



Workplace Safety and Health Report January – June 2021

— National Statistics —

CONTENTS

Notations, List of Charts and Statistical Tables Page 1

Key Facts Page 2

Overview of Trends Page 4

Annexes

Annex A – Sources of Data Page 18

Annex B – Data Coverage Page 19

Annex C – Concepts and Definitions Page 20

NOTATIONS

- : Nil or negligible
- n.a. : Not applicable/Not available
- 2021^P : 2021 figures are preliminary.

LIST OF CHARTS

- Figure 1: Number and rate of workplace injuries, 2017-2021
- Figure 2: Number and rate of workplace fatal injuries, 2017-2021
- Figure 3: Number of workplace fatal injuries by industry, 2017-2021
- Figure 4: Number of workplace fatal injuries by cause of injury, 2017-2021
- Figure 5: Number and rate of fatal injuries for Construction industry, 2017-2021
- Figure 6: Number and rate of fatal injuries for Marine industry, 2017-2021
- Figure 7: Number and rate of fatal injuries for Manufacturing industry, 2017-2021
- Figure 8: Number and rate of fatal injuries for Transportation & Storage industry, 2017-2021
- Figure 9: Number and rate of workplace major injuries, 2017-2021
- Figure 10: Number of workplace major injuries by industry, 2017-2021
- Figure 11: Number of workplace major injuries by cause of injury, 2017-2021
- Figure 12: Number and rate of workplace minor injuries, 2017-2021
- Figure 13: Number of workplace minor injuries by industry, 2017-2021
- Figure 14: Number of workplace minor injuries by cause of injury, 2017-2021
- Figure 15: Number of dangerous occurrences, 2017-2021
- Figure 16: Number of dangerous occurrences by industry, 2017-2021
- Figure 17: Number and rate of occupational diseases, 2017-2021
- Figure 18: Number of occupational diseases by industry, 2017-2021
- Figure 19: Number of occupational diseases by type, 2017-2021

LIST OF TABLES

- Table 1: Number of workplace injuries, dangerous occurrences and occupational diseases, 2019 - 2021
 - Table 2: Key safety and health indicators, 2019 - 2021
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KEY FACTS

WORKPLACE INJURIES IN FIRST HALF OF 2021 COMPARABLE TO PRE-COVID LEVELS.

There were a total of 6,411 workplace injuries¹ in the 1H2021, slightly higher than the 6,293 injuries in 2H 2020 (phased re-opening) and 5,057 injuries in 1H 2020 (Circuit Breaker). However, it was comparable to pre-Covid levels.

Specifically, there were 23 workplace fatal injuries in the 1H 2021, higher than the 13 and 17 fatalities seen in the preceding two-halves (2H 2020 and 1H 2020 respectively) and comparable to the 22 fatalities in 2H 2019. Likewise, major and minor injuries in the 1H 2021 were higher than the earlier two-halves in 2020 but were either comparable or lower than the numbers seen in 2019.

Occupational disease (OD) cases rose from 326 cases in 2H 2020 to 401 cases in 1H 2021, largely due to clearance of backlog cases and infectious diseases.

Table 1: Number of workplace injuries, dangerous occurrences and occupational diseases, 2019 - 2021

	1H 2019	2H 2019	1H 2020	2H 2020	1H 2021 ^P
Workplace Injuries	6,630	7,149	5,057	6,293	6,411
Fatal Injuries	17	22	17	13	23
Major Injuries	319	310	199	264	312
Minor Injuries	6,294	6,817	4,841	6,016	6,076
Dangerous Occurrences²	9	12	4	6	7
Occupational Diseases (OD)	264	253	202	326	401

Table 2: Key safety and health indicators, 2019 - 2021

Per 100,000 workers

	6-month Rate				
	1H 2019	2H 2019	1H 2020	2H 2020	1H 2021 ^P
Workplace Injury Rate³	192	205	151	191	193
Fatal Injuries rate	0.5	0.6	0.5	0.4	0.7
Major Injuries rate	9.2	8.9	6.0	8.0	9.4
Minor Injuries rate	182	196	145	182	183
OD Incidence Rate⁴	7.6	7.3	6.0	9.9	12.1
Man-days Lost⁵	268,405	276,259	214,852	202,211	273,327

¹ A workplace injury is any personal injury or death resulting from a workplace accident, including work-related traffic injuries. Please refer to Annexes A and B for the types of workplace injuries covered.

² Dangerous Occurrences refers to incident where no person is injured, but which had the potential to cause serious injury and death.

³ Workplace Injury Rate = $\frac{\text{No. of Fatal and Non-Fatal Workplace Injuries}}{\text{No. of Workers}} \times 100,000$

⁴ Occupational Disease Incidence Rate = $\frac{\text{No. of Occupational Disease Cases}}{\text{No. of Workers}} \times 100,000$

⁵ 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.

Rates were calculated per 100,000 workers on 6-month basis, in addition to 12-month rolling rates which were used in the past WSH half-yearly reports. The 6-month rate would be more representative of the WSH situation as it excludes the 2H 2020 injury trends, which were significantly lower due to work stoppages.

The main findings on the workplace safety and health performance for January to June 2021 were:

WORKPLACE INJURIES

- 23 workers were fatally injured. The 6-month fatal injury rate⁶ as of end June 2021 was 0.7 per 100,000 workers. (Based on 12-month rolling fatal injury rate⁷, the rate as of end June 2021 would be 1.1 per 100,000 workers)
- 312 workers sustained workplace major injuries. The 6-month major injury rate as of end June 2021 was 9.4 per 100,000 workers. (Based on 12-month rolling major injury rate, the rate as of end June 2021 would be 17.4 per 100,000 workers)
- 6,076 workers sustained workplace minor injuries. The 6-month minor injury rate as of end June 2021 was 183 per 100,000 workers. (Based on 12-month rolling minor injury rate, the rate as of end June 2021 would be 365 per 100,000 workers)
- 273,327 man-days were lost due to workplace injuries in the first half of 2021 from January to June 2021.

DANGEROUS OCCURRENCES

- 7 dangerous occurrences were reported to MOM from January - June 2021.

OCCUPATIONAL DISEASES (OD)

- 401 OD cases were confirmed. The 6-month incidence rate as of end June 2021 was 12.1 per 100,000 workers. (Based on 12-month rolling incidence rate, the rate as of end June 2021 would be 21.9 per 100,000 workers).
- Leading OD was Work-related Musculoskeletal Disorders (WRMSD) with 168 cases, including back injury cases due to ergonomic risks. The second most common OD was Noise-induced Deafness (NID) with 106 cases. The third most common OD was Infectious Diseases, with 82 cases contributed by COVID-19 infections.

