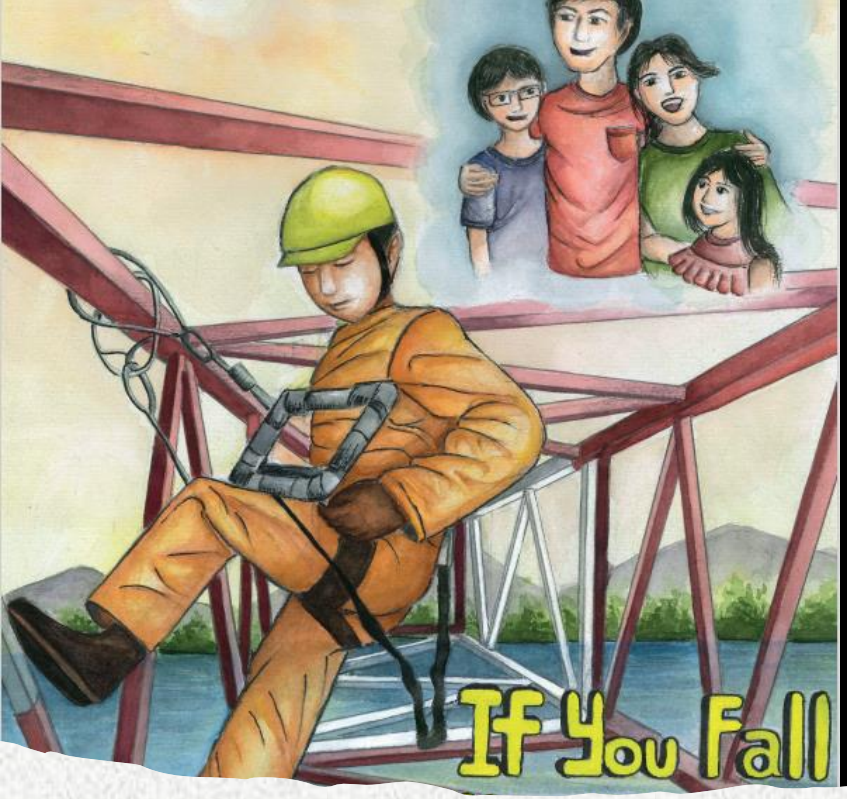
The WAH! Symposium

MINISTRY OF MANPOWER

Audrina Chua, Deputy Director (Operations)
Occupational Safety and Health Division



