

Workplace Safety and Health Report January – June 2023

National Statistics —



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NOTATIONS

- : Nil or negligible

n.a. : Not applicable/Not available
2023^P : 2023 figures are preliminary.

[N] : See (II) below, applicable to workplace major and minor injury figures from 2021.

Note:

- (I) Data presented in this report reflect revised methodology and improved classification of entities by industries, including the revision due to Singapore Standard Industrial Classification 2015 (version 2018). Data prior to 2013 is strictly not comparable.
- (II) Prior to January 2021, workplace major and minor injury numbers pertain to injuries sustained by employees that resulted in four or more days of medical leave, or at least 24 hours of hospitalisation. Following the amendments to the Work Injury Compensation Act (WICA) which took effect from September 2020, employers need to report all work injuries with any instance of medical leave or light duties. From January 2021, major and minor injury numbers shared in this report include injuries with any instance of light duty or medical leave issued. Numbers presented under this new series are marked with [N].
- (III) Occupational Disease cases contributed by workplace COVID-19 infections that were previously reported in 2020 and 2021 were removed due to low number of iReports submitted by employers.
- (IV) Since 2022, a new sub-classification for the Incident Type (Cause) of workplace injuries have been introduced to reprioritise the key areas of concern for better interventions. Incident Type (Cause) of workplace injuries will be further classified based on their fatality risk. Details of this classification can be found in **Annex B**.

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RATE OF WORKPLACE FATALITIES IMPROVED IN FIRST HALF OF 2023, WHILE RATE OF MAJOR INJURIES REMAINED STABLE

The Workplace Safety and Health performance remained stable in 1H2023 compared to 2H2022 — fatal injury rate per 100,000 workers (annualised) improved to 0.8 for 1H2023, from 1.3 for 2H2022 and 1.6 for 1H2022; while major injury rate per 100,000 workers (annualised) remained stable at 17.2 in 1H2023, comparable to 17.3 for both 2H2022 and 1H2022. This reflects positive outcomes from the Heightened Safety Period (HSP), which ended on 31 May 2023. While MOM ended the HSP in May 2023, there has been no let-up in the measures taken. Most of the measures implemented during HSP have been retained. Following the HSP, the Multi-Agency Workplace Safety and Health Taskforce (MAST) introduced a set of SAFE (Safety Accountability, Focus and Empowerment) measures to instil greater safety accountability and culture at the sector, company and individual levels. These are being progressively rolled out.

In absolute numbers, there were 14 workplace fatal injuries in 1H2023, fewer than 18 in 2H2022 and 28 in 1H2022. Excluding the two fatal Work-related Traffic Accidents (WRTA) in 1H2023, there were 12 workplace fatal injuries. Unlike conventional workplaces, workers on the road are subjected to external elements (e.g. wet weather and other road users' actions) that employers and platform companies have limited control over.

In terms of sectoral performances, Manufacturing and Construction contributed 54% of the fatal and major injuries in 1H2023 (*Table 3a*). Injuries in Construction were driven by smaller scale works such as Addition & Alteration (A&A), Renovation and Facility Management (FM), whereas in Manufacturing, it was from the Metalworking subsector (*Table 3b*). From further analysis of the fatal and major injuries by incident Types A and B (*Table 3c*), where Type A incidents have higher risk of fatality, majority of the increase in injuries from 2H2022 to 1H2023 in Manufacturing and Construction were from Type B incidents, with lower risk of fatality.

There were 12 Dangerous Occurrences (DO) in 1H2023, lower than 14 in 2H2022 and 13 in 1H2022. The top causes of DOs were collapse/ failure of structures and equipment such as lorry cranes; and fires and explosion due to explosives/ flammable used in Construction and Manufacturing. The improvement in DO numbers from higher-risk industries was likely due to the overall increase in safety awareness, extending from the HSP measures targeted at higher-risk industries.

There were 671 Occupational Diseases (OD) in 1H2023 – slightly lower than 720 in 2H2022 but higher than 332 in 1H2022. 65% of the ODs were contributed by Noise-induced deafness (NID), followed by work-related musculoskeletal disorders (29%) and occupational skin diseases (4%). The increase in OD numbers was largely due to the expansion of the enhanced workplace health surveillance programme, where companies with noisy work environments or other hazardous processes are required to send their workers for annual examinations, thus facilitating early detection of ODs such as NID.

Table 1: Number of workplace injuries, dangerous occurrences and occupational diseases, 2021-2023

	1H 2021	2H 2021	1H 2022	2H 2022	1H 2023 ^P
Workplace Injuries ¹ (Workplace Injuries [N] ²)	6,486 (11,271)	6,280 (10,915)	6,101 (10,444)	6,474 (11,322)	6,347 (11,222)
Fatal Injuries	23	14	28	18	14
From WRTA*	4	2	4	3	2
From Non-WRTA	19	12	24	15	12
Major Injuries ¹ (Major Injuries [N] ²)	316 (316)	294 (294)	298 (298)	316 (316)	308 (311)
Minor Injuries ¹ (Minor Injuries [N] ²)	6,147 (10,932)	5,972 (10,607)	5,775 (10,118)	6,140 (10,988)	6,025 (10,897)
Dangerous Occurrences	7	6	13	14	12
Occupational Diseases (OD)	333	326	332	720	671

^{*} Work-related Traffic Accident (WRTA)

Table 2: Workplace injuries rate and OD incidence rate, 2021 – 2023

	Annualised Rate (Per 100,000 workers)				
	1H	2H	1H	2H	1H
	2021	2021	2022	2022	2023P
Workplace Injury Rate	393	387	353	355	352
(Workplace Injury Rate [N])	(683)	(673)	(605)	(614)	(622)
Fatal Injuries rate	1.4	1.1	1.6	1.3	0.8
Fatal Injuries rate (Non-WRTA)	(1.2)	(0.9)	(1.4)	(1.1)	(0.7)
Major Injuries rate	19.2	18.5	17.3	17.3	17.1
(Major Injury rate [N])	(19.2)	(18.5)	(17.3)	(17.3)	(17.2)
Minor Injuries rate (Minor Injury rate [N])	373	368	335	336	334
	(663)	(653)	(586)	(596)	(604)
OD Incidence Rate	20.2	20.0	19.2	29.7	37.2

¹ Prior to January 2021, workplace major and minor injury numbers only included injuries sustained by employees that resulted in four or more days of medical leave, or at least 24 hours of hospitalisation.