⁶ 6-month Injury / Incidence Rate = $\frac{\text{No. of Workplace Injuries/Occupational Diseases for the past 6 months}}{\text{No. of Workers}} \times 100,000$

⁷ 12-month Rolling Injury / Incidence Rate = $\frac{\text{No. of Workplace Injuries/Occupational Diseases for the past 12 months}}{\text{No. of Workers}} \times 100,000$

OVERVIEW OF TRENDS

WORKPLACE INJURIES

The overall number of reported injuries⁸ increased marginally by 1.9% from 2H 2020 (6,293) to 1H 2021 (6,411), due largely to the resumption of business activities after the phased re-opening and was comparable to pre-Covid periods. The 6-month workplace injury rate increased marginally from 191 injuries per 100,000 workers in 2H 2020 to 193 in 1H 2021. (The 12-month rolling workplace injury rate increased from 344 per 100,000 workers as of end Dec 2020 to 383 as of end June 2021).

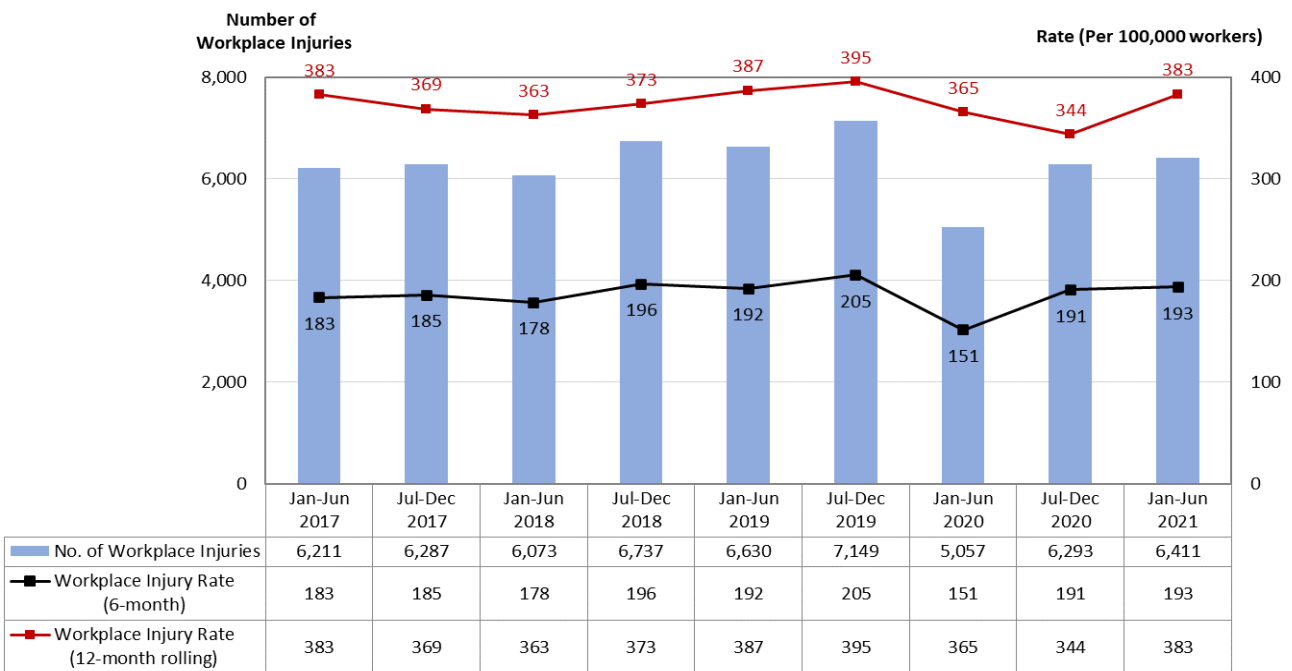


Figure 1: Number and rate of workplace injuries, 2017-2021

⁸ Employer or Occupier has to report work incidents to the Ministry of Manpower under the WSH (Incident Reporting) Regulations.

WORKPLACE FATAL INJURIES

There were 23 workplace fatal injuries in 1H 2021, higher than the 13 fatal injuries in 2H 2020 (phased re-opening) and 17 fatal injuries in 1H 2020 (Circuit Breaker), but comparable to pre-Covid numbers at 22 fatalities in 2H 2019. The 6-month fatal injury rate rose to 0.7 per 100,000 workers in 1H 2021. (The 12-month rolling workplace fatal injury rate stood at 1.1 per 100,000 workers.)

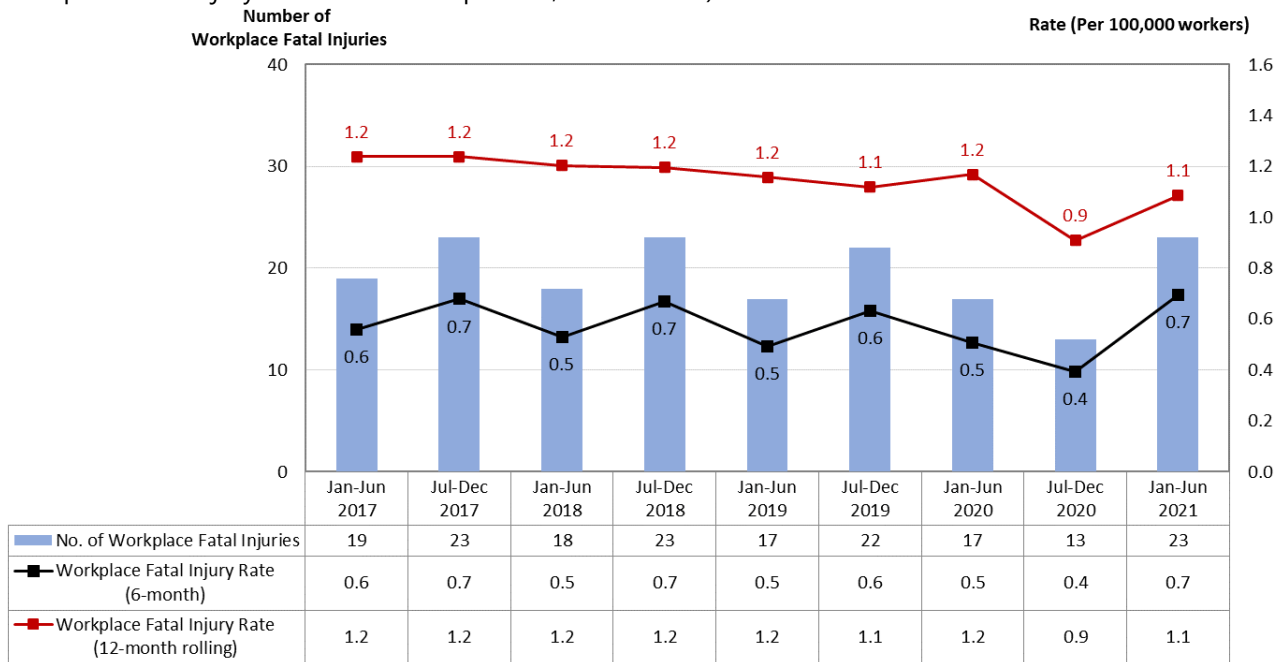


Figure 2: Number and rate of workplace fatal injuries, 2017-2021

Construction and Transportation & Storage were the top contributors to fatal injuries in 1H 2021 with 7 fatal injuries each. Both industries had more fatal injuries in 1H 2021 compared to the preceding six months. Manufacturing suffered 4 fatal injuries in 1H 2021. Collectively, these contributed to 78% of all fatal injuries in 1H 2021.