What we see on the ground

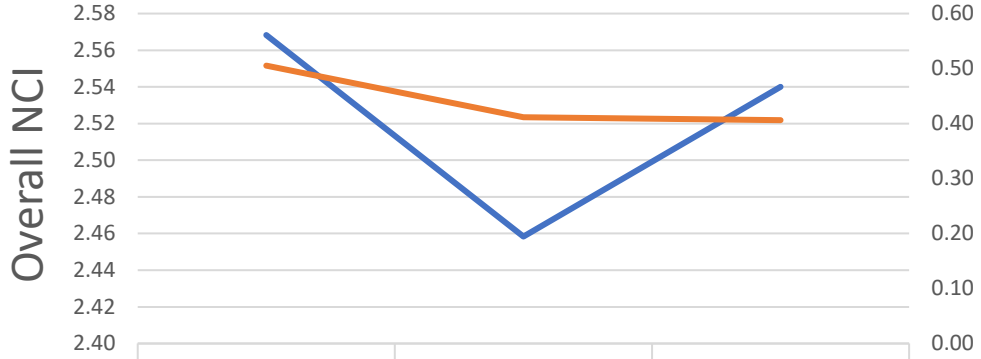
Analyze what went wrong

How to prevent

What we see on the ground

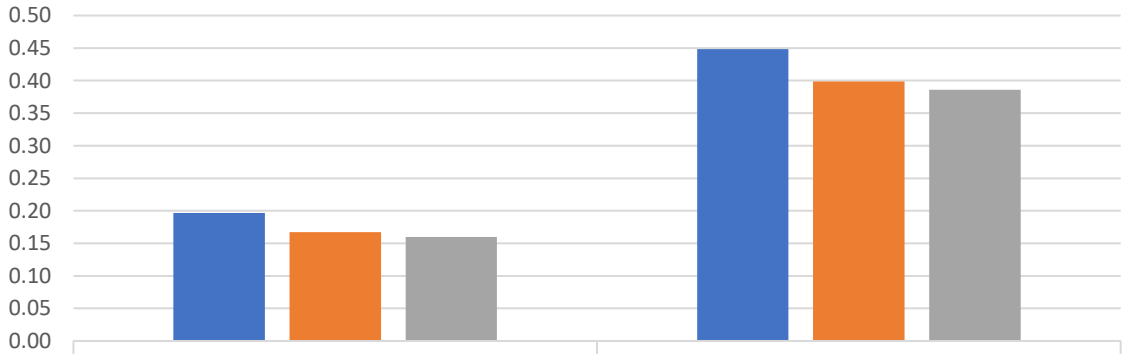
Overall, there has been reduction in WAH offences

Overall Non-Compliance Index (NCI) vs WAH-related NCI



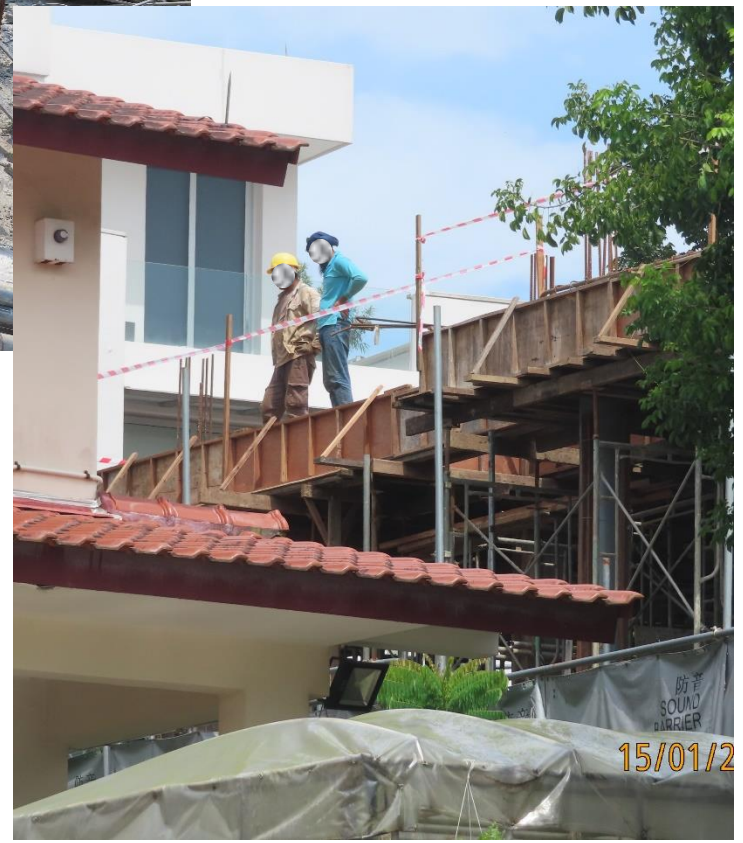
	2022	2023	2024
NCI	2.57	2.46	2.54
WAH-related NCI	0.51	0.41	0.41

Ratio of WAH-related findings to overall findings



	NCI ratio	CF ratio
2022	0.20	0.45
2023	0.17	0.40
2024	0.16	0.39

However, we continue to see severe lapses



Falling from height risks observed from inspections

Besides direct WAH risks, some unsafe practices put others at risk

Falling object from height risks observed from inspections

Case Study #1: Fall through partition board

Accident Description

- A worker was performing housekeeping works when he had a fatal fall of 4.7 metres through a partition board from level 1 to basement 1 of a building undergoing Addition & Alteration (A&A)

Investigation Findings

- No warning signs placed at or around the floor opening
- Workers not notified about the presence of floor opening

Outcomes

- Project Manager prosecuted for failing to ensure persons are aware of risks

How to prevent recurrence

Figure 3: Example of a fragile surface warning sign.

Accident could have been prevented if:

- Ensure floor openings are effectively covered, barricaded and labelled with warning signs.
- Establish and implement Fall Prevention Plan to address the hazard of falling into the opening when removing the cover.
- Effective management of construction materials and resources.

