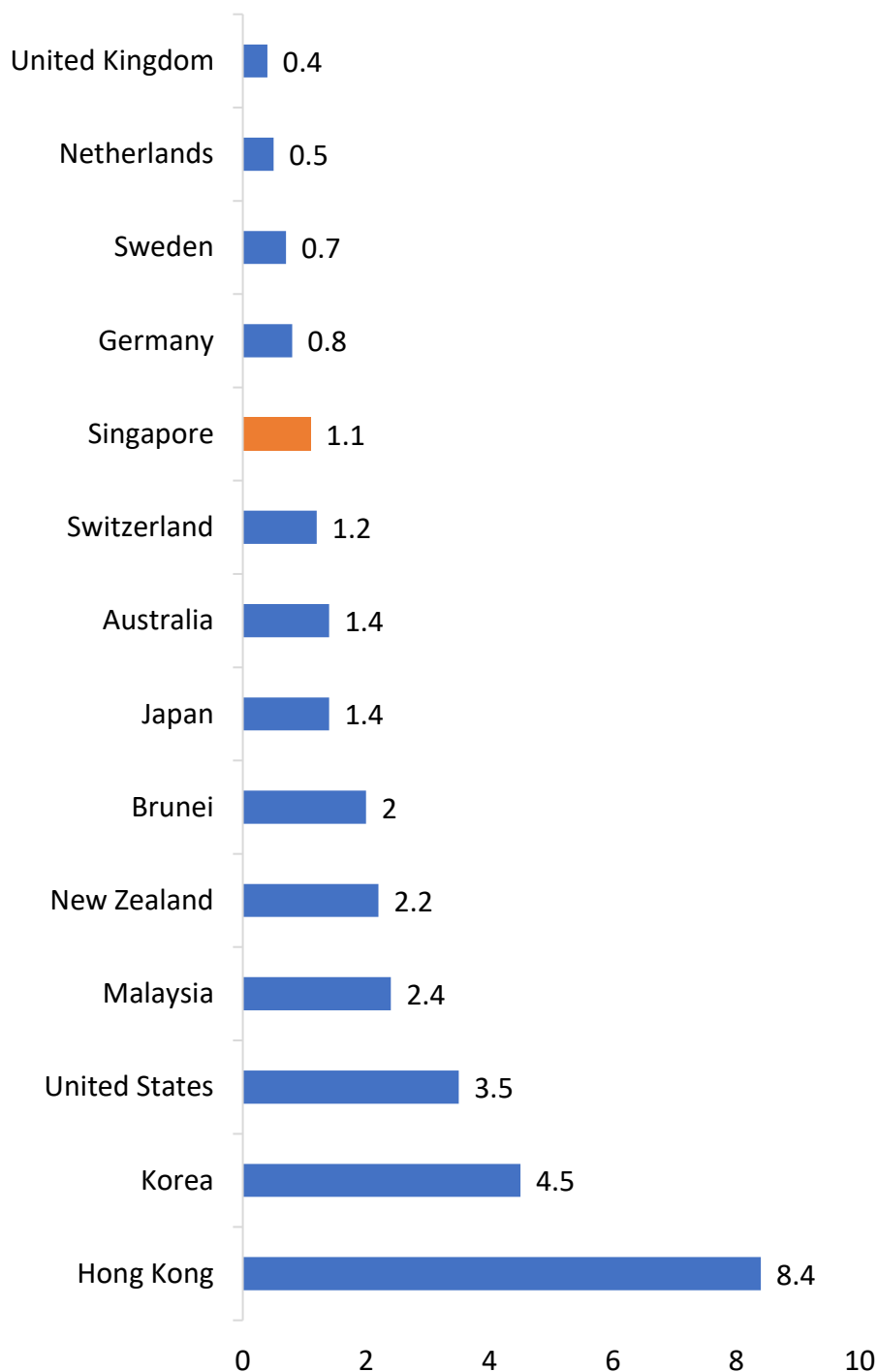


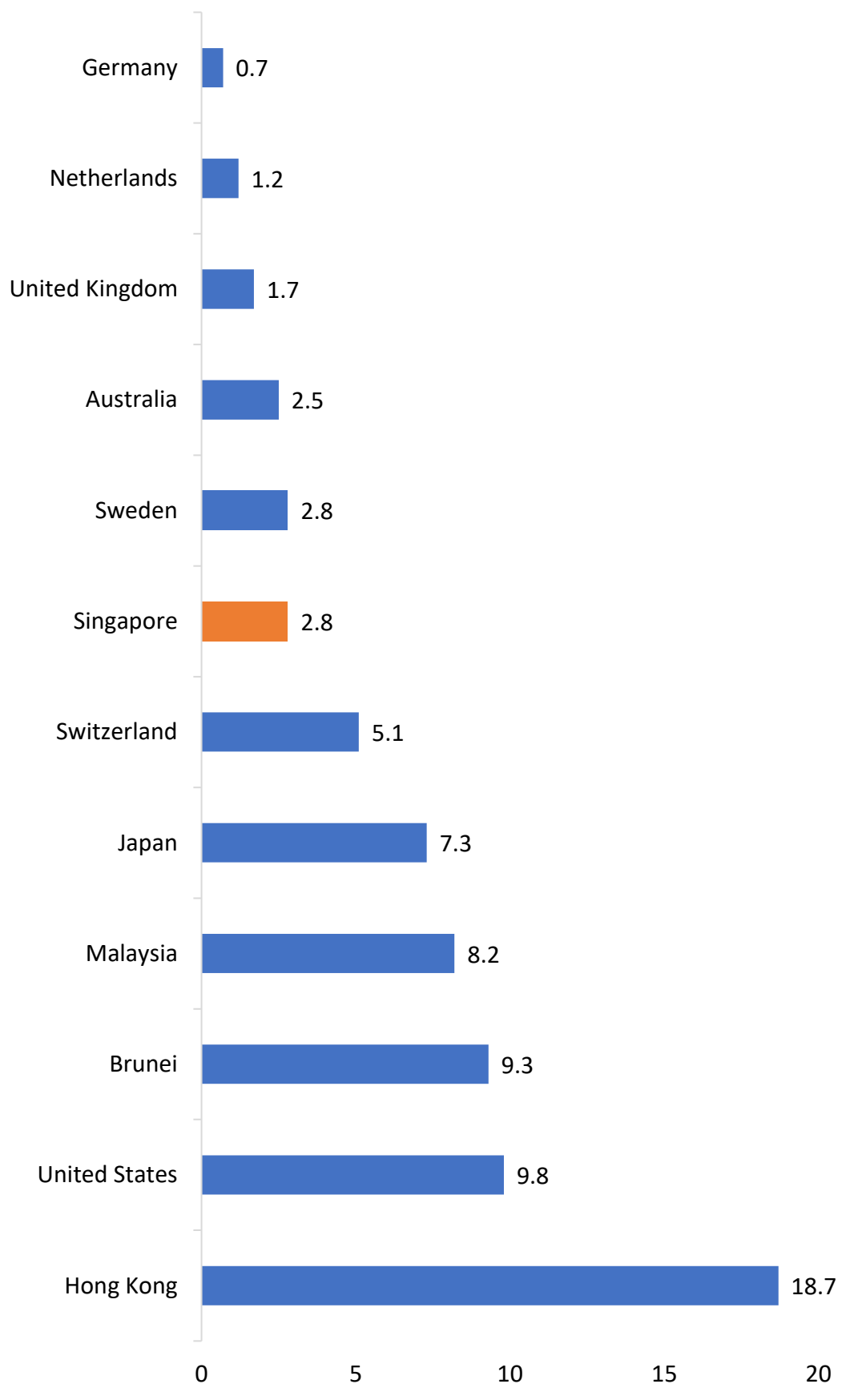
## ANNEX A: INTERNATIONAL COMPARISON<sup>1</sup> OF WORKPLACE SAFETY AND HEALTH PERFORMANCE