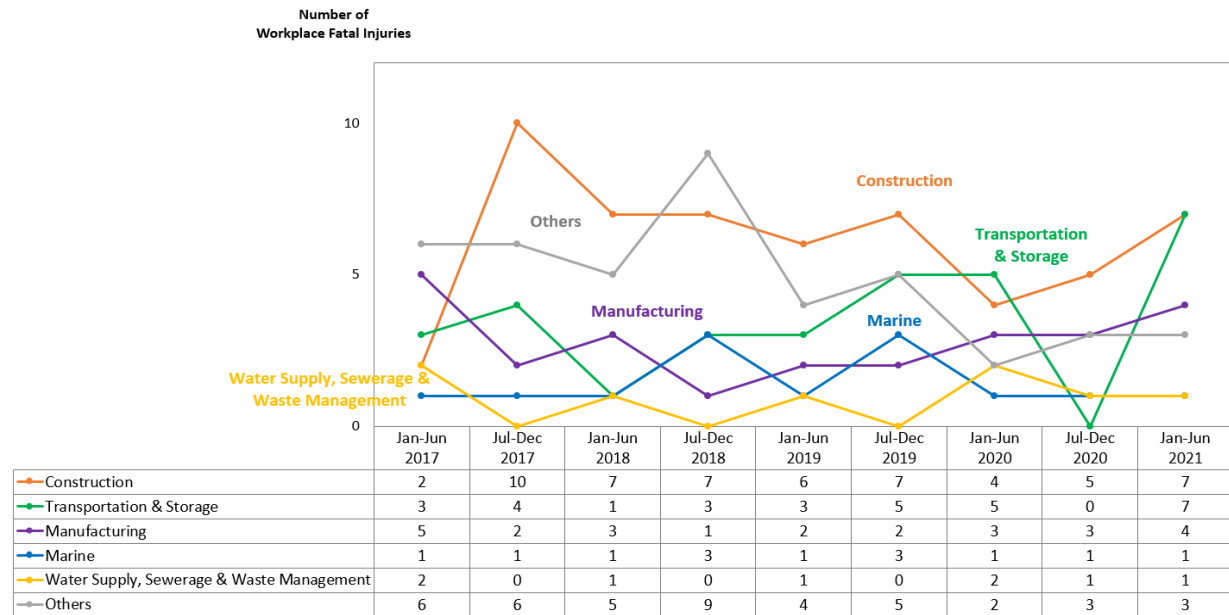


Figure 3: Number of workplace fatal injuries by industry, 2017-2021

CAUSES OF WORKPLACE FATAL INJURIES

The top two causes of workplace fatalities were Vehicular Incidents⁹ and Falls from Height. These accounted for 44% (10 injuries) of all workplace fatal injuries in 1H 2021.

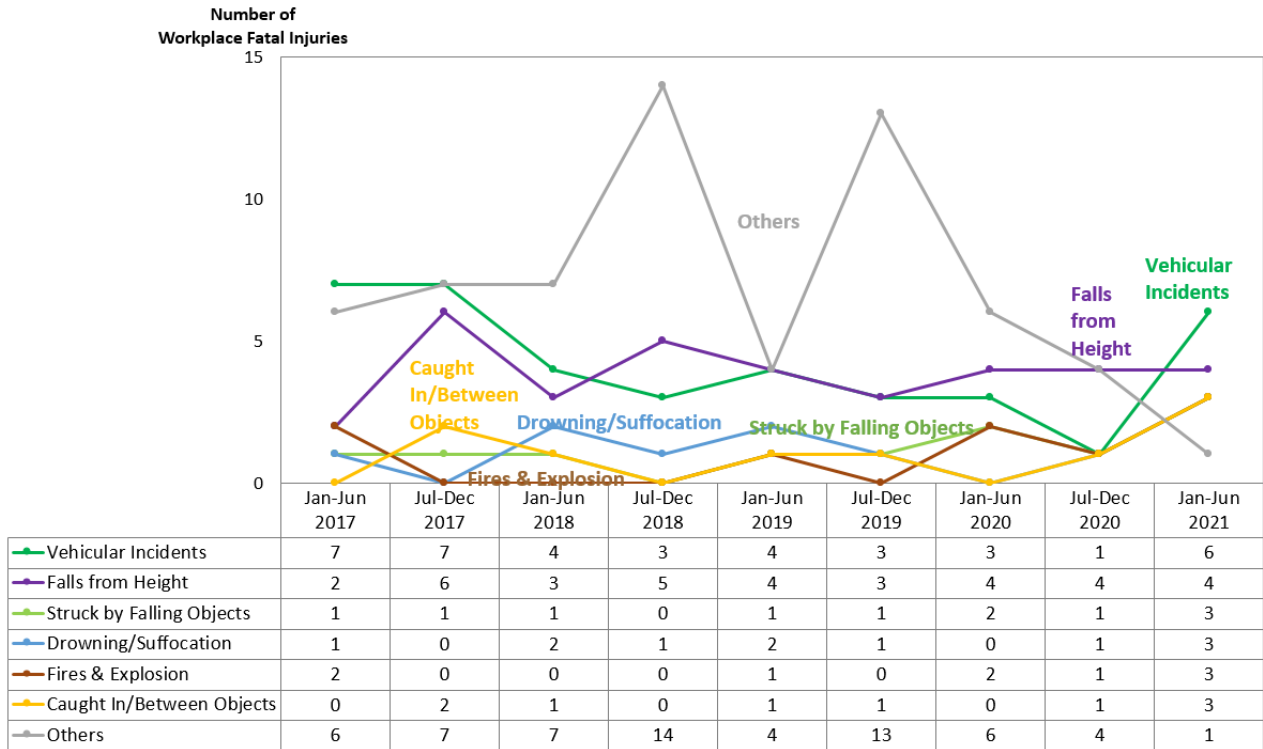


Figure 4: Number of workplace fatal injuries by cause of injury, 2017-2021

⁹ Vehicular Incidents include Struck by Moving Objects and Caught In/Between Objects where the agent(s) is a vehicle.

WORKPLACE FATAL INJURIES BY INDUSTRY

CONSTRUCTION

7 workplace fatal injuries occurred in Construction in 1H 2021, 2 fatal injuries more than 2H 2020 but comparable to pre-Covid levels at 7 fatalities in 2H2019. The 6-month fatal injury rate rose to 1.7 per 100,000 workers in 1H 2021, higher than 2019 but comparable to 2018 rates. (The 12-month rolling workplace fatal injury rate for the sector increased from 2.2 per 100,000 workers as of end Dec 2020 to 3.0 as of end June 2021).