Case Study #2: Fall from tower scaffold

Accident Description

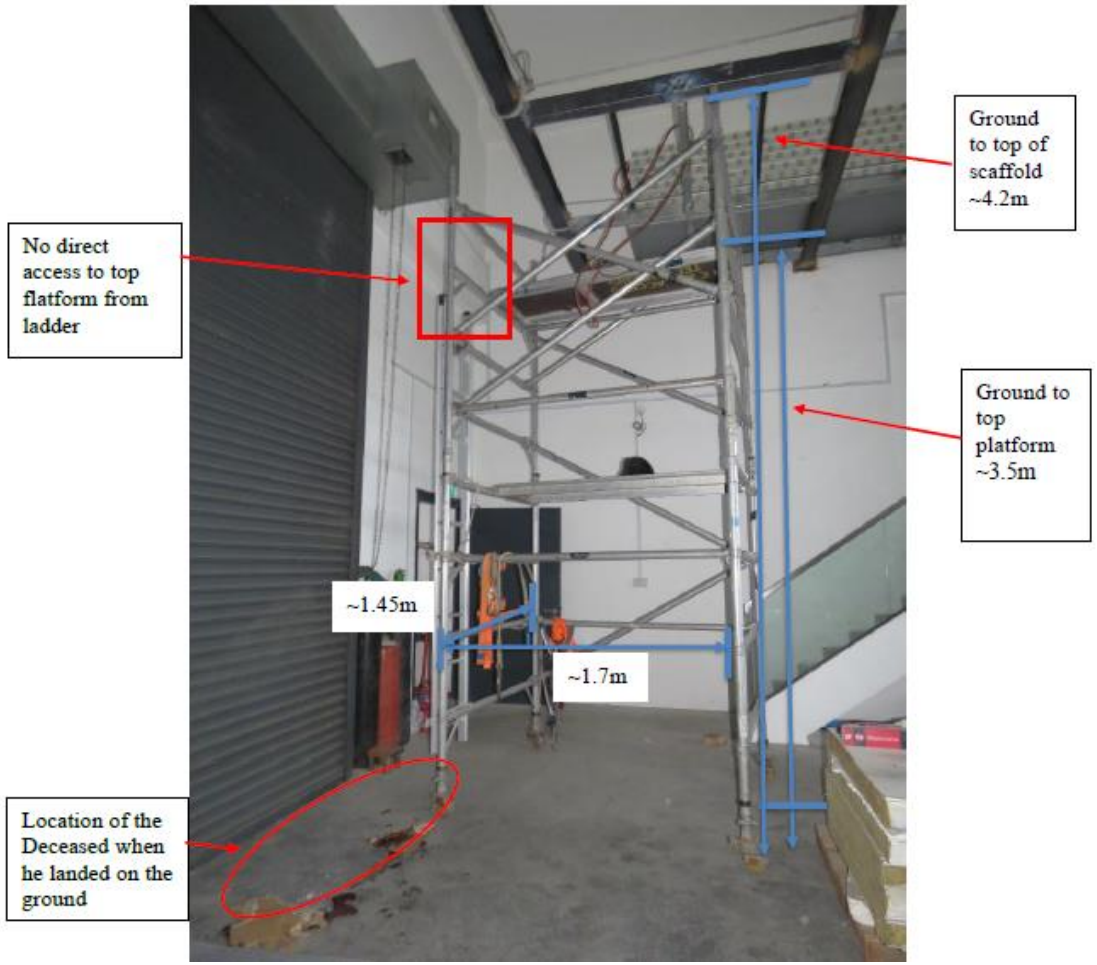
- A worker was standing on the top platform of a mobile tower scaffold when he fatally fell 3.5m off the platform when he was preparing for welding works.

Investigation Findings

- No proper construction of the mobile tower scaffold, i.e. no guardrails and toe-boards for every side of a work platform
- Improper use of the scaffold, i.e. locking of all four casters before use
- Worker's full body harness not anchored to any anchorage point.

