introduced “duty of care” principle that applies even if no other relevant law or guideline exists
- Key principal of HSWA implemented in Hong Kong in Occupational Safety and Health Ordinance CAP509



Occupational Safety and Health Ordinance Cap 509



Occupational Safety and Health Ordinance Cap 509

- Section 6 (1)
“**Every employer MUST**, as far as is reasonably practicable, ensure the safety and health at work of all his **employees**”
 - Interpretation of this by courts is that what is “reasonably practicable” relates to the severity of potential harm
- NOT**
- The cost or trouble to the organization of introducing the measures



Legal Expectation

- If you are responsible for an activity, you need to:
 - Assess the consequences of that activity on others
 - Identify all **realistic** sources of harm
 - Take **reasonable precautions** to prevent harm to others
 - Take reasonable steps to ensure that precautions are followed
- You may not be present when most of the activities you are responsible for take place
- Even if there's nothing specific in law that covers a particular situation, the duty of care still applies



Recent Prosecution under CAP 509

Apr 28, 12:39 26°C 76%

The Standard 英文虎報

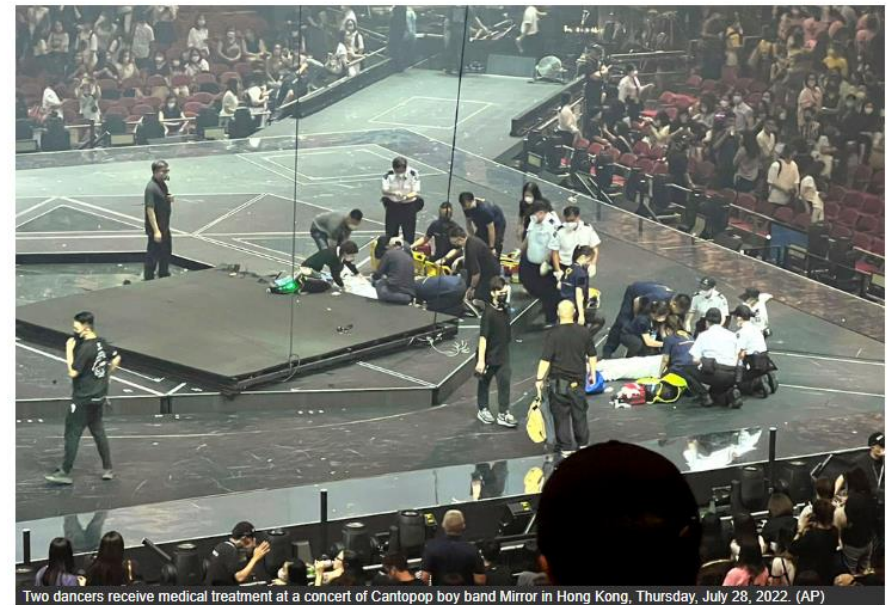
EIGHT KWAI FONG URBAN VALLEY LIVING
跑馬地新式生活風尚
8 KWAI FONG STREET, HAPPY VALLEY
匯中環
HONG KONG GROUP

Trending Section News Features Event & Promotion Coffee Break

Top News Editorial Local Finance China World Sports Central Station Columns

Gov't initiates 15 prosecutions against three companies over Mirror concert incident

Local | 27 Jan 2023 6:37 pm



Two dancers receive medical treatment at a concert of Cantopop boy band Mirror in Hong Kong, Thursday, July 28, 2022. (AP)

The Labour Department has initiated 15 prosecutions against three companies over the incident at a Mirror concert last July, where dancer Mo Lee Kai-yin was severely injured by a gigantic falling screen, and a hearing has been scheduled on March 27.

"The investigation revealed that the relevant occupiers and employers – Engineering Impact Ltd, Hip Hing Loong Stage Engineering Co. Ltd. and Studiodanz Co. Ltd. – were suspected of breaching Cap. 509 Occupational Safety and Health Ordinance and Cap. 282 Employees' Compensation Ordinance," a statement read.