**Figure 1: International Workplace Fatal Injury Per 100,000 Workers (based on 3-year average)**



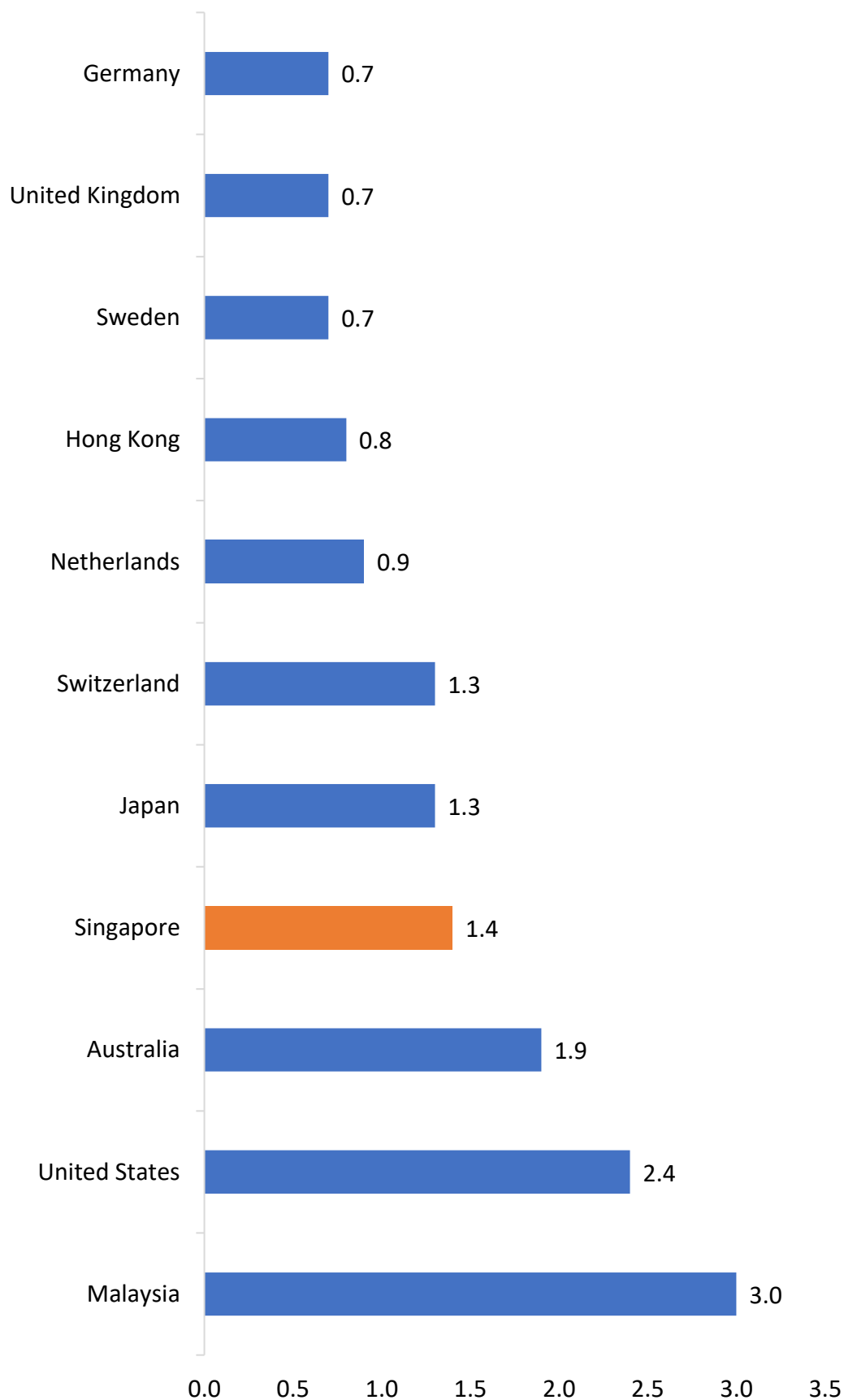
<sup>1</sup> Source: Netherlands, Sweden, Switzerland, Germany (Eurostat, [https://ec.europa.eu/eurostat/databrowser/view/HSW\\_N2\\_02/default/table?lang=en](https://ec.europa.eu/eurostat/databrowser/view/HSW_N2_02/default/table?lang=en)); UK (HSE, <https://www.hse.gov.uk/statistics/fatals.htm>); Japan, Korea (ILO, <https://ilostat.ilo.org/topics/safety-and-health-at-work/>); Australia (<https://www.safeworkaustralia.gov.au/data-and-research/work-related-injuries>); Hong Kong (<https://www.legco.gov.hk/yr2022/english/panels/mp/papers/mp20220621cb2-474-1-e.pdf>); Brunei (<https://shena.gov.bn/statistics/#workplace-injuries>); New Zealand (Stats NZ, <https://www.stats.govt.nz/information-releases/serious-injury-outcome-indicators-20002021/>); Malaysia (Department of Statistics, <https://www.dosm.gov.my/portal-main/release-content/big-data-analytics-national-occupational-accident-and-disease-statistics-2021->); United States (Bureau of Labor Statistics, <https://www.bls.gov/charts/census-of-fatal-occupational-injuries>).