Outcomes

- Officer of the company prosecuted



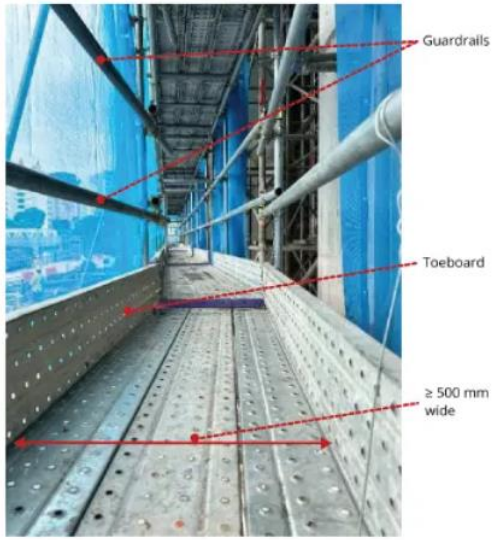
Such accidents can be prevented with the following measures:

- Provide guard rails and toe-boards on every side of a scaffold work platform more than 2m high.
- Allow only trained and authorised scaffold erectors to construct, reposition, repair or dismantle a scaffold. Employers must ensure that workers know the need for guard rails, toe-boards, and work platforms to render the work safe.
- Lock the castor wheels of the mobile tower scaffold before its use to prevent movement.

23 January 2025

WSH INSIGHTS

Working Safely with Metal Scaffolds

Install guardrails at all sides of every work platform. Install toeboards to prevent items from falling off the work platform. Provide ample working space at all work platforms.	Example of a work platform with guardrails, toeboard and ample working space 

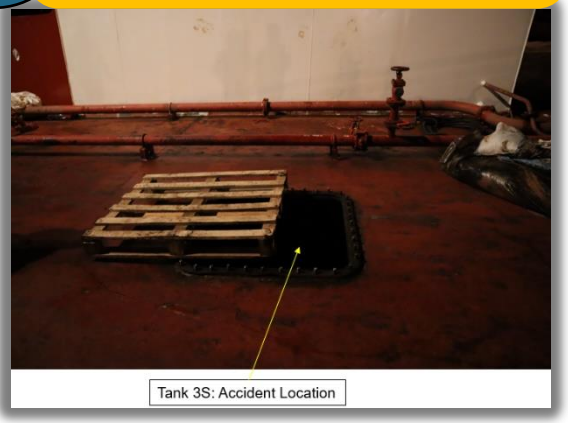
Analyze

- WSH Statistics

Drop in fall from heights fatal injuries

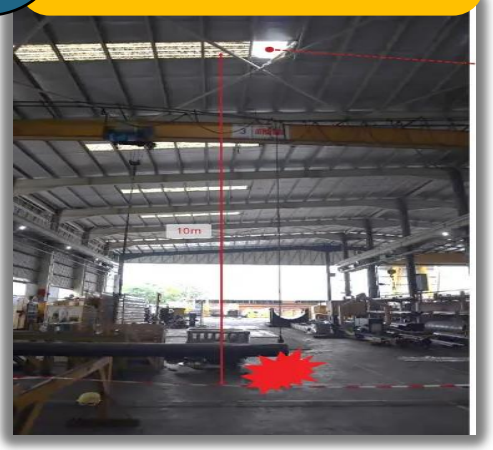
4 Jan — Worker fell 7.5m over the edge of an unfinished platform