² Following the amendments to the Work Injury Compensation Act (WICA) which took effect from September 2020, employers need to report all work injuries with any instance of medical leave or light duties. From January 2021, major and minor injury numbers will include injuries with any instance of medical leave or light duties. Numbers presented under this new series are marked with [N]

Table 3a: Top two sectors with most number of fatal and major injuries in 1H2023

Sector	1H 2023 (% of Total)
Overall	325 (100%)
Manufacturing	88 (27%)
Construction	87 (27%)

Table 3b: Number of fatal and major injuries in Construction and Manufacturing by industry activity, 2H2022 – 1H2023

Sector	Subsector/Activity	2H 2022	1H 2023
	Overall	77	87
	A&A, Reno & FM*	48	58
Construction	Regular Construction	28	28
	WRTA	1	1
	Overall	65	88
	Metalworking	18	38
Manufacturing	Food & beverage	26	18
Manufacturing	Furniture making	0	9
	Other manufacturing	5	7
	Other Subsectors	16	16

^{*} Addition & Alteration (A&A) works, Renovation and Facility Management (FM)

Table 3c: Number of fatal and major injuries in Construction and Manufacturing by Type A/B incidents, 2H2022 – 1H2023

Sector	Incident Type	2H 2022	1H 2023
	Overall	77	87
Construction	Type A	48	49
	Type B	29	38
	Overall	65	88
Manufacturing	Type A	17	26
	Type B	48	62

The main findings on the workplace safety and health performance for January to June 2023 were:

WORKPLACE INJURIES

- 14 workers lost their lives due to workplace accidents in the first six months of 2023. Excluding work-related traffic accidents (WRTA), there were 12. The annualised fatal injury rate as at end June 2023 was projected to be 0.8 fatalities per 100,000 workers, half of the rate as at end June 2022 at 1.6.
- 311 workers sustained workplace major injuries in the first six months of 2023. The annualised major injury rate is projected to be at 17.2 injuries per 100,000 workers, comparable to the rate as at end June 2022 at 17.3.
- New Series [N]: 10,897 workers sustained workplace minor injuries with any instance of medical leave or light duty in the first six months of 2023. The annualised minor injury [N] rate is projected to be at 604 injuries per 100,000 workers, higher than 586 in the first half of 2022.
- Former Series: 6,025 workers sustained workplace minor injuries with at least four days of medical leave or 24 hours of hospitalisation in the first six months of 2023. The annualised minor injury rate is projected to be at 334 per 100,000 workers, comparable to 335 in the first half of 2022.

DANGEROUS OCCURRENCES

• 12 dangerous occurrences were reported to MOM in the first six months of 2023.

OCCUPATIONAL DISEASES (OD)

- 671 OD cases were reported in the first six months of 2023. The annualised OD incidence rate is projected to be at 37.2 per 100,000 workers, higher than 19.2 in in the first half of 2022.
- Leading OD was Noise-induced Deafness (NID) with 438 cases. The second most common OD was Work-related Musculoskeletal Disorders (WRMSD) with 197 cases, including back injury cases due to ergonomic risks.

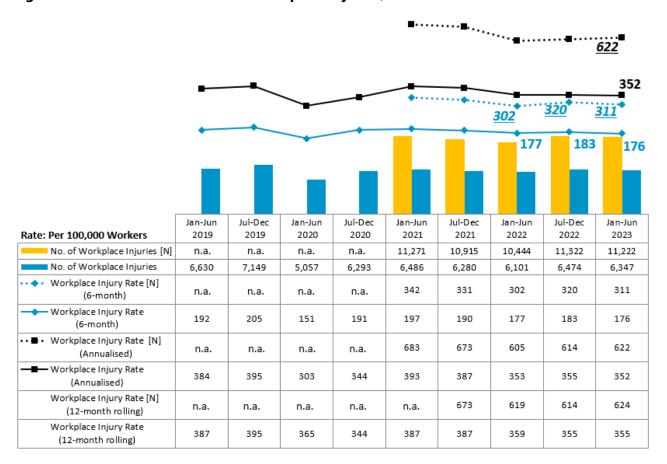
OVERVIEW OF TRENDS

TOTAL WORKPLACE INJURIES

The overall number of reported³ workplace injuries [N]⁴ in 1H2023 was 11,222, comparable to 11,322 in 2H2022 and slightly more than 10,444 in 1H2022. The annualised workplace injury rate [N] stood at 622 injuries per 100,000 workers in 1H2023.

Similarly, the overall number of reported workplace injuries with at least four days of medical leave or 24 hours of hospitalisation, was 6,347 in 1H2023, lower than 6,474 injuries in 2H2022 and 4% more than 6,101 in 1H2022. The annualised workplace injury rate stood at 352 injuries per 100,000 workers in 1H2023.

Figure 1: Number and rate of total workplace injuries, 2019-2023



³ Employer or Occupier has to report work incidents to the Ministry of Manpower under the WSH (Incident Reporting) Regulations.

⁴ Refer to Note (II) on Page 1 for changes to coverage for non-fatal injuries from 2021.

WORKPLACE FATAL INJURIES

There were 14 workplace fatal injuries in 1H2023, and excluding work-related traffic accidents, there were 12. The annualised fatal injury rate in 1H2023 was projected to be 0.8 fatalities per 100,000 workers, half of the rate as at end June 2022 at 1.6.

1.6 1.3 0.8 0.8 0.5 0.4 Jan-Jun Jul-Dec Jan-Jun Jul-Dec Jan-Jun Jul-Dec Jan-Jun Jul-Dec Jan-Jun Rate: Per 100,000 Workers 2019 2020 2020 2019 2021 2021 2022 2022 2023 No. of Workplace Fatal Injuries 17 22 17 13 23 14 28 18 14 - Workplace Fatal Injury Rate 0.5 0.7 0.6 0.5 0.4 0.4 0.8 0.5 0.4 (6-month) ■ Workplace Fatal Injury Rate 1.0 1.1 1.0 0.9 1.4 1.1 1.6 1.3 0.8 (Annualised) Workplace Fatal Injury Rate 1.2 1.1 1.2 0.9 1.1 1.1 1.2 1.3 0.9

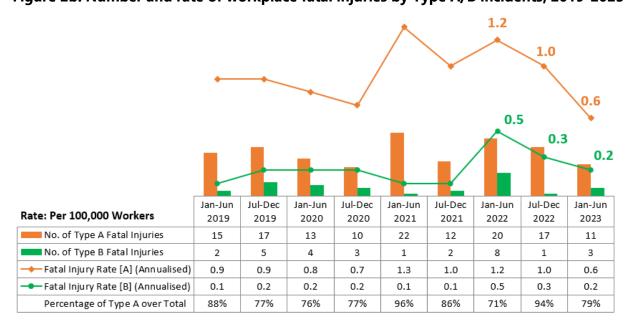
Figure 2a: Number and rate of workplace fatal injuries, 2019-2023

CAUSES OF WORKPLACE FATAL INJURIES

(12-month rolling)

Close to eight in 10 (79%) fatalities in 1H2023 were caused by Type A incidents which have higher risk of fatality.