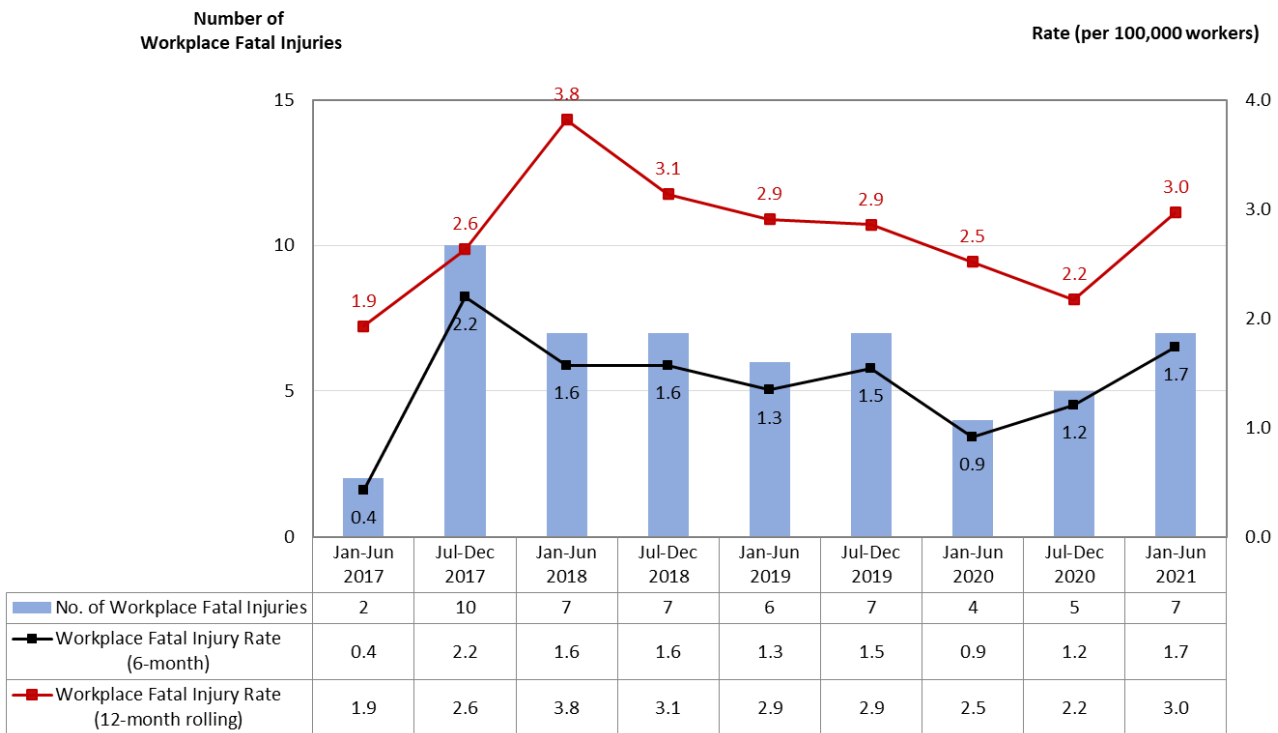


Figure 5: Number and rate of workplace fatal injuries for Construction sector, 2017-2021

MARINE

There was 1 workplace fatal injury in the Marine industry¹⁰ in 1H 2021, similar to 2H 2020. The 6-month fatal injury rate increased from 1.6 per 100,000 workers in 2H 2020 to 1.8 in 1H 2021, although remaining well below the high of 4.4 in 2H 2019 (pre-Covid). (The 12-month rolling workplace fatal injury rate increased from 3.3 per 100,000 workers as of end Dec 2020 to 3.6 as of end June 2021).

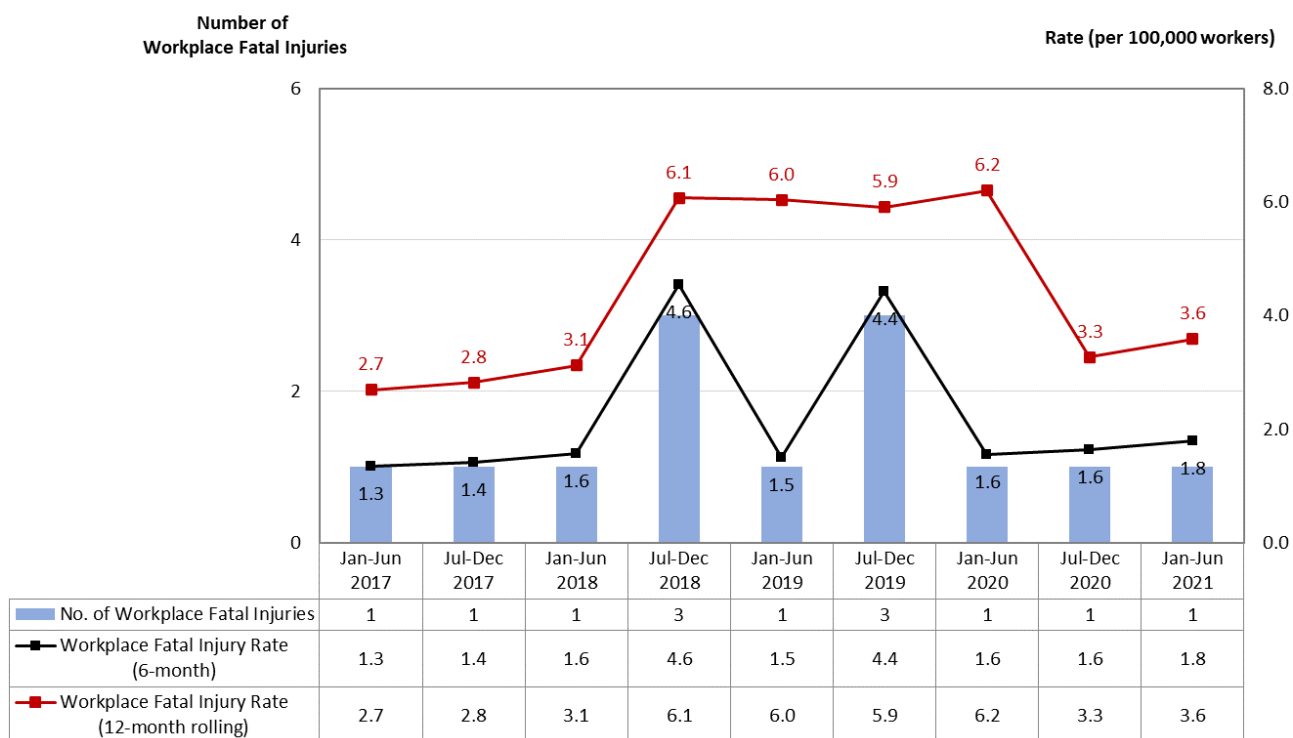


Figure 6: Number and rate of workplace fatal injuries for Marine industry, 2017-2021

¹⁰ The marine industry includes the following activities:

- Shipbuilding and Ship Repair
- Marine Surveying Services (other than classification societies)
- Salvaging of distressed vessels and cargo

Works carried out in the anchorage are also included.