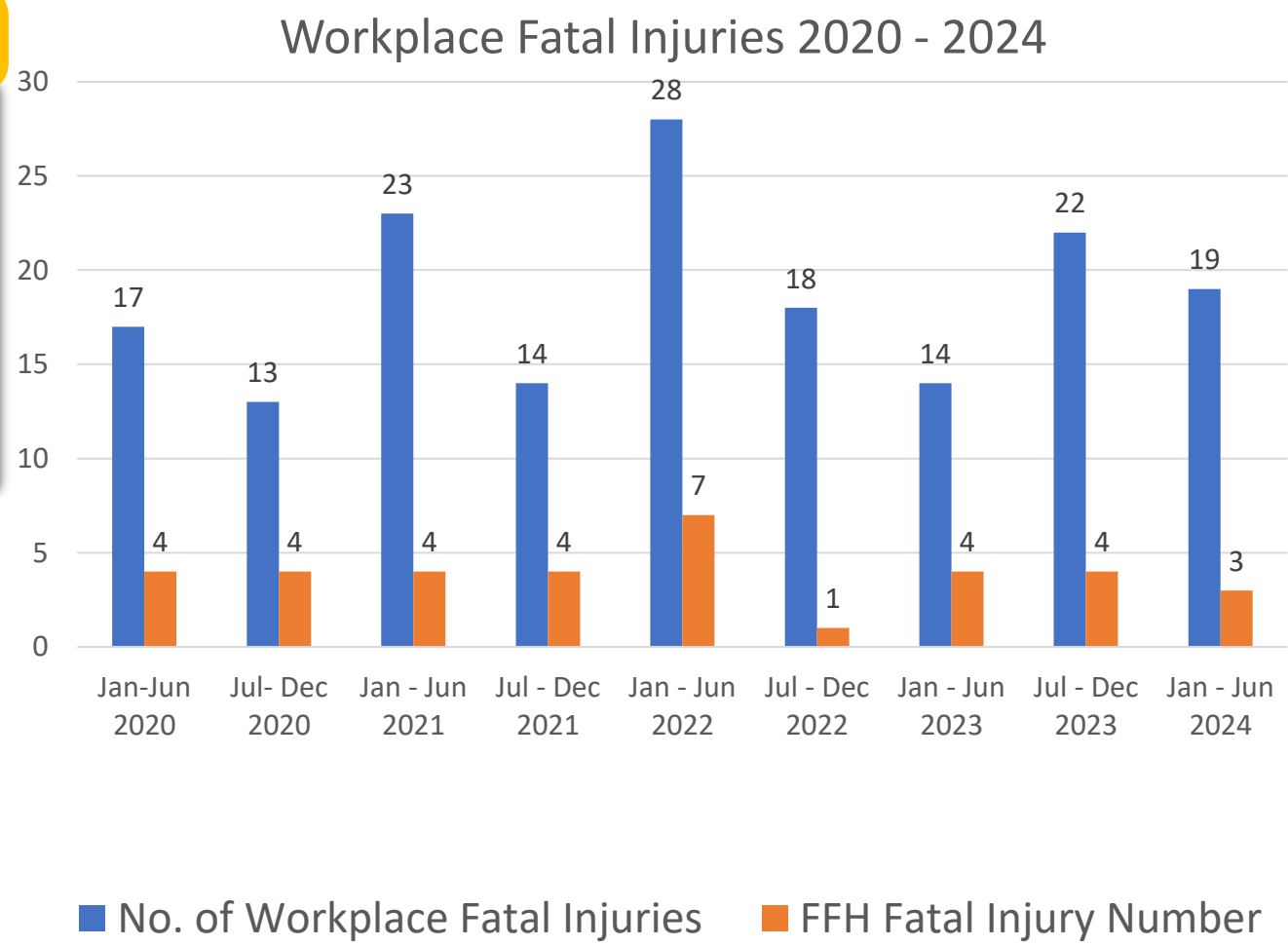
11 Mar — Fell through manhole into a sludge tank