"The involved offenses include failure to provide the employees with safe plant and safe systems of work, and failure to notify the Commissioner for Labour of accidents and to take out employees' compensation insurance for employees," it continued.



HKU's Safety Policy

- HKU is committed to ensuring the health and safety of all its employees, students and visitors
- In pursuit of this goal the University will as far as is reasonably practicable apply, provide and promote international standards of occupational and environmental health and safety



HKU Safety Policy 3.2 Supervisory Staff

- (a) Every staff member (this includes principal investigators and lecturers teaching classes) is responsible for the health and safety of those employees and students under their care. This applies equally to academic and administrative staff as to technical staff.
- (b) Staff cannot delegate out of this responsibility and should endeavour to encourage and foster safe working practices in those over whom they have charge;
- (c) In cases where safety and health guidelines have not been prepared at Departmental or University level, supervisory staff must ensure that a risk assessment has been completed and appropriate provisions made to eliminate or control the risks.



HKU Safety Policy 3.3 Departmental Safety Representatives

Each department should appoint at least one safety representative whose responsibilities are to assist the Heads in fulfilling their safety responsibilities and can include:

- (a) informing the Head of Department and the Director of Safety of any special hazards in, or new hazards about to be introduced into, the department/unit;
- (b) ensuring that new members of the department, including students, are informed of the University's health and safety policy, as well as departmental safety and health policy, standards and procedures;
- (c) identifying training needs and conducting activities to stimulate and maintain interest in safety and health amongst personnel in the department;
- (d) ensuring that means exist for all machinery and equipment to be maintained and used in a safe condition;
- (e) ensuring with the assistance of the Director of Safety that first aid, personal protective equipment and safety facilities are provided and properly maintained;
- (f) consulting with the Director of Safety, to promote, plan, and direct a regular programme of safety inspections, and participating in such inspections;
- (g) ensuring that accidents are reported promptly in accordance with University procedures and reporting any case of non-compliance to the Head;
- (h) maintaining liaison with the Director of Safety and the Director of University Health Service
- (i) investigating accidents and incidents and recommending accident prevention measures to the Head as and when necessary.



HKU Safety Policy 3.3 Departmental Safety Representatives

Each department should appoint at least one safety representative whose responsibilities are to assist the Heads in fulfilling their safety responsibilities and can include:

- (a) informing the Head of Department and the Director of Safety of any special hazards in, or new hazards about to be introduced in, the department/unit;
- (b) ensuring that new hazards in the department, including students, are informed of the University's health and safety policy, standards and procedures;
- (c) identifying training needs and conducting health amongst personnel in the department;
- (d) ensuring that means exist for all machinery maintained and used in a safe condition;
- (e) ensuring with the assistance of the Director of Safety that personal protective equipment and safety facilities are provided and properly used;
- (f) consulting with the Director of Safety, to plan regular programme of safety inspections, and participating in such inspections;
- (g) ensuring that accidents are reported promptly, and reporting any case of non-compliance to the Head;
- (h) maintaining liaison with the Director of Safety and the Director of University Health Service;
- (i) investigating accidents and incidents and recommending accident prevention measures to the Head as and when necessary.

Health and safety?
Marvellous!
But you need to speak to
our Safety Officer

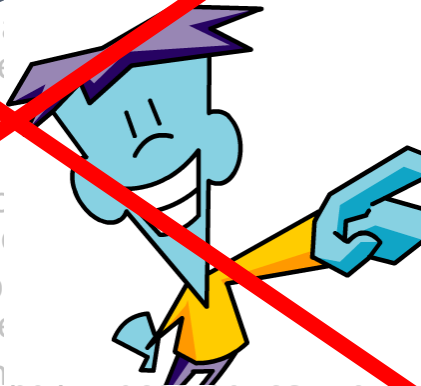


HKU Safety Policy 3.3 Departmental Safety Representatives

Each department should appoint at least one safety representative whose responsibilities are to assist the Heads in fulfilling their safety responsibilities and can include:

