

校園安全-校舍常見的危險及 風險評估的概念

Safety in School-Common Hazards in Schools and Concept of Risk Assessment



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職業安全健康局 簡介

Occupational Safety and Health Council Profile

- 於1988年根據《職業安全健康局條例》成立的法定機構。
- A statutory body established under the **Occupational Safety and Health Council Ordinance** in 1988
- 致力提高香港的**職安健水準**，保障寶貴的人力資源。
- To enhance **occupational safety and health (OSH)** and sustain the valuable workforce of Hong Kong



The background of the slide features a warm, orange-toned illustration. It depicts several silhouettes of people in various professional and casual attire, including caps and backpacks, walking across a stylized globe. The globe is represented by a grid of latitude and longitude lines. The overall composition suggests a global or multicultural context for the text.

我的工作安全嗎？
Is my job safe?

5S 概念

The Concept of 5S

Categorize “necessary” & “unnecessary” objects and dispose/handle objects not needed



分別「要」與「不要」的物品及丟棄或處理「不要」的物品

1 整理

區別及處理要和不要的物品，以騰出工作場所空間

2

存放

有條理地儲存和放置物品，使員工易於取用，節省尋找時間



物品有特定的存放位置

以物品標籤說明物品名稱及存放位置



Systematic storage for easy identification and saving time for locating objects

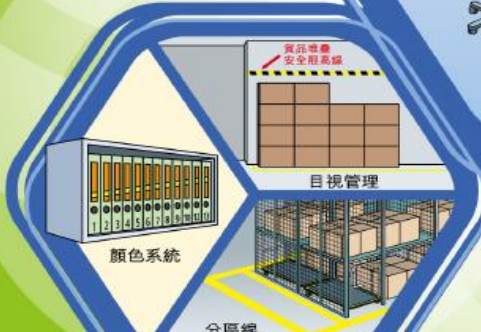


5

修養

各人自律守規、自發改善，保持良好工作場所整理習慣及遵守安全規則

Self-discipline & proactive improvement to sustain the practice of tidying up and following safety rules in a good working environment



顏色系統

目視管理

4

標準

Standardize & systemize tidy-up, storage & cleaning to establish good safety habits & culture

將整理、存放及清潔標準化及制度化，幫助建立良好安全習慣及文化

3

清潔

使工作場所乾淨無垢，保持環境及工具狀況良好，減少意外



Keep the environment dustless and tools in repair to minimize accidents

- 整理 **Organisation (Seiri)**
- 存放 **Neatness (Seiton)**
- 清潔 **Cleanliness (Seiso)**
- 標準 **Standardisation (Seiketsu)**
- 修養 **Discipline (Shitsuke)**

離地工作

Working above the Ground

- 更換光管
- Replace fluorescent tubes
- 裝飾佈置（樓邊掛橫額、彩旗等）
- Decorative settings (banners, color flags, etc.)
- 園藝工作（斜坡上工作、樹上工作）
- Gardening (working on slopes or trees)
- 清潔高位
- Clean high places
- 修理設施
- Repair facilities

離地工作

Working above the Ground

- 安全？不安全？
- Safe? Unsafe?

不安全梯具

Unsafe Ladders

- 結構不穩固
- unstable structure
- 過高
- too high
- 沒有安全標準
- do not conform with safety standard

The background of the slide features silhouettes of several people walking up a set of stairs. The silhouettes are in shades of brown and orange, matching the overall color scheme. The people are in various stages of ascent, with some carrying bags or boxes. The stairs are depicted with simple lines, and the overall scene is set against a light, warm-toned background.

意外原因

Causes of Accidents

- 站在頂級位置，失去平衡
- Lose balance when standing on the top step
- 使用損壞梯具
- Use damaged ladders
- 手持重物上落梯具
- Carry heavy objects
- 穿著濕滑的鞋
- Wear slippery shoes

梯具標準

Safety Standards for Ladders

- 英國BS 2037
- British Standard BS 2037
- 歐盟普遍採用EN131
- EU commonly adopts EN131
- ANSI A14.5應用於可移動纖維梯具
- ANSI A14.5 applies to portable glass fiber ladders

梯具應有的標準

Criteria for Choosing Ladders

1. 安全標準
Safety standards
2. 生產商額定的安全負載重量
Safe working load set by
manufacturers
3. 梯具安全使用指引
Safety instruction
4. 其他例如警告
Others, e.g. warning