12 Jun — Fall from aircon ledge

4 Dec — Worker fell through skylight





But FFH Major Injuries Increased

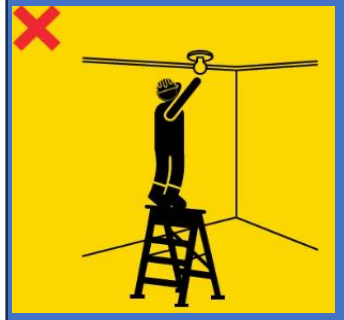
Top 3 Major Injuries Type

1. STF

2. Machinery Incidents

3. FFH

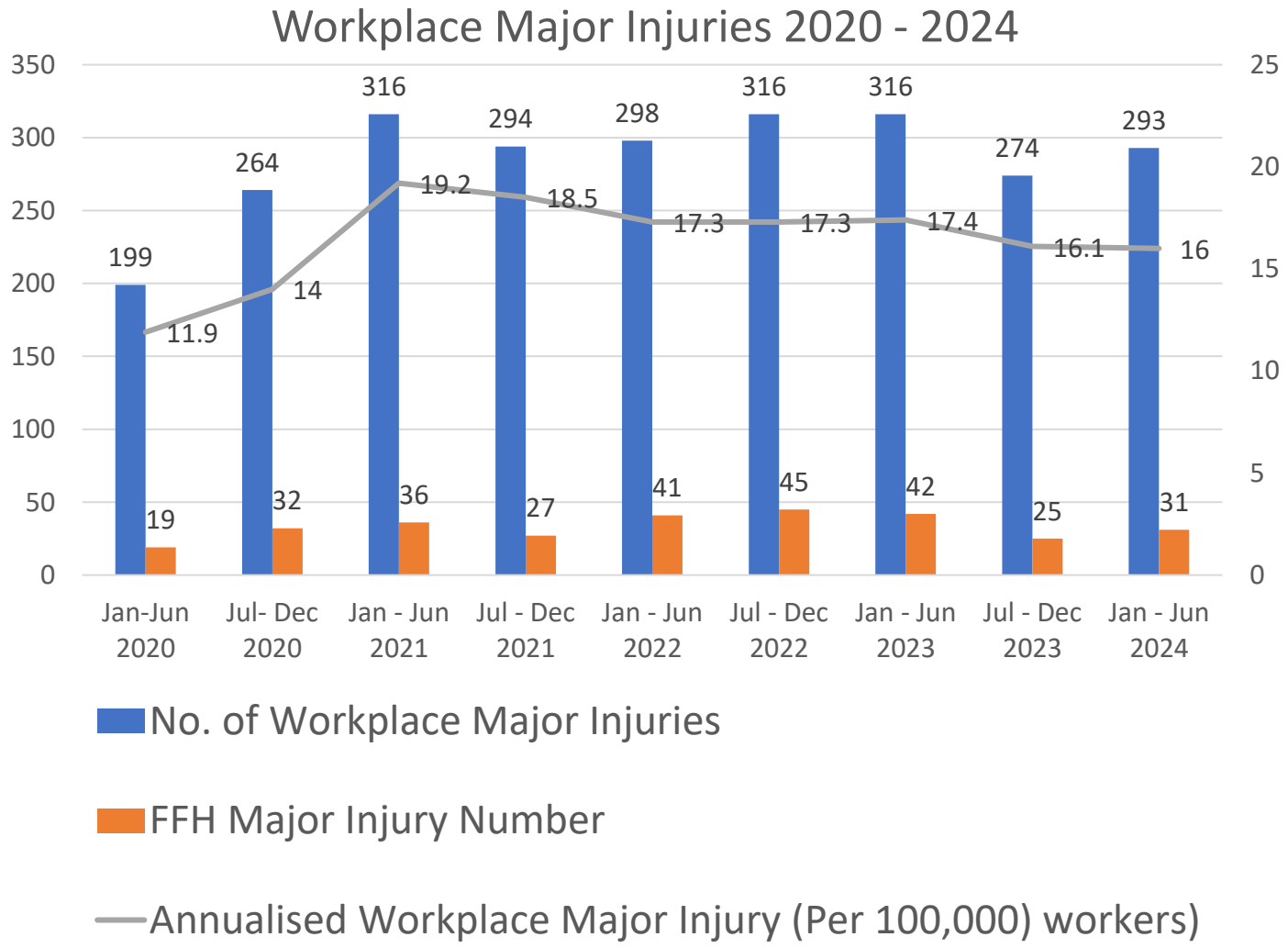
Top 3 FFH Major Injuries Type



1. Fall from ladder

2. Fall from structure

3. Fall from MEWP



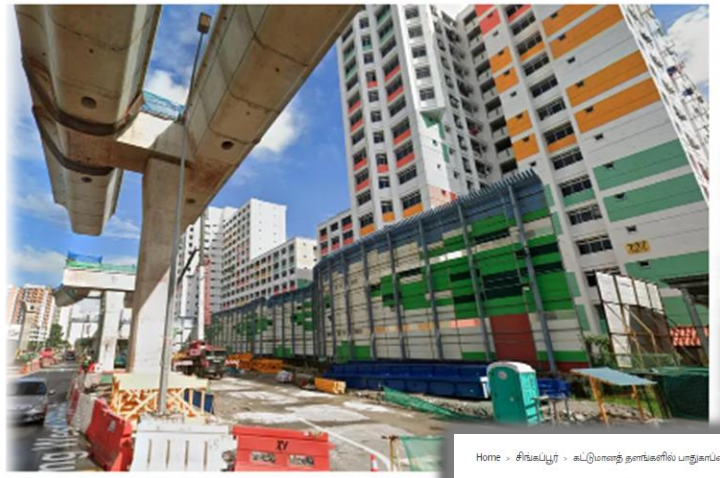
How to prevent

- ✓ Safety Awareness to public
- ✓ WSH Technology

Raising Public Awareness

9 construction sites where workers died in second half of 2024 had inadequate safety measures

Worker hospitalised after falling about 9m at Jurong Region Line site



Singapore