- (a) informing the Head of Department and the Director of Safety of any special hazards in, or new hazards about to be introduced in, the department/unit;
- (b) ensuring that new hazards, including students, are informed of the University's health and safety policy, standards and procedures;
- (c) identifying training needs and communicating health amongst personnel in the department;
- (d) ensuring that means exist for all machinery, equipment and plant to be maintained and used in a safe condition;
- (e) ensuring with the assistance of the Director of Safety that personal protective equipment and safety facilities are provided and properly used;
- (f) consulting with the Director of Safety, to plan regular inspections, and participating in such inspections;
- (g) ensuring that accidents are reported promptly, and reporting any case of non-compliance to the Head;
- (h) maintaining liaison with the Director of Safety and the Director of University Health Service;
- (i) investigating accidents and incidents and recommending accident prevention measures to the Head as and when necessary.

Health and safety?
Marvellous!
But you need to speak to
our Safety Officer



Hazard Spotting

There are 14 hazards in the following picture of an office

I would like you to identify 4 of them





Some Office Risks that may be less obvious

- Manual Handling/Repetitive Physical Tasks
- Display Screen Use
- Cleaning and other Chemicals
- Clocks



Manual Handling/Repetitive Physical Tasks



Manual Handling/Repetitive Physical Tasks



Health and Safety
Executive

Manual handling assessment charts (the MAC tool)



This is a web-friendly version of leaflet INDG383(rev3), published 11/18

Introduction

Work-related musculoskeletal disorders (MSDs), including manual handling injuries, are the most common type of occupational ill health in the UK. It is important to remember that:

- there is a lot you can do to prevent them;
- preventative measures are often simple and cost-effective;
- you cannot prevent all MSDs, but where they occur, early reporting of symptoms, proper treatment and suitable rehabilitation are essential.

The Manual Handling Assessment Charts (MAC) is a tool aimed at employers, health and safety managers and safety representatives and is used by health and safety inspectors. The tool will help you assess the most common risk factors in lifting (and lowering), carrying and team handling operations and was developed to identify high-risk manual handling. It will point you towards the factors you need to modify to control these risks.

What does the law say?

The Manual Handling Operations Regulations 1992 set out a clear hierarchy of measures for dealing with risk likely to cause harm:

- avoid hazardous manual handling operations
- assess any manual handling operations that cannot be avoided
- reduce the risk of injury to as low as reasonably practicable

Structure of the MAC

There are three types of assessment that can be used:

- lifting operations (pages 3-7);
- carrying operations (pages 8-12);
- team handling operations (pages 13-17).

For each type of assessment there is an assessment guide and a score sheet to complete at the end of the assessment.

When not to use the MAC

Using the MAC is not appropriate for:

- manual handling operations involving pushing and pulling (see HSE's guidance booklet L23 *Manual handling: Manual Handling Operations Regulations 1992: Guidance on Regulations*);
- assessing people handling (see HSE's *The A systems approach*);
- assessing workplace risks associated with Assessment of Repetitive Tasks of the upper limbs (the ART tool).



Health and Safety
Executive

Risk assessment of pushing and pulling (RAPP) tool



INDG476
Published 2016

Introduction

This tool is designed to help assess the key risks in manual pushing and pulling operations involving whole-body effort, eg moving loaded trolleys or roll cages, or dragging, hauling, sliding or rolling loads.

It is intended to be used alongside the *Manual handling assessment charts (the MAC tool)* which helps assess lifting and carrying operations, and follows a similar approach to that tool. It is aimed at those responsible for health and safety in workplaces and will help you to identify high-risk pushing and pulling activities and check the effectiveness of any risk-reduction measures.

Structure of the tool

There are two types of pushing and pulling operations you can assess using this tool:

- moving loads on wheeled equipment, such as hand trolleys, pump trucks, carts or wheelbarrows (Section A);
- moving loads without wheels, which might involve actions such as dragging/sliding, churning (pivoting and rolling) and rolling (Section B).

For each type of operation there is a flow chart, an assessment guide and a score sheet.