MANUFACTURING

There were 4 workplace fatal injuries in Manufacturing in 1H 2021, 1 fatal injury more compared to 2H 2020. The 6-month fatal injury rate increased from 0.8 per 100,000 workers in 2H 2020 to 1.0 in 1H 2021, the highest since 1H 2017. (The 12-month rolling workplace fatal injury rate increased from 1.5 per 100,000 workers as of end Dec 2020 to 1.8 as of end June 2021).

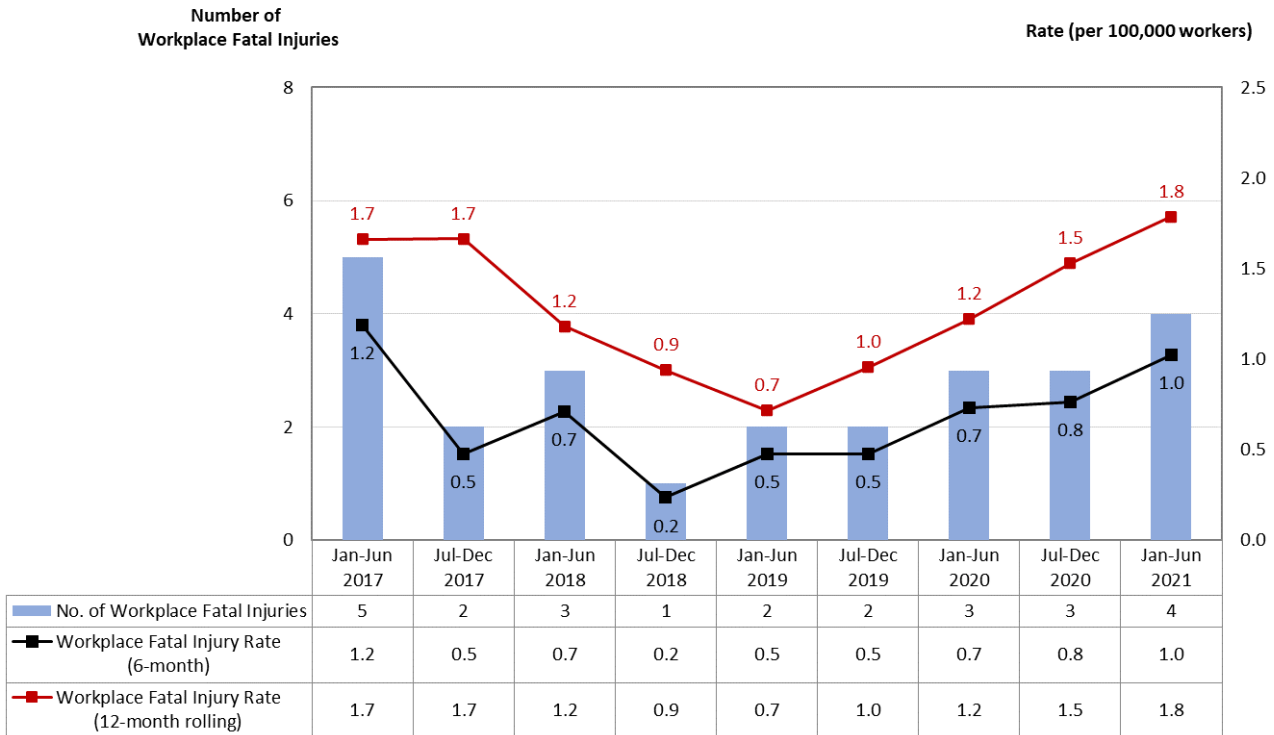


Figure 7: Number and rate of workplace fatal injuries for Manufacturing sector, 2017-2021

TRANSPORTATION & STORAGE

There were 7 workplace fatal injuries in the Transportation & Storage industry in 1H 2021 which was higher than 2H 2020 where there were none. Consequently, the 6-month fatal injury rate increased from 0 per 100,000 workers in 2H 2020 to 2.8 in 1H 2021. (The 12-month rolling workplace fatal injury rate increased from 2.0 per 100,000 workers as of end Dec 2020 to 2.8 as of end June 2021).

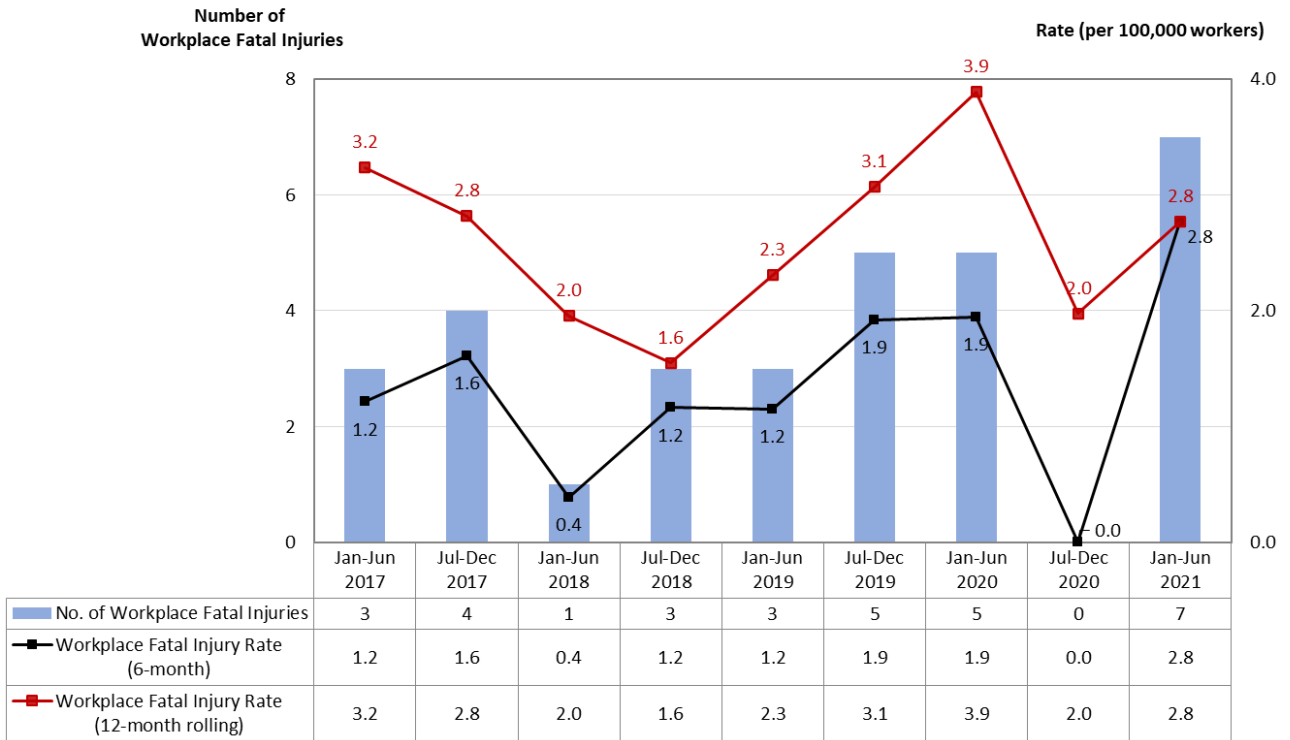


Figure 8: Number and rate of workplace fatal injuries for Transportation & Storage industry, 2017-2021