梯具安全檢查

Inspection of Ladders

- ✓ 鋒利角位
- ✓ Sharp corners
- ✓ 鬆脫部份
- ✓ Loose part
- ✓ 撞凹
- ✓ Dented
- ✓ 裂縫
- ✓ Cracks
- ✓ 失掉部份
- ✓ Missing part
- ✓ 破損
- ✓ Damaged
- ✓ 屈曲梯級或扶手
- ✓ Bent rungs or handles
- ✓ 缺少梯級
- ✓ Missing rungs
- ✓ 沒有防滑膠腳
- ✓ Without slip-resistant ladder pad

安全使用梯具

Safe Use of Ladders

- 梯具只可用於上落。如需離地工作，必須使用安全梯台或工作台，並且佩戴附有帽帶的安全帽。
- Ladders can only be used for access and egress. Step platforms or work platforms and safety helmets with chin straps must be used if work-above-ground is needed.
- 上落梯具時應確保「三點接觸」，即身體四肢中的三肢任何時間均接觸梯具。
- Users should ensure “three-point contact” when using a ladder, which means that three limbs should contact with the ladder at all times.

The background features a series of overlapping, semi-transparent silhouettes of people in various work-related poses. Some are standing, some are leaning over, and one appears to be using a tool. The overall color palette is a warm, light orange or beige, creating a professional and safety-oriented atmosphere.

安全使用手工具

Safe Use of Hand Tools

- 選用合適之手工具，經常進行檢查及確保手工具沒有損壞 Choose appropriate hand tools & always inspect to ensure they are not damaged
- 須抹去手工具上的油污，以防因滑溜而造成意外 Remove oil on tools to prevent them from slipping out of hand accidentally
- 正確地使用手工具，不可用作別的用途 Use tools correctly & not for undesignated purposes

電力安全

Electricity Safety

- 定期檢查及保養電力裝置
- Periodic inspection & maintenance of electrical installations
- 如非專業人士，不應自行修理電器
- Only repair appliances by competent persons
- 電掣房於非使用時應上鎖
- Lock switch room when it is not in use

防火安全

Fire Safety

- 切勿阻塞走火通道、緊急出口及滅火設備
- Don't obstruct means of escape, emergency exits & fire extinguishers
- 定期檢查及保養滅火筒
- Periodic inspection & maintenance of fire extinguishers
- 有足夠人員接受防火訓練
- Fire prevention training for sufficient number of people