The flow charts provide an overview of the risk factors and assessment process, while the assessment guides provide information to help you determine the level of risk for each factor.

The tool is **not** appropriate for assessing pushing and/or pulling operations involving:

- just the upper limbs, eg pushing buttons/knobs, pulling levers or moving loads which are on a conveyor (see *Upper limb disorders in the workplace HSG607*);
- just the lower limbs, eg pushing on pedals, or with the feet;
- powered handling equipment.

Use of the tool may not comprise a full risk assessment. HSE's guidance booklet L23 *Manual handling: Manual Handling Operations Regulations 1992: Guidance on Regulations* contains more information on conducting full risk assessments. Always consider individual and psychosocial issues when completing the RAPP score sheet.

Page 1 of 15

Assessment of repetitive tasks of the upper limbs (the ART tool)

Guidance for employers



INDG438
Published 03/10

The assessment of repetitive tasks (ART) tool is designed to help you risk assess tasks that require repetitive moving of the upper limbs (arms and hands). It helps you to assess some of the common risk factors in repetitive work that contributes to the development of upper limb disorders (ULDs).

ART is aimed at those responsible for designing, assessing, managing and inspecting repetitive work. It can help identify those tasks that involve significant risks and where to focus risk-reduction measures. It will be useful to employers, safety representatives, health and safety practitioners, consultants and ergonomists.

Further information on ART, including online training on how to use the tool, can be found at www.hse.gov.uk/msd/uld/art.



Manual Handling – Some Considerations

- Posture

- Is the worker required to take up a difficult position to reach or place object ?
- Does the worker need to hold the object above head height, at arms length etc. ?

- Load Factors

- Weight
- Size, Shape
- Cohesive object or can change shape easily ?
- Dirty or clean ?

} Rubbish bags

- Ease of handling

- Grip with hands ?
- Good handles available ?
- Lifting aids/trolley/sack barrow etc.



Manual Handling

High-risk Work Practice

- ▲ Conveying loads in awkward shapes, big, unwieldy or unstable loads



- ▲ Conveying loads which are too heavy and beyond a worker's capacity



- ▲ Conveying loads on an unstable surface



- ▲ Repetitive and/or long duration of conveyance work



- ▲ Over-stretching while conveying, i.e. lifting from below mid-thigh or to above shoulder height



- ▲ Insecure grip and poor lifting position with feet too close together while conveying



- ▲ Carrying objects away from the body



- ▲ Twisting movements while conveying



- ▲ Obstructed pathway



Repetitive Physical Tasks

C4 Wrist posture

The wrist is considered to be bent or deviated if an obvious wrist angle can be observed.

The wrist is:

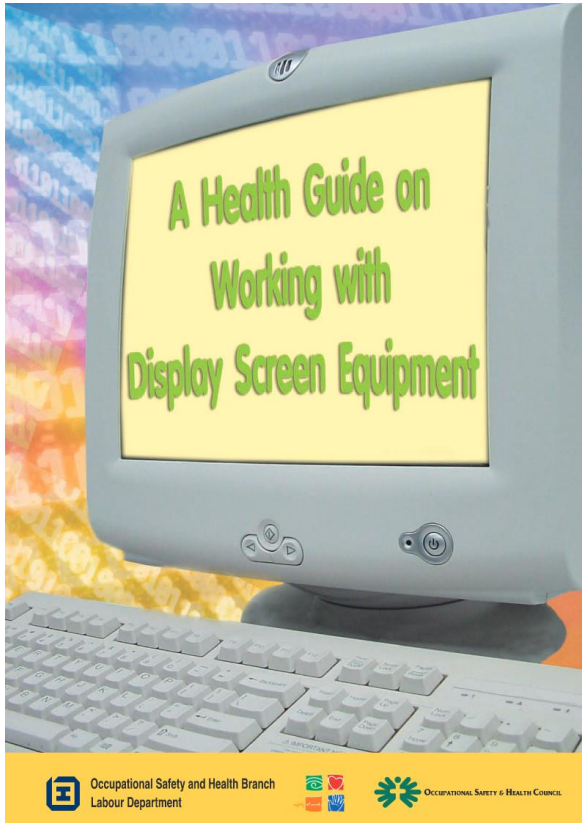
	L	R	
	Almost straight/in a neutral position	0	0
	Bent or deviated part of the time	1	1
	Bent or deviated more than half of the time	2	2