Figure 2b: Number and rate of workplace fatal injuries by Type A/B incidents, 2019-2023



These Type A incidents were Falls from Height (four injuries) and Collapse/Failure of Structure & Equipment (four injuries) and vehicular incidents (three injuries).

3rd Тор Тор 4th 5th Туре А Type B Type A Type A Type B **Falls from Height** Collapse/Failure of **Vehicular Incidents** Slips, Trips & Falls **Exposure to Electric** Structures & Equipment 4 0 0 0 Jul-Dec 2019 Jan-Jun 2020 Jan-Jun 2019 Jul-Dec 2019 Jan-Jun 2020 Jul-Dec 2020 Jan-Jun 2021 Jul-Dec 2021 Jan-Jun 2022 Jul-Dec 2022 Jan-Jun 2023 Jul-Dec 2022 Jan-Jun 2023 Jul-Dec 2022 Jan-Jun 2023 Jul-Dec 2022 Jan-Jun 2023 Jul-Dec 2020 Jan-Jun 2021 Jul-Dec 2022 Jan-Jun 2023 Jul-Dec 2020 Jul-Dec 2020 Jul-Dec 2021 Jan-Jun 2022 lan-Jun 2019 Jul-Dec 2019 Jul-Dec 2020 lan-Jun 2019 Jul-Dec 2019 lan-Jun 2020 Jul-Dec 2021 Jan-Jun 2022 Jan-Jun 2019 Jan-Jun 2021 Jul-Dec 2021 Jan-Jun 2022 lan-Jun 2021 Jul-Dec 2021 lan-Jun 2022 lan-Jun 2020 lan-Jun 2021

Figure 2c: Number of workplace fatal injuries by cause of injury, 2019-2023

INDUSTRIES CONTRIBUTING TO WORKPLACE FATAL INJURIES

The traditionally higher risk industries accounted for 93% of all fatal injuries in 1H2023. These were namely, Construction which remained the top contributor in 1H2023 with seven fatal injuries, followed by Transportation & Storage (five injuries) and Manufacturing (one injury). Wholesale and Retail Trade industry contributed to one fatal injury.

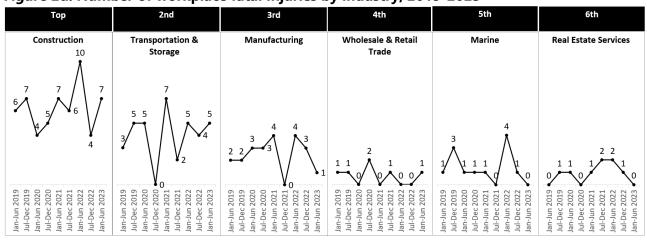


Figure 2d: Number of workplace fatal Injuries by industry, 2019-2023

Traditionally higher risk industries refer to Construction, Manufacturing, Transportation & Storage and Marine industries.

WORKPLACE FATAL INJURIES BY INDUSTRY

CONSTRUCTION

There were seven workplace fatal injuries in the Construction sector in 1H2023, which was fewer than the 10 fatalities in the same period last year (1H2022). The annualised workplace fatal injury rate decreased from 4.4 fatal injuries per 100,000 workers in 1H2022 to 2.7 in 1H2023. More than seven in 10 of fatal injuries from the sector in 1H2023 were contributed by Type A incidents.

Figure 3a: Number and rate of workplace fatal injuries for Construction sector, 2019-2023

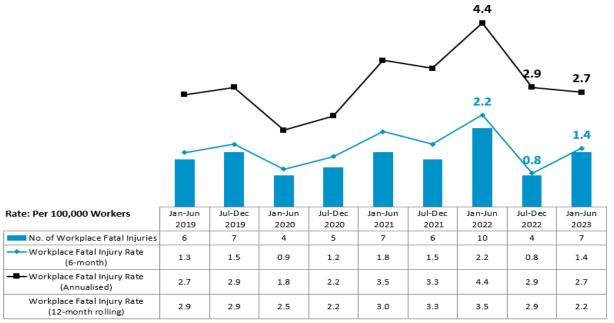
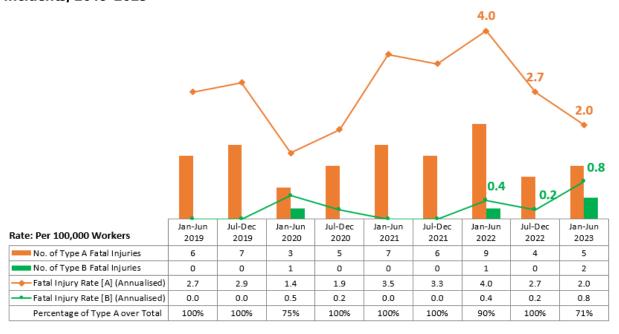


Figure 3b: Number and rate of workplace fatal injuries for Construction sector by Type A/B Incidents, 2019-2023



MARINE

There were no workplace fatal injuries in the Marine industry⁵ in 1H2023, compared with the four injuries suffered by the industry in the same period last year (1H2022). The annualised workplace fatal injury rate consequently dropped to zero fatal injuries per 100,000 workers in 1H2023, compared to 13.5 in 1H2022. In previous years, majority of fatal injuries from the industry were contributed by Type A incidents, except for 2022 where there were more Type B (three injuries) incidents than Type A (two injuries).

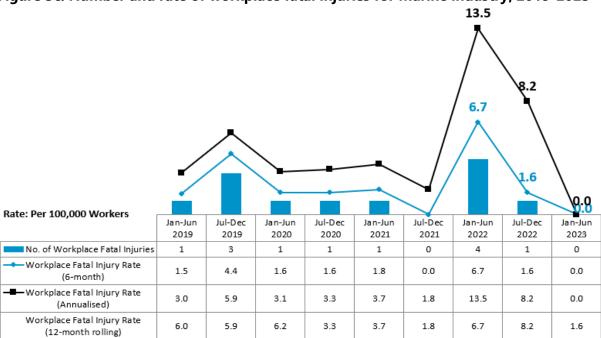
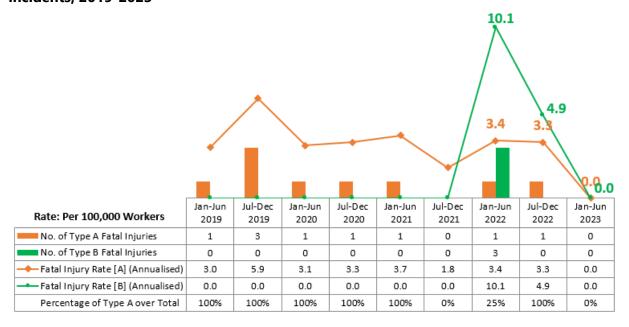


Figure 3c: Number and rate of workplace fatal injuries for Marine industry, 2019-2023

Figure 3d: Number and rate of workplace fatal injuries for Marine industry by Type A/B incidents, 2019-2023



⁵ The marine industry includes the following activities:

Works carried out in the anchorage are also included.