WORKPLACE MAJOR INJURIES

The number of workplace major injuries¹¹ increased from 264 injuries in 2H 2020 to 312 injuries in 1H 2021, comparable to 310 injuries in 2H 2019 (pre-Covid). The 6-month major injury rate correspondingly rose from 8.0 per 100,000 workers in 2H 2020 to 9.4 in 1H 2021, comparable to the pre-Covid rates of around 9.0 in 2019. (The 12-month rolling major injury rate correspondingly increased from 14.0 per 100,000 workers as of end Dec 2020 to 17.4 as of end June 2021 but remaining well below the rates in 2019.

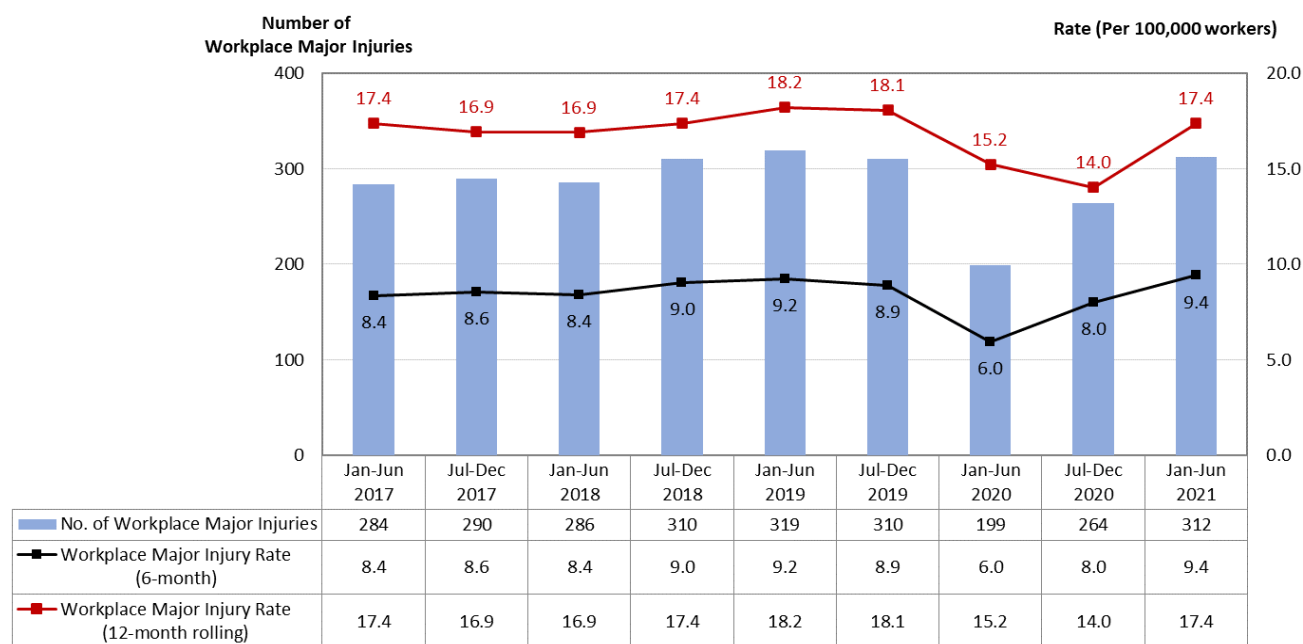


Figure 9: Number and rate of workplace major injuries, 2017-2021

In 1H 2021, Manufacturing suffered 80 major injuries, followed by Construction with 61 major injuries. These two sectors collectively accounted for 45% (141 injuries) of major injuries in 1H 2021.

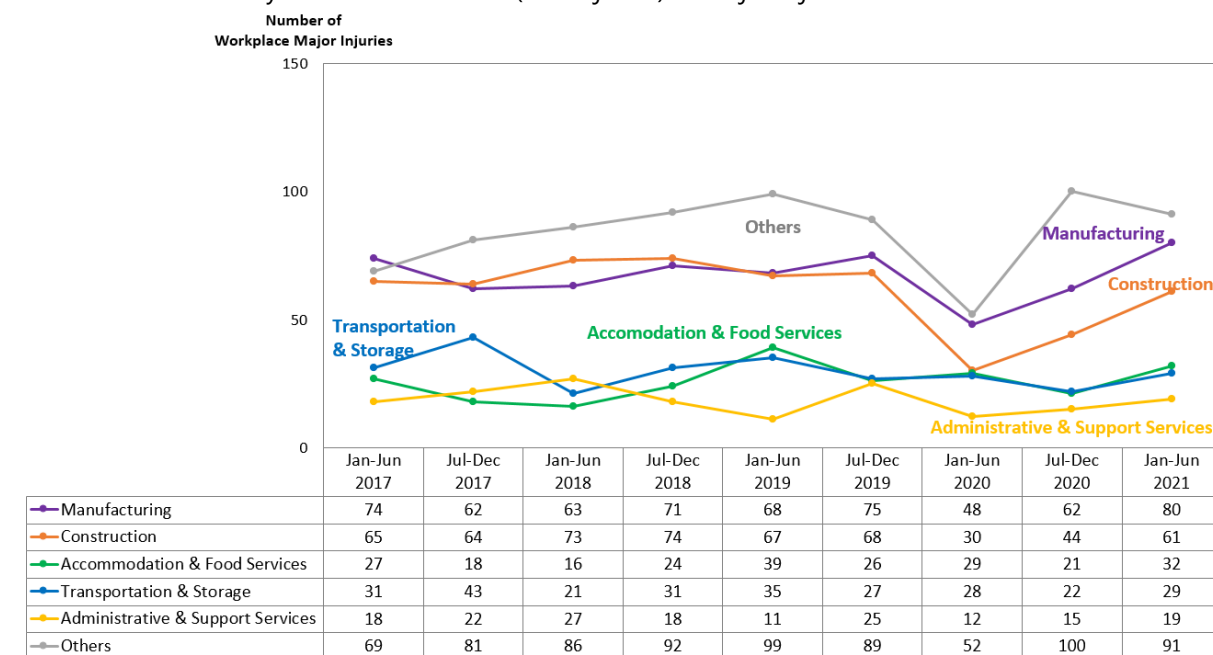


Figure 10: Number of workplace major injuries by industry, 2017-2021

¹¹ Refer to Annex C for definition.