C5 Hand/finger grip

The hands or fingers hold objects in a:

	L	R	
	Power grip or do not grip awkwardly	0	0
	Pinch or wide finger grip for part of the time	1	1
	Pinch or wide finger grip for more than half of the time	2	2

Display Screen Equipment

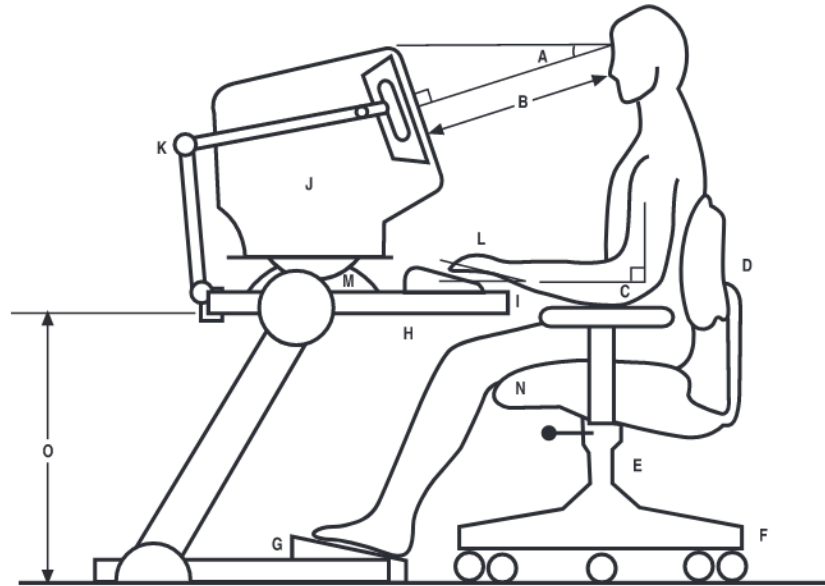


Occupational Safety and Health Branch
Labour Department



OCCUPATIONAL SAFETY & HEALTH COUNCIL

Diagram : The optimal workstation and working posture








- A. First line on screen at about or just below eye level
- B. Comfortable viewing distance, e.g. 35 - 60 cm for text of normal font size
- C. Forearm at about right angle to arm
- D. Backrest adjustable in height and tilt
- E. Adjustable seat height : allowing the user to sit with thighs approximately horizontal, lower legs vertical and feet resting firmly on the floor
- F. Stable base, with castors if necessary
- G. Firm footrest if required
- H. Adequate legroom
- I. Support for hands
- J. Screen at about right angle to line of sight
- K. Adjustable document holder if required
- L. Wrist kept straight or at most slightly inclined
- M. Screen support easily adjustable for rotation and tilting
- N. Rounded or scrolled edge seat pad
- O. Adjustable table height preferable



Display Screen Equipment

- Safety Office [arranges](#) on-site training provided by OSHC
- Multiple opportunities each year, according to demand


職業安全健康局
OCCUPATIONAL SAFETY & HEALTH COUNCIL

[简体](#) [繁體](#)


Main Page
Member Zone

OSH Training
Enrollment Procedure
Location
Subscription Form
Print

- ☉ New Courses
- ☉ Training Programmes
- ☉ In-House Training
- ☉ Youth Training
- ☉ Overseas Training
- ☉ Joint Courses

【Training Programmes】

The Council offers a good variety of quality training programmes to fulfill the increasing needs of the society.