**Figure 2: International Construction<sup>2</sup> Workplace Fatal Injury Rate per 100,000 workers (based on 3-year average)**



<sup>2</sup> Some countries/economies do not publish workplace fatal injury rate for Construction.

**Figure 3: International Manufacturing<sup>3</sup> Workplace Fatal Injury Rate per 100,000 workers (Based on 3-year average)**



<sup>3</sup> Some countries/economies do not publish workplace fatal injury rate for Manufacturing.

## ANNEX B: SUMMARY OF FINDINGS

### Fatalities

Figure 4: Workplace Fatality Numbers and Rate (per 100,000 workers)

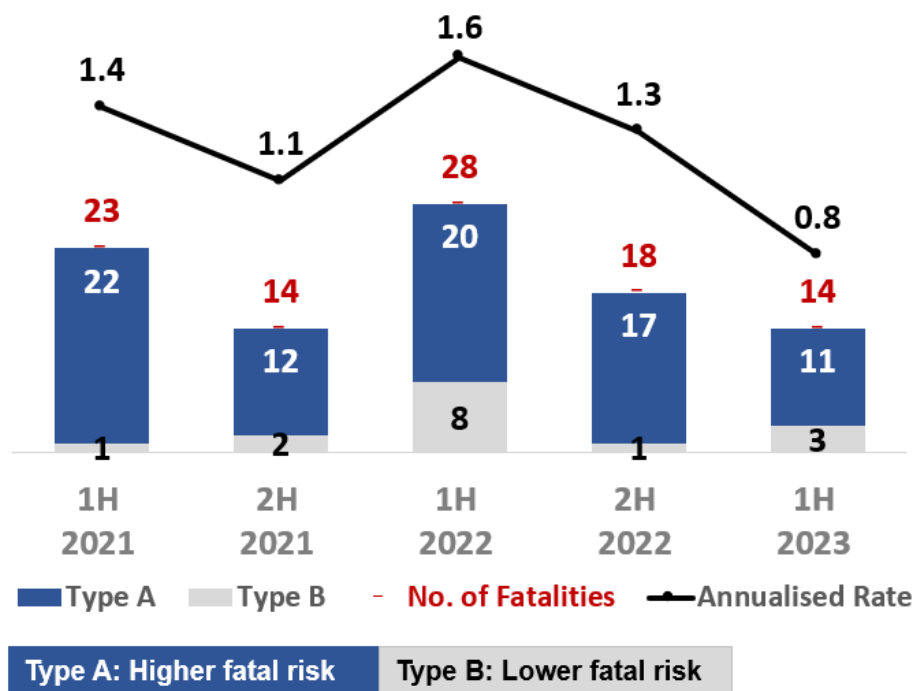
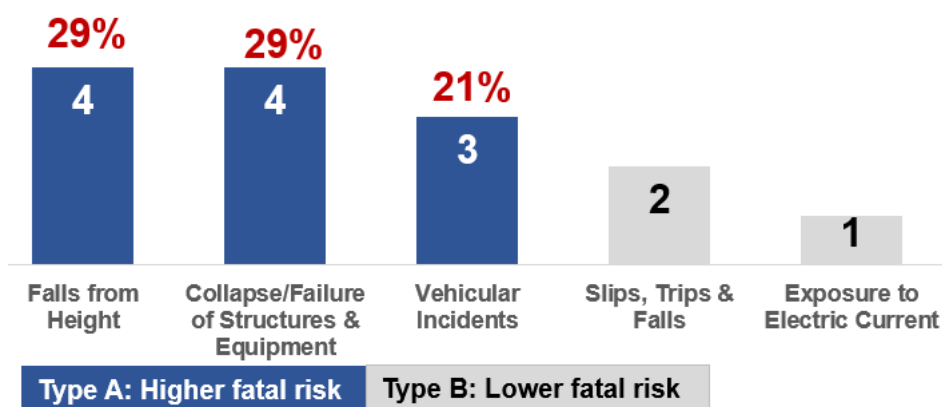


Figure 5: Top 5 Causes of Workplace Fatalities in 1H 2023



**Top causes of fatalities were Fall from Height (FFH) and Collapse/ Failure of Structures & Equipment**

There were 14 fatalities in 1H 2023, of which FFH and Collapse/ Failure of Structures & Equipment accounted for 57% of the fatalities. 79% of all fatalities in 1H 2023 arose from Type A incidents (i.e. those with a higher fatality risk).