CAUSES OF WORKPLACE MAJOR INJURIES

In 1H 2021, the following top three causes accounted for 58% (181 injuries) of workplace major injuries: (i) Slips, Trips & Falls; (ii) Falls from Height; and (iii) Machinery Incidents¹².

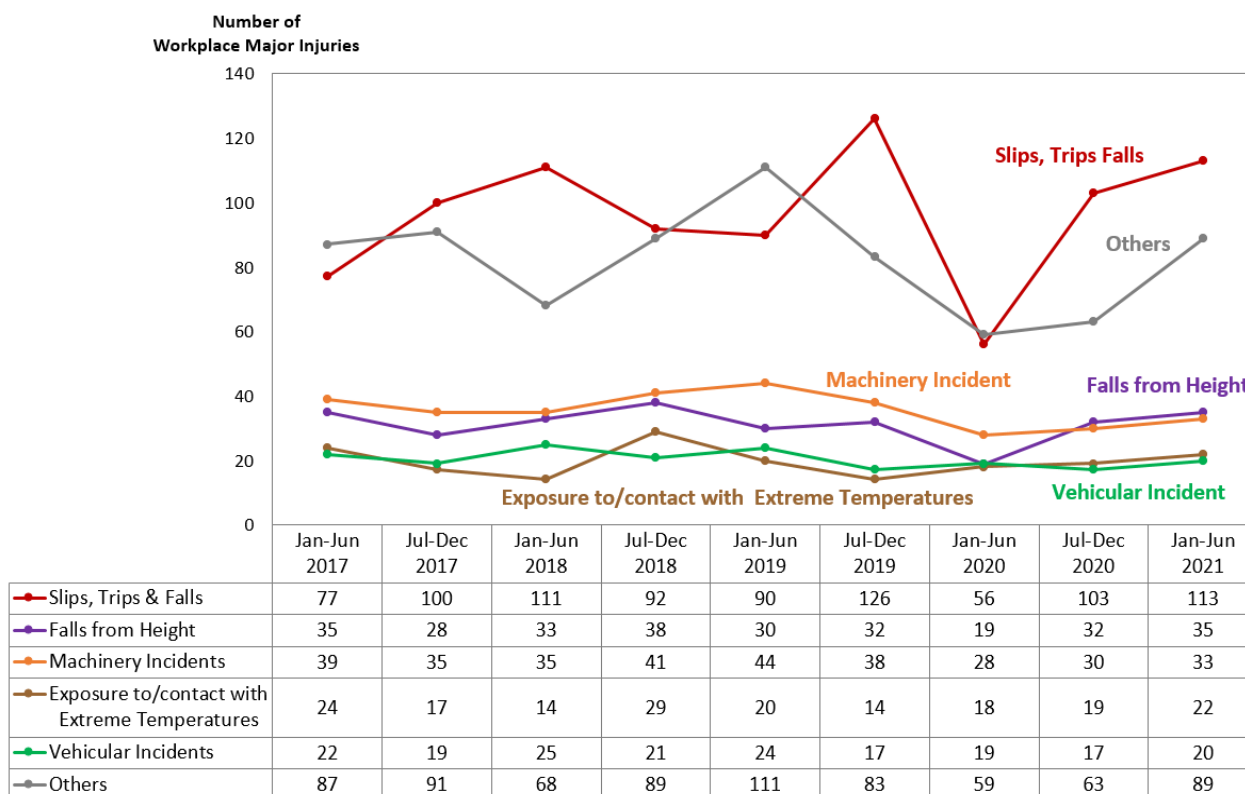


Figure 11: Number of workplace major injuries by cause of injury, 2017-2021

¹² 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.

WORKPLACE MINOR INJURIES

The number of workplace minor injuries increased marginally from 6,016 injuries in 2H 2020 to 6,076 injuries in 1H 2021 but stayed below the 6,817 in 2H 2019 (Pre-Covid). The 6-month minor injury rate remained stable from 182 per 100,000 workers in 2H 2020 to 183 in 1H 2021 (The 12-month rolling minor injury rate increased from 329 per 100,000 workers as of end Dec 2020 to 365 as of end June 2021, lower than 2019 rates).

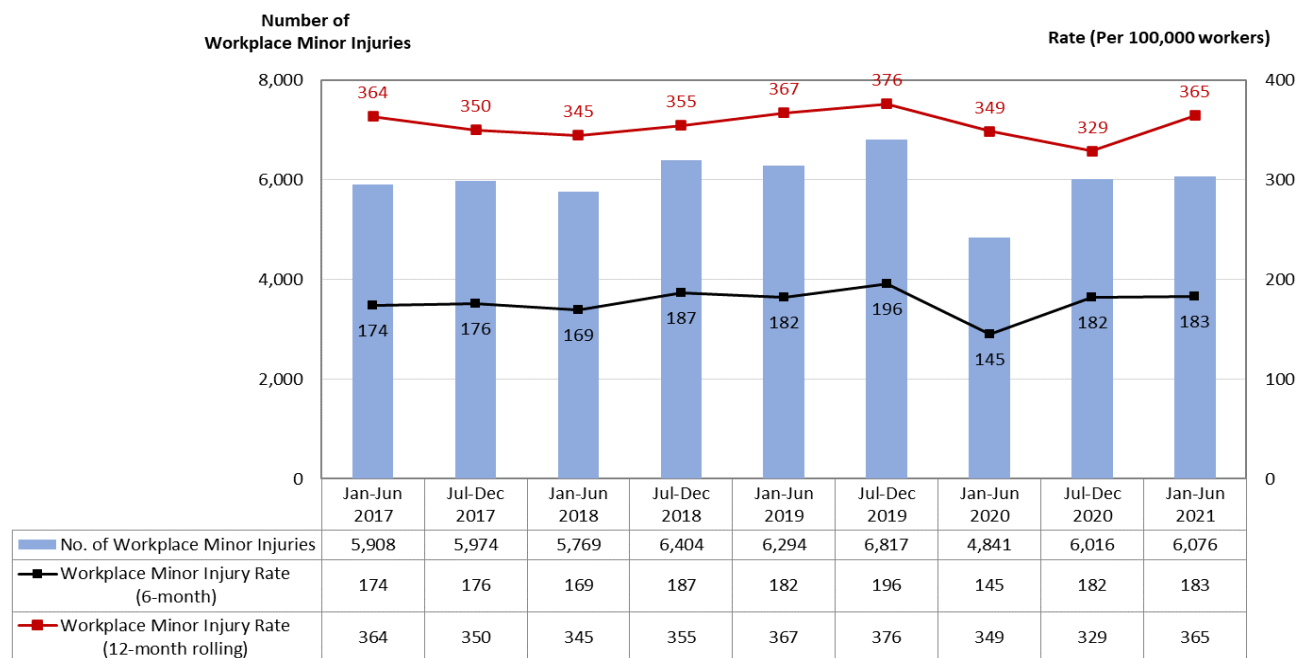


Figure 12: Number and rate of workplace minor injuries, 2017-2021

In 1H 2021, the leading contributor of minor injuries came from Manufacturing with 1,364 injuries, followed by Construction with 1,109 injuries and Accommodation & Food Services with 657 injuries. These top three contributing industries collectively accounted for 52% (3,130 injuries) of minor injuries in 1H 2021.