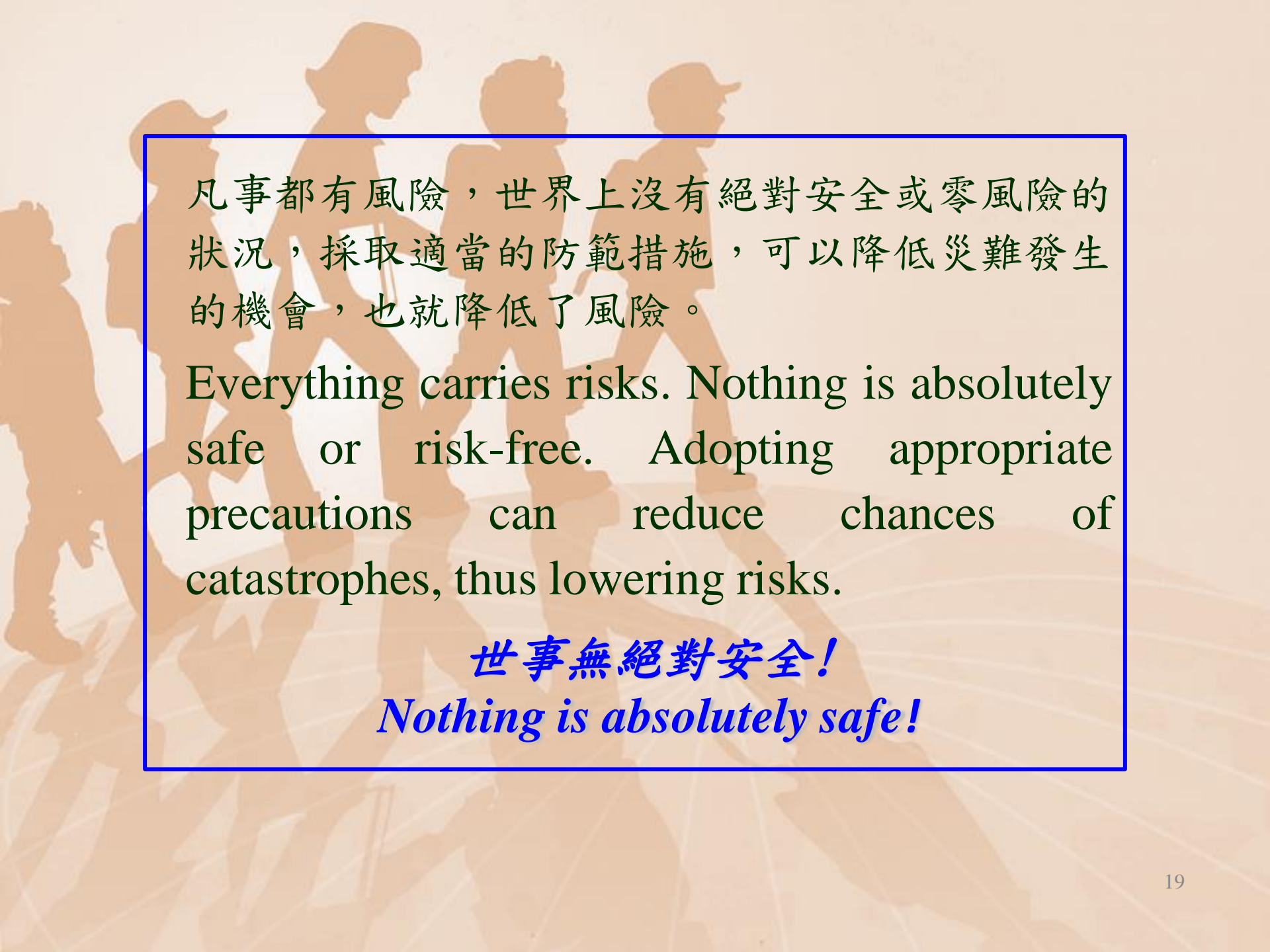


風險評估 (Risk Assessment)



風險評估是否很深奧？ Is risk assessment very complicated?

- 未必！我們常進行風險評估，速度亦非常快。
- **Not necessarily! Risk assessment can be conducted efficiently.**

The background of the slide features a series of orange silhouettes of people walking in various directions, creating a sense of movement and activity. The silhouettes are layered, with some appearing in front of others, and they are set against a light orange background with a subtle grid pattern.

凡事都有風險，世界上沒有絕對安全或零風險的狀況，採取適當的防範措施，可以降低災難發生的機會，也就降低了風險。

Everything carries risks. Nothing is absolutely safe or risk-free. Adopting appropriate precautions can reduce chances of catastrophes, thus lowering risks.

世事無絕對安全!
Nothing is absolutely safe!

風險評估的計算

Estimation of risk

- 風險是指某危害（危險）事故發生的可能性兼嚴重性，因此計算程式可寫成：
- Risk is the likelihood and severity of a hazardous (dangerous) incident. The formula is:

$$\begin{array}{l} \text{風險} \\ \text{Risk} \end{array} = \begin{array}{l} \text{某危害事故發生的可能性} \\ \text{Likelihood of a hazard} \end{array} \times \begin{array}{l} \text{某危害事故的嚴重性} \\ \text{Severity of a hazard} \end{array}$$

危害嚴重性評級

Hazard Severity Rating

嚴重性 Severity	描述 Description
1. 輕微傷害 Slightly harmful	<ul style="list-style-type: none">- 表面受傷、輕微割傷及擦傷、塵埃引致眼睛刺痛 Superficial injuries, minor cuts and bruises, eye irritation from dust
2. 傷害 Harmful	<ul style="list-style-type: none">- 割傷、燒傷、腦震盪、嚴重扭傷、輕微骨折 Lacerations, burns, concussions, serious sprains, minor fractures- 失聰、皮膚炎等 Deafness, dermatitis, etc.
3. 嚴重傷害 Extremely harmful	<ul style="list-style-type: none">- 斷肢、嚴重骨折、多處受傷、死亡 Amputations, major fractures, multiple injuries, fatal injuries- 職業性癌症、其他引致壽命縮短的嚴重疾病、急性致命疾病 Occupational cancer, other severe life shortening diseases, acute fatal diseases

意外事故發生的可能性

Probability of Occurrence

可能性 Probability or likelihood	描述 Description
A. 很有可能/時常 Likely/frequent	重複發生/事故已預料到的 Occur repeatedly/event expected
B. 不大可能 Unlikely	雖可想像到，但可能性極微 Rather remote, though conceivable
C. 極不可能 Highly unlikely	不可能，發生機會接近零 So unlikely that probability is close to zero