[•] Shipbuilding and Ship Repair

[•] Marine Surveying Services (other than classification societies)

[•] Salvaging of distressed vessels and cargo

MANUFACTURING

There was one workplace fatal injuries in the Manufacturing sector in 1H2023, fewer than the four fatal injuries in the same period last year (1H2022). The annualised workplace fatal injury rate consequently dropped to 0.5 fatal injuries per 100,000 workers in 1H2023, compared to 1.9 in 1H2022. In the last 12 months, all fatal injuries suffered by the sector were from Type A incidents.

Figure 3e: Number and rate of workplace fatal injuries for Manufacturing sector, 2019-2023

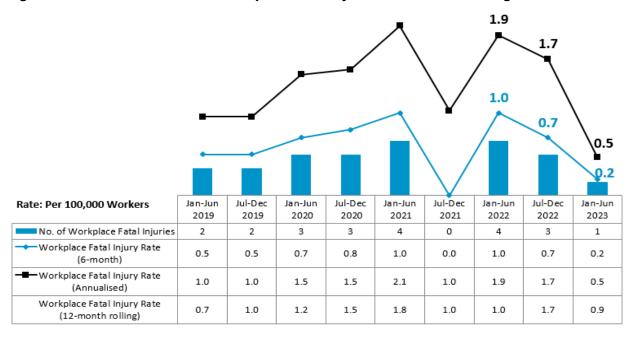
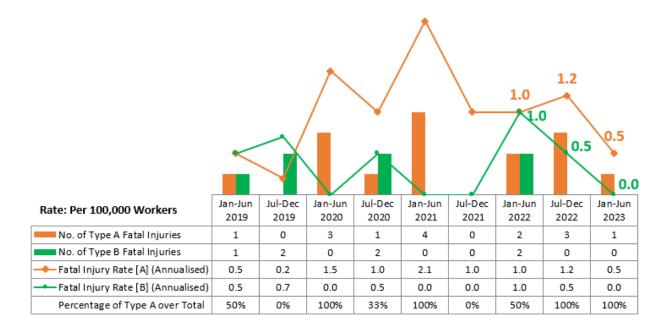


Figure 3f: Number and rate of workplace fatal injuries for Manufacturing sector by Type A/B incidents, 2019-2023



TRANSPORTATION & STORAGE

There were five workplace fatal injuries in the Transportation & Storage industry in 1H2023, same number as 1H2022 (five injuries). Excluding work-related traffic accidents (WRTA), there were three fatalities in 1H 2023 and one fatality in 1H 2022. The annualised workplace fatal injury rate for the industry remained at 3.8 fatal injuries per 100,000 workers in 1H2023 and 1H2022. Majority of fatal injuries from the industry were contributed by Type A incidents.

Figure 3g: Number and rate of workplace fatal injuries for Transportation & Storage industry, 2019-2023

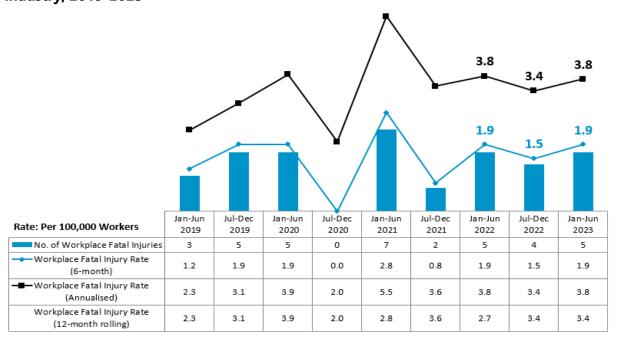
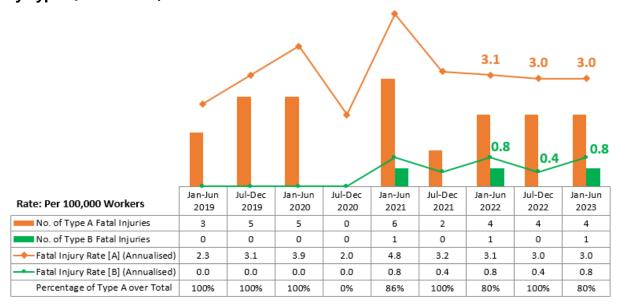


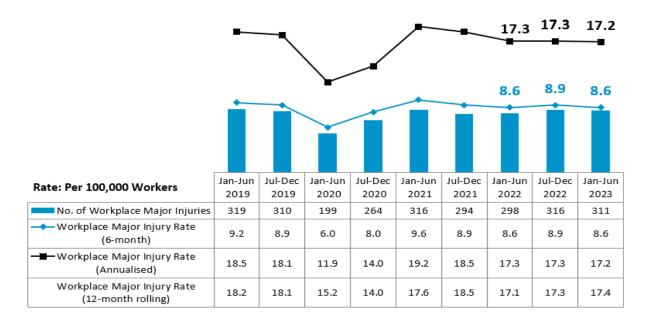
Figure 3h: Number and rate of workplace fatal injuries for Transportation & Storage industry by Type A/B incidents, 2019-2023



WORKPLACE MAJOR INJURIES

There were 311 workplace major injuries in 1H2023, comparable to 316 injuries in 2H2022. The annualised workplace major injury rates stabilised and hovered around 17injuries per 100,000 workers since 1H2022.

Figure 4a: Number and rate of workplace major injuries, 2019-2023



CAUSES OF WORKPLACE MAJOR INJURIES

Incidents with lower fatality risk (Type B) formed more than 60% of all major injuries in 1H2023. Injury rate for Type B incidents has hovered around 11.0 major injuries per 100,000 workers since 2021.

Figure 4b: Number and rate of workplace major injuries by Type A/B incidents, 2019-2023



The top three causes of workplace major injuries were (i) Slips, Trips & Falls; (ii) Machinery Incidents; which were Type B incidents, and (iii) Falls from Height. These collectively accounted for 59% (183 injuries) of the total number of workplace major injuries in 1H2023.