## Major and Minor Injuries

Figure 6: Workplace Major Injury Numbers and Rate (per 100,000 workers)

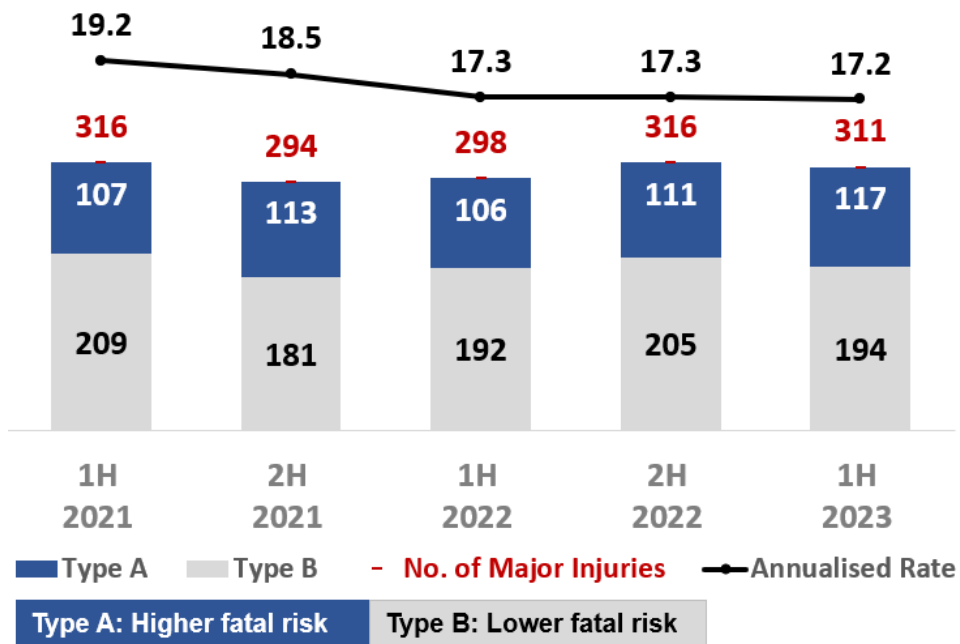
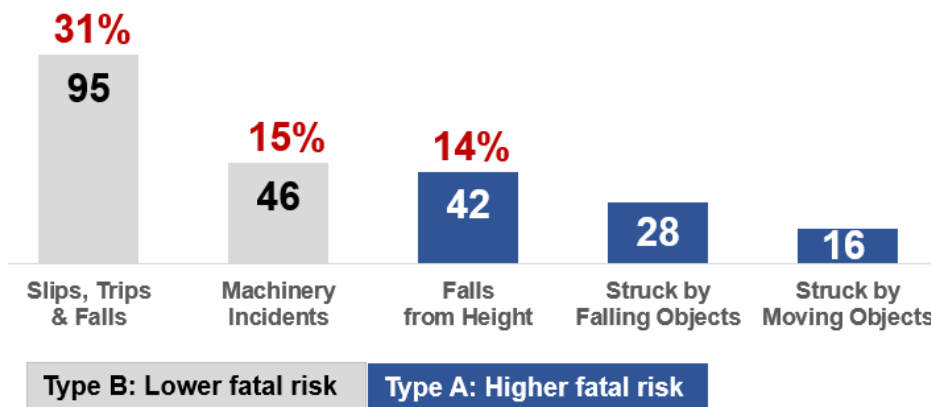


Figure 7: Top 5 Causes of Workplace Major Injuries in 1H 2023



**Major and minor injury rates stable; Slips, Trips and Falls remain the leading cause of non-fatal injuries**

The major injury rate remained stable at 17.2 per 100,000 workers in 1H 2023, as compared to 17.3 in 1H and 2H 2022. Reported minor injury rate was also stable at 604 per 100,000 workers when compared to 596 in 2H 2022. This reflects the positive outcomes from the HSP.