風險矩陣

Risk Matrix

可能性 Probability/ likelihood	嚴重性Severity 1. 輕微傷害 Slightly harmful	2. 傷害 Harmful	3. 嚴重傷害 Extremely harmful
C. 極不可能 Highly Likely	微不足道風險 Trivial Risk	輕微風險 Minor Risk	中等風險 Moderate Risk
B. 不大可能 Unlikely	輕微風險 Minor Risk	中等風險 Moderate Risk	重大風險 Substantial Risk
A. 很有可能 Likely	中等風險 Moderate Risk	重大風險 Substantial Risk	極大風險 Extreme Risk

不同風險程度的建議

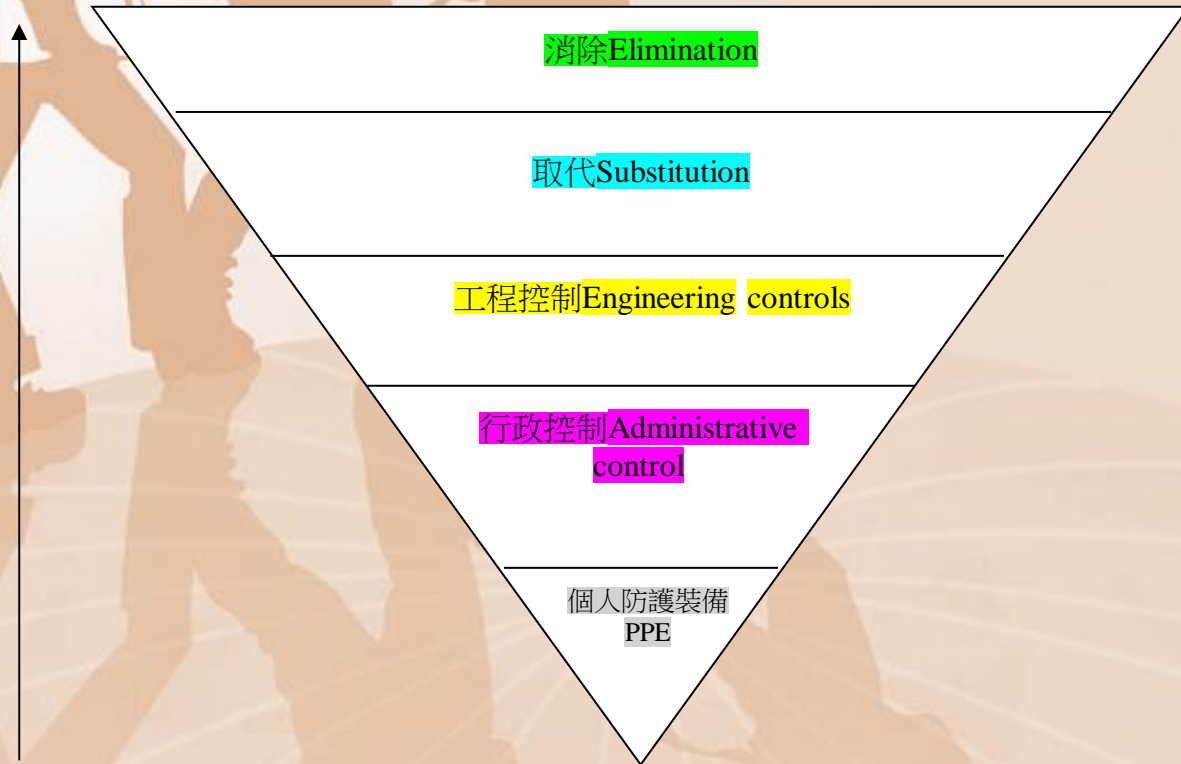
General Recommendations of Different Risk Levels

風險程度 Risk Level	一般建議措施 General Recommendations for control measures
極大風險 Extreme Risk	<p>應考慮暫停相關工作程序/活動；除非已執行改善措施並有效降低風險程度，否則不應重開相關工作程序/活動。</p> <p>Discontinuation of the concerned process/activity should be considered; improvement actions should be put in place before re-starting the activity/process.</p>
重大風險 Substantial Risk	<p>積極尋找方法降低此類風險的風險程度；優先安排資源以執行控制措施，籍以降低風險程度。</p> <p>Opportunity to reduce the risk level should be actively sought; prioritize resources to develop control measures so as to further reduce the risk level.</p>
中等風險 Moderate Risk	<p>尋找方法降低此類風險的風險程度；清晰界定及分配人員責任以執行控制措施以確保風險已被妥善控制。</p> <p>Ways to reduce the risk level should be explored; clearly define and allocate responsibilities to implement control measures for ensuring good control of these risks.</p>
輕微風險 Minor Risk	<p>持續執行現有措施以控制此類風險。</p> <p>Routine control measures to manage the risks.</p>
微不足道風險 Trivial Risk	<p>此類風險可被接受，但必須持續監測以確保風險已被妥善控制</p> <p>Risks are considered tolerable but continuous monitoring is recommended to ensure that they are well controlled.</p>