Figure 4c: Number of workplace major injuries by cause of injury, 2019-2023

Тор	2nd	3rd	4th	5th	6th
Туре В	Туре В	Туре А	Туре А	Туре А	Туре А
Slips, Trips & Falls 126 113 103 105 90 90 56	Machinery Incidents 44 38 28 30 33 30 35 42 46	Falls from Height	Struck by Falling Objects 21 21 13131518 24 28 12 18	Struck by Moving Objects 25 21 13 7 10 13 16 10 16	Vehicular Incidents
Jan-Jun 2019 Jul-Dec 2019 Jan-Jun 2020 Jul-Dec 2020 Jul-Dec 2021 Jul-Dec 2021 Jul-Dec 2021 Jul-Dec 2022 Jul-Dec 2022	Jan-Jun 2019 Jul-Dec 2019 Jan-Jun 2020 Jul-Dec 2020 Jul-Dec 2021 Jul-Dec 2021 Jul-Dec 2021 Jan-Jun 2022 Jul-Dec 2022 Jul-Dec 2022	Jan-Jun 2019 Jul-Dec 2019 Jan-Jun 2020 Jul-Dec 2020 Jul-Dec 2021 Jul-Dec 2021 Jul-Dec 2021 Jul-Dec 2022 Jul-Dec 2022 Jul-Dec 2022	Jan-Jun 2019 Jul-Dec 2019 Jan-Jun 2020 Jul-Dec 2020 Jul-Dec 2021 Jul-Dec 2021 Jul-Dec 2021 Jul-Dec 2021 Jul-Dec 2022 Jul-Dec 2022	Jan-Jun 2019 Jul-Dec 2019 Jan-Jun 2020 Jul-Dec 2020 Jan-Jun 2021 Jul-Dec 2021 Jan-Jun 2022 Jul-Dec 2022	Jul-Dec 2019 Jul-Dec 2019 Jul-Dec 2020 Jul-Dec 2020 Jan-Jun 2021 Jul-Dec 2021 Jul-Dec 2022 Jul-Dec 2022 Jul-Dec 2022

INDUSTRIES CONTRIBUTING TO WORKPLACE MAJOR INJURIES

In 1H2023, the top contributing sector for major injuries came from Manufacturing with 87 major injuries, followed by the Construction sector with 80 major injuries. These top two contributing sectors collectively accounted for 54% (167 injuries) of the total major injuries in 1H2023.

Figure 4d: Number of workplace major injuries by industry, 2019-2023

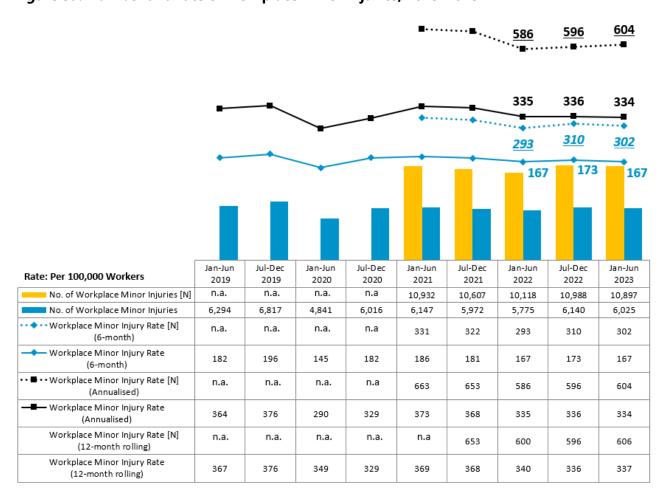
Тор	2nd	3rd	4th	5th	6th	7th
Manufacturing	Construction	Transportation & Storage	Accommodation & Food Services	Administrative & Support Services	Health & Social Services	Marine
68 ⁷⁵ 77 87 62 64 60 62	68 6363 7380	³⁵ 272822 ²⁹³⁰ 29 ³² 26	39 26 ²⁹ 31 2827 ₂₄	35 25 11 12 15 23 21 20 23	8 6 1515 1615 8 6 7 7 7	8 8 6 7 8 7 ¹⁰ 5 ¹²
Jan-Jun 2019 Jul-Dec 2019 Jan-Jun 2020 Jul-Dec 2020 Jul-Dec 2021 Jan-Jun 2021 Jul-Dec 2021 Jul-Dec 2021 Jul-Dec 2022 Jul-Dec 2022	Jan-Jun 2019 Jul-Dec 2019 Jan-Jun 2020 Jul-Dec 2020 Jan-Jun 2021 Jul-Dec 2021 Jul-Dec 2021 Jul-Dec 2022 Jul-Dec 2022	Jan-Jun 2019 Jul-Dec 2019 Jan-Jun 2020 Jul-Dec 2020 Jul-Dec 2021 Jul-Dec 2021 Jul-Dec 2021 Jul-Dec 2022 Jul-Dec 2022	Jan-Jun 2019 Jul-Dec 2019 Jan-Jun 2020 Jul-Dec 2020 Jan-Jun 2021 Jul-Dec 2021 Jul-Dec 2021 Jul-Dec 2022 Jul-Dec 2022	Jan-Jun 2019 Jul-Dec 2019 Jan-Jun 2020 Jul-Dec 2020 Jul-Dec 2021 Jul-Dec 2021 Jul-Dec 2021 Jul-Dec 2021 Jul-Dec 2022 Jul-Dec 2022	Jan-Jun 2019 Jul-Dec 2019 Jan-Jun 2020 Jul-Dec 2020 Jul-Dec 2021 Jul-Dec 2021 Jan-Jun 2022 Jul-Dec 2022 Jul-Dec 2022	Jan-Jun 2019 Jul-Dec 2019 Jan-Jun 2020 Jul-Dec 2020 Jan-Jun 2021 Jul-Dec 2021 Jul-Dec 2021 Jul-Dec 2022 Jul-Dec 2022 Jul-Dec 2022 Jul-Dec 2022 Jul-Dec 2022

WORKPLACE MINOR INJURIES

Under the new series [N] (any instance of medical leave or light duties), the overall number of reported minor injuries in 1H2023 was 10,897, 1% lower compared to 10,988 in 2H2022 but 8% more than 10,118 in 1H2022. The corresponding annualised minor injury rate for 1H2023 was at 604 injuries per 100,000 workers.

Based on the former series (four or more days of medical leave, or at least 24 hours of hospitalisation only), there were 6,025 minor injuries in 1H2023, 2% lower than 6,140 in 2H2022 but 4% more than 5,775 in 1H2022. The corresponding annualised minor injury rate in the former series stabilised at around 335 injuries per 100,000 workers since 1H2022.