Major injuries were analysed by incident types A and B, to better prioritise the key areas of concern for more targeted interventions and enforcement. Major injuries caused by Type A incidents accounted for 38% of all major injuries in 1H 2023. With a

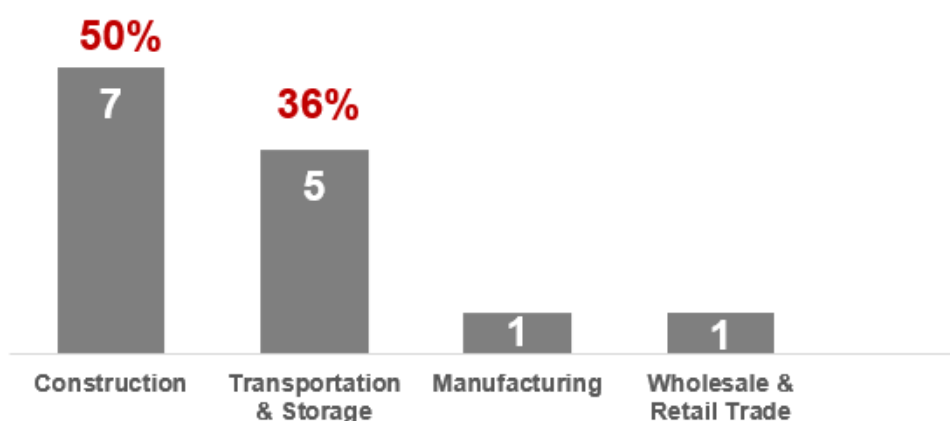
higher risk of fatality, Type A incidents such as falls from height and vehicular incidents are stronger precursors to workplace fatalities. Common root causes of these injuries included inadequate fall prevention measures, unsafe worker behaviours, inadequate traffic management plans, inadequate WSH management systems leading to incompatible works, and inadequate lifting plans.

Major injuries caused by Type B incidents (i.e. those with a lower risk of fatality such as slips, trips and falls, and machinery incidents) accounted for 62% of major injuries. Common root causes included the lack of control measures such as machine guarding, non-compliance with safety measures such as bypass of safety interlocks, lack of safety measures to manage flow of goods, lack of provision of suitable tools, or failure to provide anti-slip footwear.

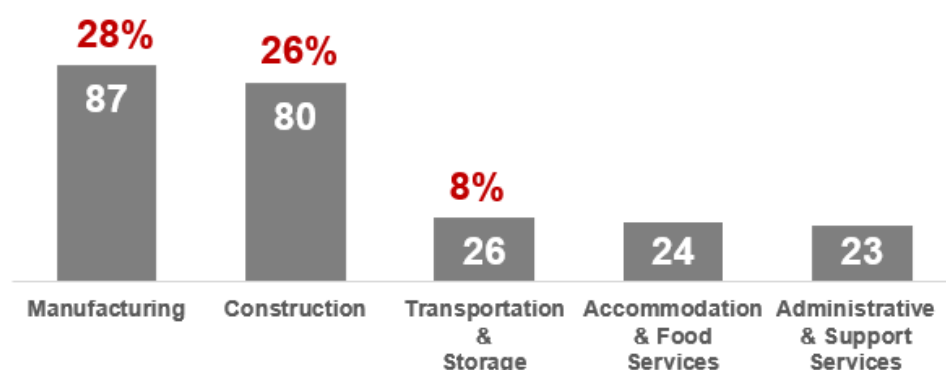
Slips, Trips and Falls (STFs) remained the top cause of non-fatal injuries, accounting for 31% of all major and 28% of all minor injuries. In 1H 2023, there were 95 STF-related major injuries, the same as 1H 2022. Machinery incidents were the second most common cause for major injuries, accounting for 15% of all major injuries in 1H 2023. There were 46 machinery-related major injuries in 1H 2023, an increase from 35 in 1H 2022 and 42 in 2H 2022. Machinery incidents were also the second most common cause for minor injuries. There were 1,480 machinery-related minor injuries in 1H 2023 (14% of total minor injuries), a 6% decrease from 1,578 in 2H 2023.

### Injuries by Industry

**Figure 8: Top 3 Industries for Workplace Fatalities in 1H 2023**



**Figure 9: Top 5 Industries for Workplace Major Injuries in 1H 2023**



***Construction, Transportation & Storage and Manufacturing continue to be top sectoral contributors***

Construction, Transportation & Storage and Manufacturing accounted for about 93% of all workplace fatalities in 1H 2023, with seven, five and one workplace fatalities respectively.