15 workplace deaths in construction sector in second half of 2024

MOM is investigating three workplace deaths in about two weeks.

Construction firms urged to take safety timeout after 10 workplace deaths in 4 months: MOM

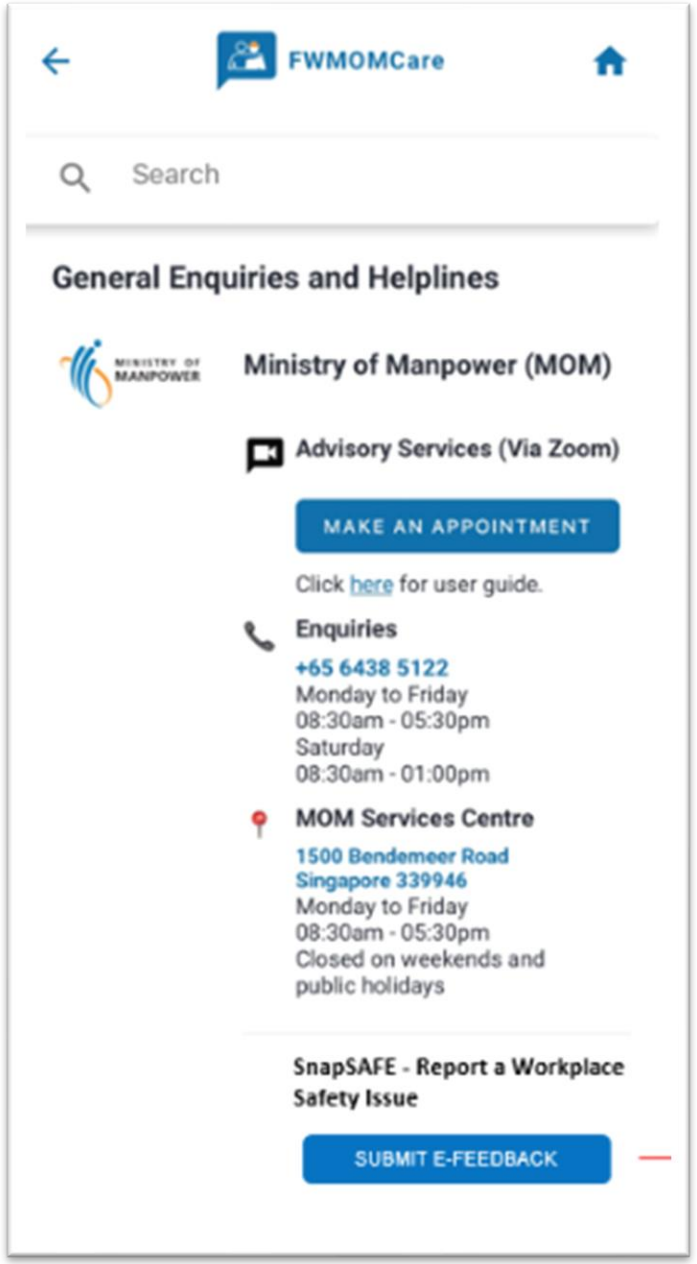
கட்டுமானத் தளங்களில் பாதுகாப்பை உறுதிசெய்யும் பணியிடைநிறுத்தத்திற்கு வலியுறுத்தல்

Reporting Saves Lives

SnapSAFE is a reporting platform that allows you to report unsafe workplace practices to MOM. You can use SnapSAFE if:

- You see worker/s working unsafely; or
- You spot a hazardous worksite or equipment; or
- You were asked to work in an unsafe manner or environment without any protections.