Figure 5a: Number and rate of workplace minor injuries, 2019-2023



69%

70%

70%

71%

69%

70%

70%

CAUSES OF WORKPLACE MINOR INJURIES

Percentage of Type B over Total

68%

68%

Annualised minor injury rates for both Type A and Type B incidents have stabilised for the former series and have increased slightly in the new series [N] since 1H2022. Type B incidents formed about 70% of all minor injuries in both series since 2021. Slips, Trips & Falls, Machinery Incidents, and Struck by Moving Objects remained the top three leading causes of minor injuries, accounting for 52% (5,642 injuries) of 10,897 minor injuries in 1H2023.

416 420 425 232 232 231 179 175 171 103 104 102 Jan-Jun Jul-Dec Jan-Jun Jul-Dec Jan-Jun Jul-Dec Jan-Jun Jul-Dec Jul-Dec Jul-Dec Jan-Jun lan-lun lan-lun lan-lun 2021 2021 2022 2022 2019 2019 2020 2020 2021 2021 2022 2022 2023 Rate: Per 100,000 Workers [N] [N] [N] [N] [N] No. of Type A Minor Injuries 1,771 1.906 1,847 3,311 2.944 3,273 3,232 2.014 2.195 1.472 1.810 1.941 1,859 3,179 No. of Type B Minor Injuries 4,280 4,622 3,369 4,206 4,206 4,113 4,004 4,234 4,178 7,621 7,428 7,174 7,715 7,665 Minor Injury Rate [A] 179 117 121 88 99 118 115 103 104 102 201 197 171 175 (Annualised) Minor Injury Rate [B] 248 255 202 229 255 252 232 232 231 462 456 416 420 425 (Annualised)

Figure 5b: Number and rate of workplace minor injuries by Type A/B incidents, 2019-2023

Figure 5c: Number of workplace minor injuries by cause of injury, 2019-2023

70%

70%

68%

69%

69%

Тор	2nd	3rd	4th	5th	6th
Type B	Type B	Туре А	Туре А	Туре В	Type B
Slips, Trips & Falls 7.853 2.793 2.793 3.066	Machinery Incidents	Struck by Moving Objects	Struck by Falling Objects	Over-exertion/Strenuous Movements	Striking Against Objects
1,777 1,977 1,977 1,1978 1,778 1,738 1,738 1,738 1,738	1,103 784 912 932 945 1,156 945 1,156 945 1,1578 980 1,1578	6 1,121 1,121 1,117 1,1021 1,096	# 847 # 812 # 785 # 942 # 830	# 884 # 848 # 780 # 767	721 721 721 691 711
		527 646 646 568 582 582 564 501 512 552	538 543 394 470 456 480 480 553	428 474 434 456 487 421 410 440 440	378 406 290 290 348 341 327 327 285
Jan-Jun 2019 Jul-bec 2019 Jan-Jun 2020 Jul-bec 2020 Jan-Jun 2021 Jan-Jun 2022 Jul-bec 2022 Jul-bec 2022 Jul-bec 2022 Jul-bec 2022	Jan-Jun 2019 Jul-Dec 2019 Jan-Jun 2020 Jul-Dec 2020 Jan-Jun 2021 Jul-Dec 2021 Jan-Jun 2022 Jul-Dec 2022 Jul-Dec 2022	Jan-Jun 2019 Jul-Dec 2019 Jan-Jun 2020 Jul-Dec 2020 Jan-Jun 2021 Jul-Dec 2021 Jul-Dec 2021 Jul-Dec 2022 Jul-Dec 2022 Jul-Dec 2022	Jan-Jun 2019 Jul-Dec 2019 Jan-Jun 2020 Jul-Dec 2020 Jan-Jun 2021 Jul-Dec 2021 Jul-Dec 2021 Jul-Dec 2022 Jul-Dec 2022 Jul-Dec 2022	Jan-Jun 2019 Jul-Dec 2019 Jan-Jun 2020 Jul-Dec 2020 Jan-Jun 2021 Jul-Dec 2021 Jul-Dec 2021 Jul-Dec 2022 Jul-Dec 2022 Jul-Dec 2022	Jan-Jun 2019 377 Jul-Dec 2019 40 Jan-Jun 2020 208 Jul-Dec 2020 348 Jan-Jun 2021 341 Jul-Dec 2021 387 Jul-Dec 2021 387 Jul-Dec 2022 327 Jul-Dec 2022 327 Jul-Dec 2022 320

INDUSTRIES CONTRIBUTING TO WORKPLACE MINOR INJURIES

With the new series, the relative rankings for the top three leading industries were Manufacturing (1,993), Construction (1,728) and Accommodation & Food Services (1,437). These three industries accounted for 47% (5,158 injuries) of 10,897 minor injuries in 1H2023.

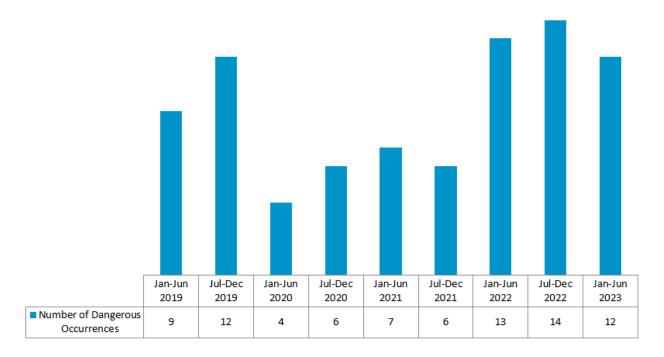
Figure 5d: Number of workplace minor injuries by industry, 2019-2023

Тор	2nd	3rd	4th	5th	6th
Manufacturing	Construction	Accommodation & Food Services	Health & Social Services	Transportation & Storage	Administrative & Support Services
2,158 2,065 1,940 1,993	1,907 1,892 1,662 1,851 1,728	1,283 ,205 ,250 1,382 1,437	116 1.192 1.152 1,255 1,351		
1,370 1,055 1,055 1,275 1,313 1,195 1,227	1,108 680 994 1,125 1,074 1,161 1,161	33	1,11	# 834 # 829 # 766 # 898	767 734 704 711
-■-·[N] New Series[F] Former Series	ő	75 8: 544 • 701 701 663 631 691 73	324 381 466 447 437 424 481 464	541 64 486 485 510 536 467 487 481	438 444 458 449 463 444 443 429
Jan-Jun 2019 Jul-Dec 2019 Jan-Jun 2020 Jul-Dec 2020 Jan-Jun 2021 Jul-Dec 2021 Jul-Dec 2021 Jul-Dec 2022 Jul-Dec 2022 Jul-Dec 2022 Jul-Dec 2022	Jan-Jun 2019 Jul-bec 2019 Jul-bec 2019 Jul-Dec 2020 Jul-Dec 2020 Jul-bec 2021 Jul-bec 2021 Jul-bec 2022 Jul-bec 2022 Jul-bec 2022	Jan-Jun 2019 Jul-Dec 2019 Jan-Jun 2020 Jul-Dec 2020 Jan-Jun 2021 Jul-Dec 2021 Jan-Jun 2022 Jul-Dec 2022 Jul-Dec 2022 Jul-Dec 2022 Jan-Jun 2022	Jan-Jun 2019 Jul-Dec 2019 Jan-Jun 2020 Jul-Dec 2020 Jan-Jun 2021 Jul-Dec 2021 Jul-Dec 2022 Jul-Dec 2022 Jul-Dec 2022 Jul-Dec 2022 Jul-Dec 2022	Jan-Jun 2019 Jul-bec 2019 Jan-Jun 2020 Jul-bec 2020 Jan-Jun 2021 Jul-bec 2021 Jan-Jun 2022 Jul-bec 2022 Jul-bec 2022 Jan-Jun 2022	Jan-Jun 2019 Jul-Dec 2019 Jan-Jun 2020 Jul-Dec 2020 Jan-Jun 2021 Jul-Dec 2021 Jan-Jun 2022 Jan-Jun 2022 Jul-Dec 2022 Jan-Jun 2022