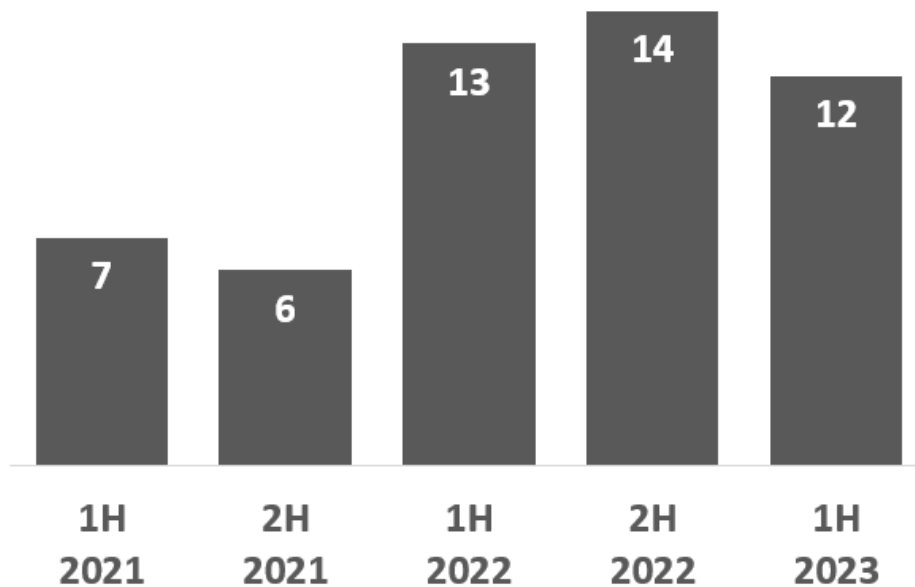
The annualised workplace fatality rate per 100,000 workers for the Construction sector decreased to 2.7 in 1H 2023 as compared to 4.4 in 1H 2022 and 2.9 in 2H 2022. Similarly, in the Manufacturing sector, the annualised workplace fatality rate per 100,000 workers decreased to 0.5 in 1H 2023 as compared to 1.9 in 1H 2022 and 1.7 in 2H 2022. In contrast, for Transportation & Storage, the workplace fatality rate per 100,000 workers rose from 3.4 in 2H 2022 to 3.8 in 1H 2023, the same as 1H 2022 (3.8). To address vehicular incidents and uplift safety standards and practices, MAST is studying measures to strengthen safe operations of vehicles such as cranes and forklifts, including adoption of WSH Technology.

These three industries were also leading industries for major injuries, and accounted for 62% of all major injuries in 1H 2023. Within these industries, SMEs generally had poorer WSH performance as compared to larger firms.

MOM has commenced an enforcement operation from September to October 2023. The operation will cover high-risk sectors such as Construction, Manufacturing and Transport & Storage. The operation will focus on vehicular safety and other areas of concern such as work at heights and machinery safety.

## Dangerous Occurrences

Figure 10: Number of Dangerous Occurrences



### ***Decrease in Dangerous Occurrences, with collapse/failure of structures and equipment continuing to be main cause***

The number of dangerous occurrences (DOs<sup>4</sup>) decreased from 13 in 1H 2022 and 14 in 2H 2022 to 12 in 1H 2023. Amongst the DO cases, eight involved Collapse/Failure of Structures & Equipment and four involved Fires & Explosion.

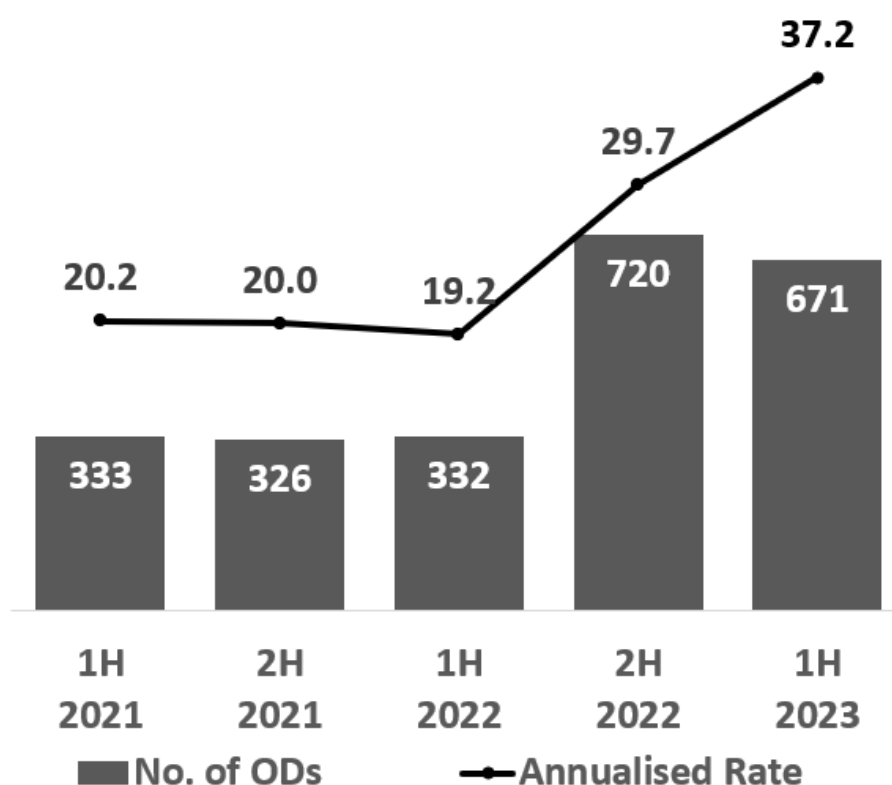
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<sup>4</sup> Incidents with a high potential for multiple fatalities.