風險控制等級

Hierarchy of Control

有效程度最大
Most effective



有效程度最小
Least effective

參考資料：

1. 安全管理工作守則，勞工處
2. 風險控制等級，美國國家職業安全衛生研究所
3. BS8800職業健康及安全管理制度 – 指引，英國標準協會

Reference Information:

1. Code of Practice on Safety Management, Labour Department
2. Hierarchy of Controls, The National Institute for Occupational Safety and Health
3. BS8800 Occupational Health and Safety Management System – Guide, British Standard Institute

風險評估報告

Risk Assessment Report

項目 Item	位置 Location	工作程序/ 設施/裝置 Operation/ Facility/ Equipment	危害 Hazard	有可能受 影響人士 People Potentially at Risk	可引致 的後果 Potential Effect	後果的 嚴重性 Severity of Effect	後果的可 能性 Probability/ Likelihood of Effect	風險程 度 Risk Level	現有控 制措施 Existing Control Measures	殘餘風險 程度 Residual Risk Level	建議控制措施 Recommended Control Measures
1	1樓走 廊 Corridor on 1/F	洗地 Cleaning the floor	滑倒 Slip	校內所有 人士 All people in campus	跌傷 Slip & fall injuries	1	A	中等 (Moderate) (1A)	工友穿 防滑鞋 Janitors wearing slip resistant shoes	中等 (Moderate) (1A)	<ul style="list-style-type: none"> • 安排放學後才洗地 • clean after school • 圍封清潔範圍 • enclose areas under cleaning • 在當眼處放置警告告示 • place warning signs in visible locations • 要求工友於同時 間內不可清潔過 大範圍 • limit the scope of cleaning

國際安全學校 認證計劃

International Safe Schools Program



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國際安全學校計劃 (ISSP)

目的 (Objective) :

- 通過學校的傷患預防推廣計劃，以營造安健校園環境，以保障教職員、學生及訪客的安全
- To protect S&H of teachers, staff, students & visitors by promoting injury prevention programs at schools and creating a safe school environment
- 如學校能達致 7 個基本準則，即可被確認成為「國際安全學校」
- Schools will be certified as “International Safe School” (ISS) if they meet 7 criteria

為何要成為國際安全學校？

Why do you want to become an ISS?

- 消除校園內潛在危害，營造安全校園 Eliminate potential hazards on campus and create a safe environment
- 引入系統化安全管理，預防意外發生 Introduce systematic safety management to prevent accidents
- 表明學校對安全及健康的承諾 Demonstrate commitment to S&H
- 提升學校形象 Improve school image
- 盡社區一份子的責任，為構建安全社區出力
Contribute to the building of safe community and fulfil obligations as a part of the community

國際安全學校準則 (ISS Criteria)

1. 安全學校組織架構
Safety School Organization
2. 安全學校政策
Safe school policy
3. 安全計劃的推廣及實施
Promotion and implementation of
safety program
4. 關注高風險族群及環境
Concerns on high risk group and
environment

國際安全學校準則 (ISS Criteria)

5. 意外事故的記錄及分析

Accident/incident reporting and analysis

6. 安全指標

Safety evaluation

7. 社區關係及經驗交流

Community relationship and experience sharing

成為國際安全學校之流程

Flow of Becoming Safe Schools

1. 向職安局提出申請
Apply to OSHC
2. 初次校園探訪（差距分析）
First school visit (gap analysis)
3. 校方根據差距分析報告進行改善
For schools to improve according to gap analysis report
4. 職安局提供指導並進行中期探訪
Mid-term visit & recommendation from OSHC

成為國際安全學校之流程

Flow of becoming Safe Schools

5. 校方完成改善後，由職安局進行確認探訪
On-site verification assessment by OSHC after improvements
6. 校方提交「安全學校計劃」
Schools to submit “Safe Schools projects”
7. 校方被確認為「國際安全學校」
Designated as “ISS”
8. 每3年進行再確認
Validation for every 3 years



費用全免
**FOR
FREE**

國際安全學校證書 ISS Certificate



國際安全學校計劃

「國際安全學校計劃」通過學校及社區的傷患預防推廣計劃，以保障教師、職員、學生及訪客的安全和健康。

國際安全學校計劃指引 ▶

「國際安全學校計劃」申請表格 ▶

獲確認國際安全學校名單 ▶

http://www.oshc.org.hk/tchi/main/services_support/safe_community/



謝謝!
THANK YOU!