DANGEROUS OCCURRENCES (DO)

There were 12 cases of DOs reported to MOM in 1H2023, fewer compared to 1H2022 and 2H2022. Among the DOs, eight cases involved Collapse/Failure of Structures & Equipment and four involved Fires & Explosion.

Figure 6a: Number of dangerous occurrences, 2019-2023



In 1H2023, Construction was the top contributor accounting for 42% (five cases) of all DO cases. The second top contributing industry was Manufacturing at 25% (three cases).

Figure 6b: Number of dangerous occurrences by industry, 2019-2023

Тор	2nd	3rd	4th	
Construction	Manufacturing	Transportation & Storage	Marine	Others
6 5 7 5	5 1 1 1 1 1 3		2 2 0 0 0 0 0 0	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Jan-Jun 2019 Jul-Dec 2019 Jan-Jun 2020 Jul-Dec 2020 Jan-Jun 2021 Jan-Jun 2022 Jul-Dec 2022 Jan-Jun 2022	Jan-Jun 2019 Jul-Dec 2019 Jan-Jun 2020 Jul-Dec 2020 Jan-Jun 2021 Jan-Jun 2022 Jul-Dec 2022 Jan-Jun 2022 Jan-Jun 2022	Jan-Jun 2019 Jul-Dec 2019 Jan-Jun 2020 Jul-Dec 2020 Jan-Jun 2021 Jan-Jun 2022 Jul-Dec 2022 Jul-Dec 2022 Jul-Dec 2022	Jan-Jun 2019 Jul-Dec 2019 Jan-Jun 2020 Jul-Dec 2020 Jan-Jun 2021 Jan-Jun 2022 Jan-Jun 2022 Jan-Jun 2022	Jan-Jun 2019 Jul-Dec 2019 Jan-Jun 2020 Jul-Dec 2020 Jan-Jun 2021 Jul-Dec 2021 Jul-Dec 2021 Jul-Dec 2022 Jan-Jun 2022

Others refer to the summation of various industries with lower incidence of DOs in recent years.

9.9

20.0

20.0

96

19.2

191

20.3

29.7

29.7

18.6

37.2

38.5

OCCUPATIONAL DISEASES

OD Incidence Rate (6-month)

OD Incidence Rate

(12-month rolling)

OD Incidencey Rate (Annualised)

There were 671 cases of ODs reported in 1H2023, 7% fewer compared to the 720 cases in 2H2022, but twice as many cases compared to 332 cases in 1H2022. The annualised OD incidence rate consequently increased to 37.2 cases per 100,000 workers in 1H2023. The higher number of OD cases since 2H2022 was largely driven by the rise in reported Noise-induced Deafness (NID) cases due to the ongoing Enhanced Workplace Health Surveillance (WHS+) efforts and increased awareness in reporting amongst doctors and employers.

37.2 29.7 20.3 18.6 Jul-Dec Jan-Jun Jul-Dec Jan-Jun Jul-Dec Jan-Jun Jan-Jun Jul-Dec Jan-Jun Rate: Per 100,000 Workers 2019 2019 2020 2020 2021 2021 2022 2022 2023 OD Cases 264 253 196 298 333 326 332 720 671

59

11.7

13.4

9.0

15.0

15.0

10.1

20.2

191

Figure 7a: Number and rate of occupational diseases, 2019-2023

76

15.3

15.4

7.3

14.8

14.8

Manufacturing was the top contributor in 1H2023 with 326 OD cases, followed by Construction and Health & Social Services with 69 and 50 reported cases, respectively. These industries collectively accounted for 66% (445 cases) of all reported OD cases in 1H2023.

Figure 7b: Number of occupational diseases by industry, 2019-2023

Тор	2nd	3rd	4th	5th
Manufacturing	Construction	Health &	Marine	Transportation &
389		Social Services		Storage
103 95 70 117	25 ³⁸ 31 34 ⁴⁷ 50 67 69	23 25 28 51 51 56 38 40 50	7 3 8 3 29 5 16 43 46	30 38 20 31 28 29 38 35 39
Jan-Jun 2019 Jul-Dec 2019 Jan-Jun 2020 Jul-Dec 2020 Jul-Dec 2021 Jul-Dec 2021 Jul-Dec 2021 Jul-Dec 2022 Jul-Dec 2022	Jan-Jun 2019 Jul-Dec 2019 Jul-Dec 2020 Jul-Dec 2020 Jul-Dec 2021 Jul-Dec 2022 Jul-Dec 2022 Jul-Dec 2022	Jan-Jun 2019 Jul-Dec 2019 Jul-Dec 2020 Jul-Dec 2020 Jul-Dec 2021 Jul-Dec 2021 Jul-Dec 2022 Jul-Dec 2022 Jul-Dec 2022	Jan-Jun 2019 Jul-Dec 2019 Jan-Jun 2020 Jul-Dec 2020 Jan-Jun 2021 Jan-Jun 2022 Jul-Dec 2022 Jul-Dec 2022 Jul-Dec 2022	Jan-Jun 2019 Jul-Dec 2019 Jan-Jun 2020 Jan-Jun 2020 Jan-Jun 2021 Jul-Dec 2021 Jul-Dec 2021 Jul-Dec 2022 Jul-Dec 2022 Jul-Dec 2022 Jul-Dec 2022

TYPES OF OCCUPATIONAL DISEASES

The top two types of OD cases reported were (i) Noise-induced Deafness and (ii) Work-related Musculoskeletal Disorders⁶, collectively accounting for 95% (635 cases) of all OD cases reported in 1H2023.