Seminar Calendar
Introduction

Certificate Of Competence Courses

(DSEA)Certificate of Competence in Display Screen Equipment Assessment

The Occupational Safety and Health (Display Screen Equipment) Regulation requires that the person responsible for a workplace shall take steps to reduce any risks in a Display Screen Equipment (DSE) workstation identified in a risk assessment to the lowest extent as is reasonably and assessing the risk to the safety and health of users of a workstation; deciding whether existing precautions are adequate; and recording the findings.

After completing the course, participants will be able to know the techniques for carrying out risk assessment in a workstation. They will also develop an understanding on the various health hazards and the corresponding control measures in connection with the use of DSE.



Highlights :	<ol style="list-style-type: none"> 1. Occupational Safety and Health (Display Screen Equipment) Regulation 2. Health hazards arising from the use of DSE 3. Risk assessment in a DSE workstation 4. Common control measures 5. Case studies and practical exercises
Duration (Hour) :	6 hours
Instructor :	Professional or OSHC consultant
Language :	Cantonese supplemented with Chinese notes
Prerequisites :	<ol style="list-style-type: none"> 1. Completion of secondary education (F.5 under HKCEE or F.6 under HKDSE) or above or equivalent (applicants should provide copies of certification) and 2. Ability to read and write in Chinese
Remark :	<ul style="list-style-type: none"> • Award of Certificate : 100% attendance and pass the end-of-course examination and course assignment. • Students who do not have sufficient attendance are not allowed to attend the examination. • Students who are absent from the class, late or leave earlier for more than 30 minutes in class will be regarded as absent for that session.

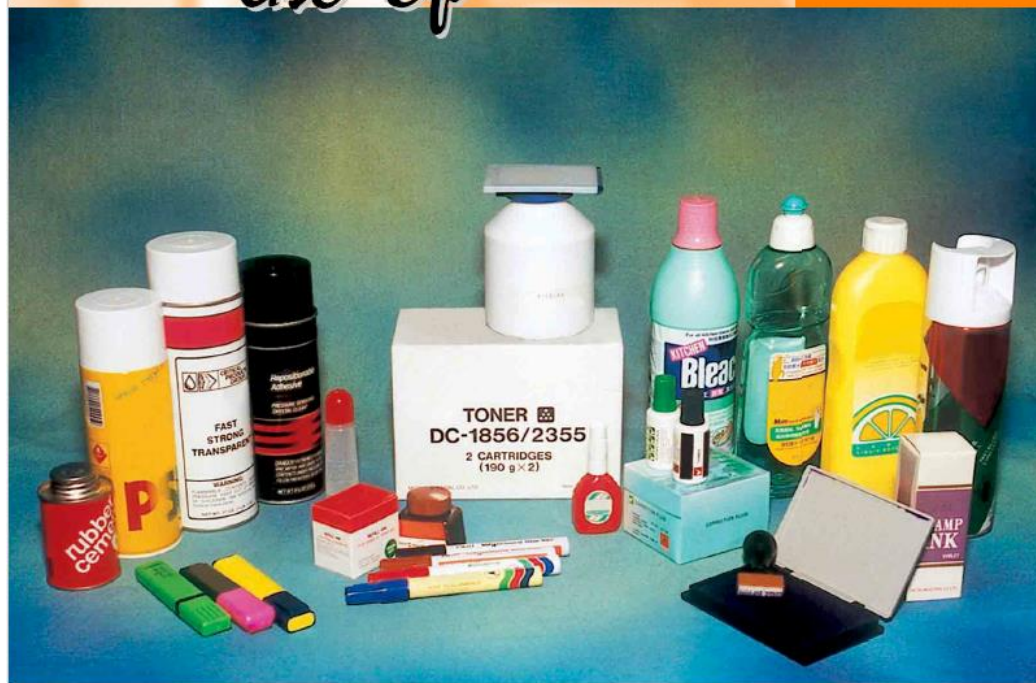


Chemicals

A Simple Guide to Health Risk Assessment

Office Environment Series OE 6/2003

Use of Chemicals



Chemicals

- A common perception is that because some chemical products can be purchased in shops they are somehow “safe”
 - In practice the perceived safety is because in a domestic setting the chemicals are used occasionally
 - In the workplace the same products may be used in larger quantities and more often
 - In terms of risk domestic chemicals such as concentrated bleach are similar to concentrated hydrochloric or sulphuric acids used in labs
- Spray adhesive
 - Spray paint
 - Toilet cleaners
 - Disinfectants
 - Bleaches
 - Insecticides