## Occupational Diseases

Figure 11: Occupational Diseases (OD) Numbers and Rate



### ***Occupational Diseases incidence rate rose***
















The annualised Occupational Diseases (ODs) incidence rate per 100,000 workers increased from 29.7 in 2H 2022 to 37.2 in 1H 2023. This increase was driven by the rise in reported Noise-Induced Deafness (NID) cases due to ongoing Enhanced Workplace Health Surveillance<sup>5</sup> (WHS+) efforts, which heightened awareness of reporting amongst doctors and employers and expanded the surveillance footprint.

Under WHS+, companies with workers found to have higher exposures to toxic substances or noise are required to adopt upstream risk controls and put in place programmes (e.g. Hearing Conservation Programmes, Management of Hazardous Substances Programmes) that effectively reduce health risks. Companies also need to undergo third party audits to ensure their workplace health programmes are effective and submit an audit report to MOM. MOM will continue to increase the number of workplaces under WHS+, as well as collaborate with the WSH Council to increase awareness and implementation of workplace health programmes.

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<sup>5</sup> In 2021, MOM rolled out the Enhanced Workplace Health Surveillance (WHS+) under the national 10-year WSH 2028 strategy to minimise hazards that lead to occupational diseases, including NID.

## ANNEX C: SUMMARY OF SAFE MEASURES

	IMPLEMENTED	TO BE IMPLEMENTED BY 2023 & 2024
SECTORAL LEVEL	 <p>Introduce a set of disqualification criteria across all public sector construction tenders to temporarily disqualify contractors with poor WSH</p>	 <p>Expand Demerit Point System to the Manufacturing Sector <b>(Oct 2023)</b></p>
	 <p>Introduce a revised Demerit Point System for Construction sector, to temporarily debar errant companies from hiring foreign employees</p>	 <p>Introduce more stringent safety requirements in Government tenders <b>(1Q 2024)</b></p>
	 <p>Retain Multi-Agency Workplace Safety and Health Taskforce (MAST) as a standing committee and expand MAST membership</p>	 <p>Require Video Surveillance System for construction sites with project value <math>\geq</math> \$5mil <b>(Jun 2024)</b></p>
COMPANY LEVEL	 <p>Require Chief Executives (CEs) to personally account for serious WSH lapses</p>	 <p>Require CEs or Board Directors in high-risk industries to attend the Top Executive WSH Programme <b>(Mar 2024)</b>, for which online courseware will be available <b>(by end-Sep 23)</b></p>
	 <p>Require companies with major injuries and Stop Work Order to engage auditors</p>	
	 <p>Require CEs or Board Directors to attend ½ day in-person Top Executive WSH Programme, for companies with major WSH lapses following serious or fatal incidents</p>	
	 <p>Ramp up Enhanced Workplace Health Surveillance programme for noise</p>	
	 <p>Provide more support to SMEs through SME Centres</p>	
WORKER LEVEL	 <p>Launch annual National WSH Campaign to enhance safety reporting</p>	 <p>Introduce online micro-learning to Safety Orientation Course recertification <b>(Jan 2024)</b></p>
<b>CONTINUE ENFORCEMENT EFFORTS</b>		
	 <p>Increase penalties for lapses with higher fine quantum</p>	