Figure 7c: Number of occupational diseases by type, 2019-2023

Тор	2nd	3rd	
Noise-induced	Work-related	Occupational	Others
Deafness	Musculoskeletal Disorders	Skin Diseases	
495			
	145 148 130 198 176 203 165 175 115		
90 50 50 60 106 62	1 1 1	2 6	
r. 9		23 16 5 25 37 37 42 24 24 39 39	6 11 15 14 19 19 11 11
2019 2020 2020 2020 2021 2021 2022 2022	2019 2019 2020 2020 2021 2021 2022 2022	2019 2020 2020 2021 2021 2022 2022 2022	2019 2020 2020 2021 2021 2022 2022 2022
Jan-Jun Jul-Dec Jan-Jun Jul-Dec Jan-Jun Jul-Dec Jan-Jun Jul-Dec Jan-Jun	Jan-Jun Jul-Dec Jan-Jun Jul-Dec Jan-Jun Jul-Dec Jan-Jun Jul-Dec Jan-Jun	Jan-Jun Jul-Dec Jan-Jun Jul-Dec Jan-Jun Jul-Dec Jan-Jun Jul-Dec	Jan-Jun 2019 Jul-Dec 2019 Jan-Jun 2020 Jul-Dec 2020 Jan-Jun 2021 Jan-Jun 2022 Jul-Dec 2021 Jan-Jun 2023

Others refer to the summation of various OD types with lower incidence in recent years such as Compressed Air Illness, Barotrauma and Cancers.

⁶ Back injuries due to ergonomic risks were considered as Work-related Musculoskeletal Disorders and included as an occupational disease since 2013.



SOURCE OF DATA

Data on workplace and work-related traffic injuries, dangerous occurrences and occupational diseases were collated from incident reports made by employers, occupiers, medical practitioners and private insurers in fulfilment of their obligations under the Workplace Safety and Health Act and Workplace Safety and Health (Incident Reporting) Regulations.

Employment data used in the computation of workplace fatal, injury and occupational disease incidence rates were extracted from records within the Ministry of Manpower.

DATA COVERAGE

The types of workplace and work-related traffic injuries and occupational diseases covered in the reported statistics include the following:

- Workplace and work-related traffic injuries sustained by employees and resulting in any instance of medical leave or light duties;
- Workplace and work-related traffic injuries sustained by employees and resulting in at least 24 hours of hospitalisation;
- Workplace and work-related traffic incidents resulting in the death of employees and selfemployed persons;
- Workplace and work-related traffic incidents resulting in the injury of self-employed persons who have to be taken to the hospital for treatment; and
- Occupational diseases listed in the Second Schedule of the Workplace Safety and Health Act and Work Injury Compensation Act.



CONCEPTS AND DEFINITIONS

Incident Agent refers to the object or physical environment, which due to its hazardous nature/condition, leads to the occurrence of a particular type of incident. It is related to the incident, not injury.

Incident Type (Cause) refers to the type of event which resulted in the injury of a victim. Where the event involves a chain of incidents, the incident type should be the one that triggered the chain of other incidents. From 2022, a new sub-classification for Incident Type (Cause) have been introduced based on their fatality risk profile as shown below.

Higher fatality risk - Type A

- Caught in/between Objects
- Collapse/Failure of Structures & Equipment
- Crane-related Incidents
- Falls from Height
- Fires & Explosion
- Suffocation/Drowning
- Struck by Falling Objects
- Struck by Moving Objects
- Vehicular related injuries

Lower fatality risk – Type B

- Cut/Stabbed by Objects
- Discharge of Dangerous Substances
- Exposure to Biological Materials
- Exposure to Electric current
- Exposure to Extreme Temperatures
- Exposure to Hazardous Substances
- Machinery Incidents
- Physical Assault
- Over-exertion/Strenuous Movements
- Slips, Trips & Falls
- Stepping on Objects
- Striking against Objects
- Others

Major Injuries refer to non-fatal injuries which are more severe in nature. Major injuries are defined using a combination of factors, including the nature of injury, part of the body injured, incident type and duration of medical leave. These include:

- amputation
- blindness
- deafness
- paralysis
- crushing, fractures and dislocations: head, back, chest and abdomen, neck, hip and pelvis
- exposure to electric current
- asphyxia/drowning
- burns with more than 20 days of medical leave
- concussion with more than 20 days of medical leave
- mosquito borne diseases with more than 20 days of medical leave
- virus outbreak with more than 20 days of medical leave

Minor injuries refer to non-severe injuries with any instance of medical leave or light duties.



GLOSSARY OF COMMONLY USED TERMS

Term	Description
Dangerous Occurrences	Dangerous Occurrences refer to incident where no person is injured, but which had the potential to cause serious injury and death.
Heightened Safety Period	Arising from the spate of workplace fatalities in 1H 2022, MOM progressively rolled out interventions to increase enforcement, engagement and penalties; and introduced Heightened Safety Period (HSP) measures from 1 Sep 2022, to instil a stronger safe operations culture and place greater accountability on senior management. https://www.mom.gov.sg/workplace-safety-and-health/heightened-safety-period
Machinery Incidents	Machinery Incidents include Struck by Moving Objects, Caught In/Between Objects and Cut/Stabbed by Objects where the agent(s) is an industrial machine, industrial hand tool or other machines and tools.
Man-days Loss	For the purpose of this publication, MOM considers a fatal injury as equivalent to the loss of 6,000 man-days, similar to the U.S. National Institute of Occupational Safety and Health (NIOSH)'s table of scheduled charges.
Vehicular Incidents	Vehicular Incidents include Struck by Moving Objects and Caught In/Between Objects where the agent(s) is a vehicle.
Workplace Injury	A workplace injury is any personal injury or death resulting from a workplace accident, including work-related traffic injuries. Refer to Annexes A & B for the types of workplace injuries covered.
Work-related Traffic Accident	A work-related traffic accident (WRTA) is any unintended event that causes bodily injury to a vocational driver while he or she is driving any vehicle in the course of work.

GLOSSARY OF COMMONLY USED TERMS (CONTINUED)

DEFINITION FOR RATES USED:

Term	Description
6-month Injury / Incidence Rate	No. of Workplace Injuries/Occupational Diseases for the past 6 months No. of Workers X 100,000
12-month (rolling) Injury / Incidence Rate	No. of Workplace Injuries/Occupational Diseases for the past 12 months No. of Workers X 100,000
Annualised Rate	Annualised Rate is an estimated rate should the current 6-month rate be sustained throughout the year.
Occupational Disease Incidence Rate	No. of Occupational Disease Cases X 100,000 No. of Workers
Total Workplace Injury Rate	No. of Fatal and Non-Fatal Workplace Injuries X 100,000 No. of Workers

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