Cleaning Chemicals

Clorox® Regular-Bleach,

Revision Date June 12, 2015

2. HAZARDS IDENTIFICATION


Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1

GHS Label elements, including precautionary statements

Emergency Overview

Signal word	Danger		
Hazard Statements	Causes severe skin burns and eye damage Causes serious eye damage		
			
Appearance	Clear, pale yellow	Physical State	Thin liquid
		Odor	Bleach

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling.
Wear protective gloves, protective clothing, face protection, and eye protection such as safety glasses.

Sigma-Aldrich.

www.sigmaldrich.com

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Version 8.4
Revision Date 18.03.2023
Print Date 06.09.2023
GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name : Hydrochloric acid

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Corrosive to Metals (Category 1), H290
Skin corrosion (Sub-category 1B), H314
Serious eye damage (Category 1), H318
Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal Word

Danger

Hazard statement(s)

H290

May be corrosive to metals.

H314

Causes severe skin burns and eye damage.

H335

May cause respiratory irritation.

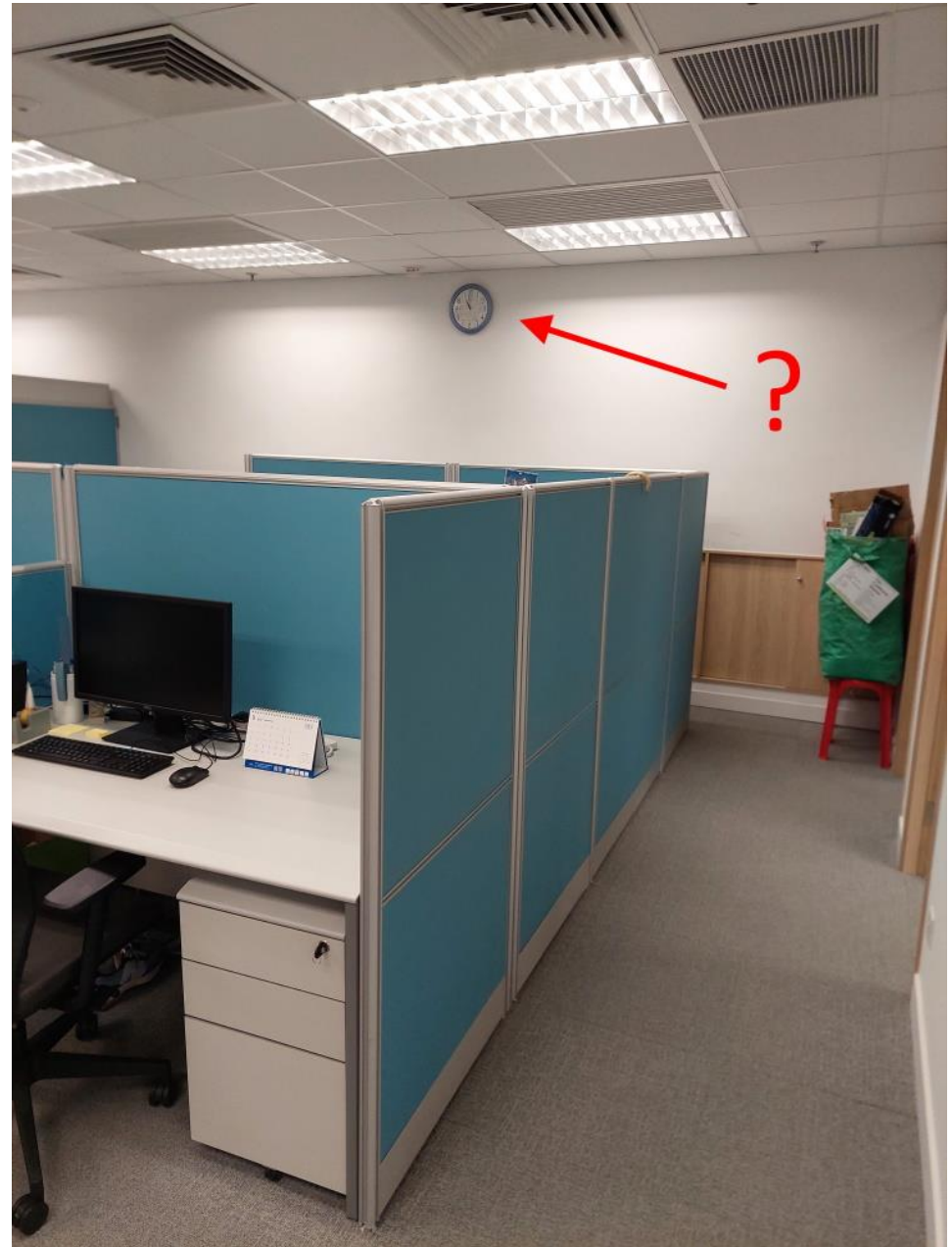


Chemicals

- Store and use chemicals correctly and away from food
- Read and follow advice on the warning labels
 - Pay attention to warnings about effects on health
 - Eg. Inhalation, skin contact
 - Spray glue, spray paint etc.
- Avoid mixing different products
- Avoid over-stocking
- Wear robust gloves, and eye protection when using chemical cleaning agents. Wear overall if frequent user
- Redesign task to avoid needing to bring eye/face close to a place where chemicals could spill
- Some oil-based chemicals should not be disposed of via drains



Moving Clocks/Changing Clock Batteries





Ensuring a safe and healthy environment
for the University Community



*For laboratory emergency
Please dial 3917 2882
help desk manned 24/7*

Biosafety

Chemicals & Waste

Construction Safety

Environmental Hygiene

Laboratory Safety

Radiation



Training