Online form to report Workplace Safety Lapses



WSH Technology - Video analytics

Examples of VSS with video analytics ability

Images from Ailytics, Invigilo

Video analytics complement Video Surveillance Systems in automating detection of hazards, including but not limited to:

- ✓ Open Edge detection
- ✓ Detect worker under lifting load
- ✓ PPE Detection
- ✓ Workers near machinery/ vehicles

Mitigating Work at Height Risks – Robotic Solutions

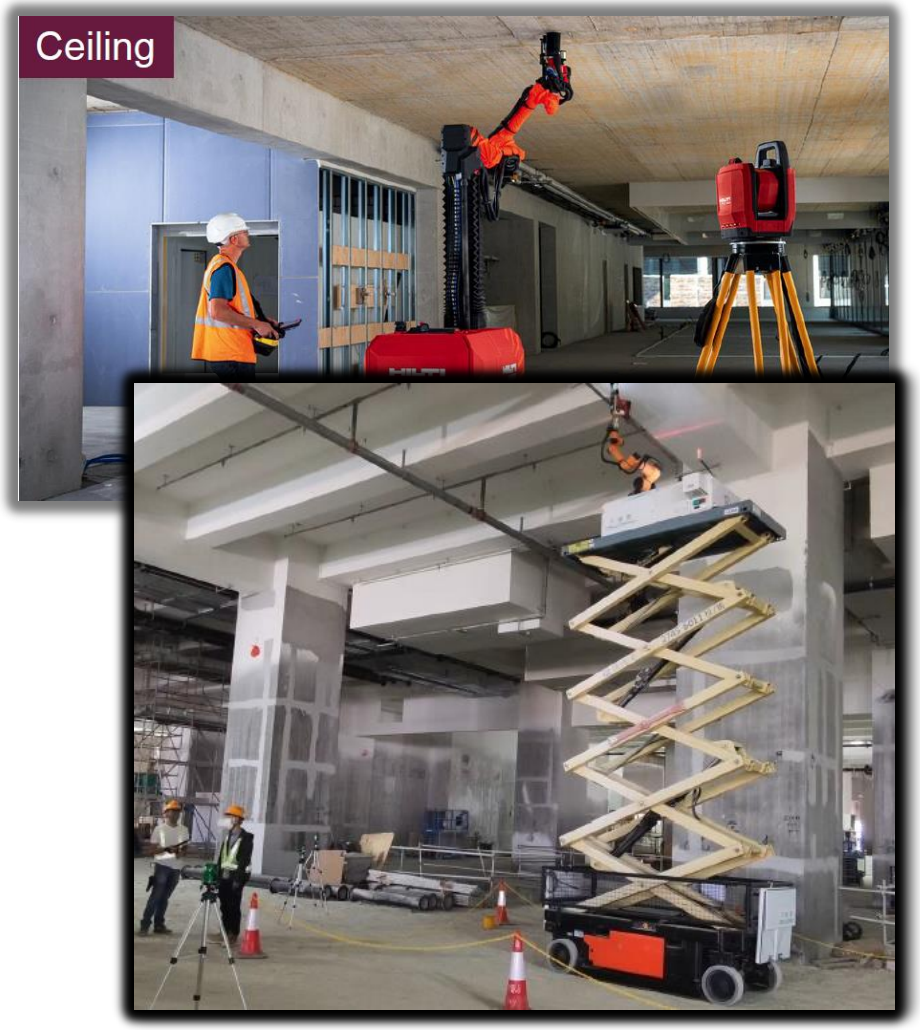
Source: H3 Dynamics

Façade Inspection

Images from ELID & Aegis Building & Engineering

Façade cleaning

Source: Hilti & CSC Robo



“If we miss this opportunity, the sacrifice will be even greater.”

MINISTRY OF MANPOWER

Thank you

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