The Safety Office provides and arranges different training courses for University staff and students. We work with Faculties and Departments, Human Resources, and CEDARS. These courses are either conducted by our Office's professional staff (free of charge) or by course vendor (charged at cost). The major topics include:

Mandatory Safety Training

First Aid

Display Screen Equipment Assessors

[Learn More ^](#)

Training provided for Faculties and Departments

Safety Office – Specialist Technical Support

Construction and Event Safety Team

- To comment and endorse event submissions provided by Registry, Cedars and other HKU units in line with statutory safety requirements before commencement of the corresponding event.
- To carry out safety inspections on events under Cedars, Registry and other HKU units and make advices or recommendations on improvement.
- To help Estates Office maintain an effective safety management system for their operation and activities in line with the Safety Management Regulations requirements.
- To comment and approve construction safety submissions provided by Estates Office and other HKU units in line with statutory safety requirements before commencement of the corresponding project.
- To carry out safety inspections on construction projects under Estates Office and other HKU units and make advices or recommendations on improvement.
- To investigate related accidents or incidents to find out their cause(s) and make recommendations for minimizing or even eliminating reoccurrence of similar cases.
- To provide or organize training(s) or workshop(s) to the relevant HKU stakeholders to continually upgrade or refresh their safety knowledge if appropriate.



Safety Office

- * Director Dr Paul Hunt
- * Assistant Director Dr Arthur Leung
- * Biological Safety Dr Paul Hunt
- * Radiation Dr Charles Chan
- * Chemical Safety/ DG/Waste Ms. Mabel Lau
- * Occupational Hygiene Ms. Florence Lam
- * Construction and Events Mr. CP Wong

Emergency Call Centre 3917 2882. Manned 24/7. Have Safety Office out of hours contact details for Laboratory Safety Emergency

Tel : 3917 2400
Email: safety@hku.hk

Fax: 2858 7159
<http://www.hku.hk/safety>