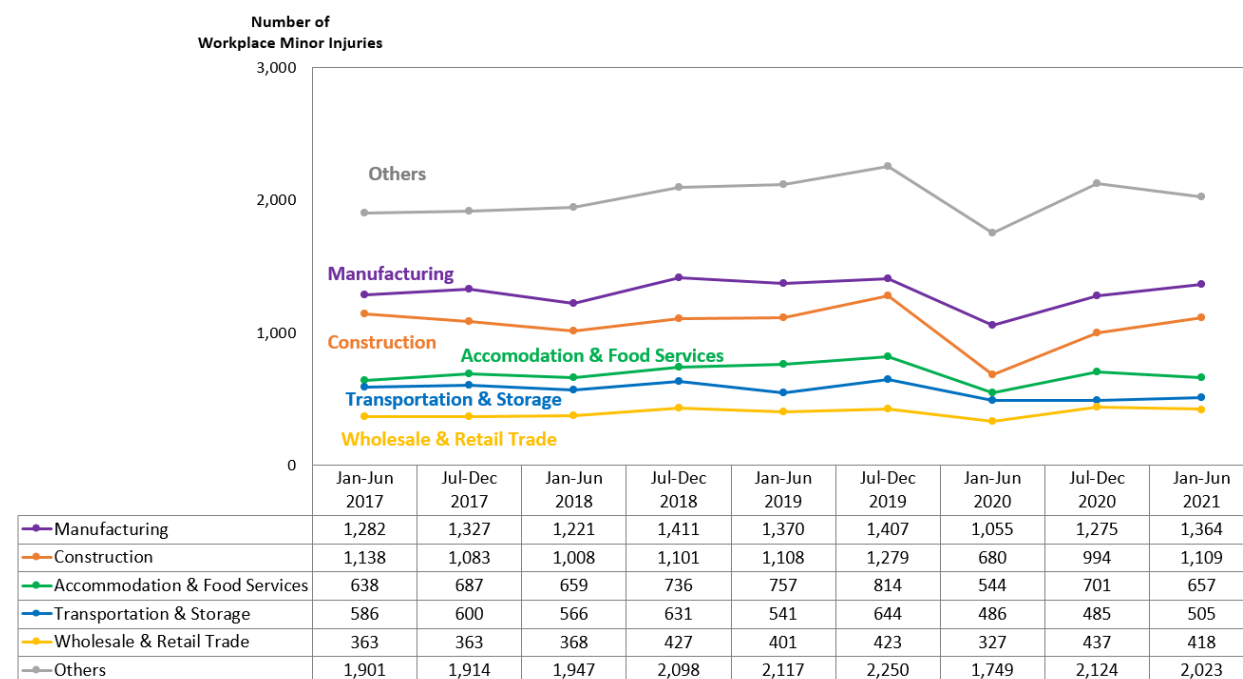


Figure 13: Number of workplace minor injuries by industry, 2017-2021

CAUSES OF WORKPLACE MINOR INJURIES

In 1H 2021, the following top three causes accounted for 54% (3,294 injuries) of minor injuries: (i) Slips, Trips & Falls; (ii) Machinery Incidents; and (iii) Struck by Moving Objects.

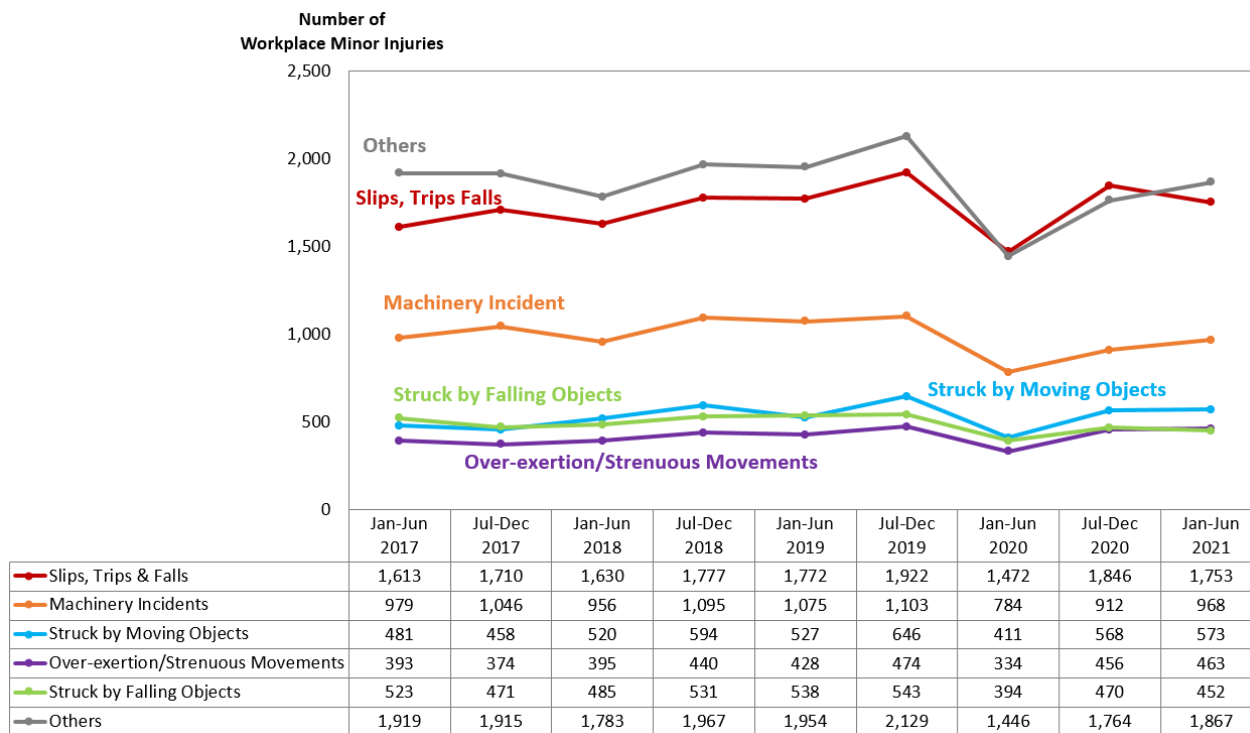


Figure 14: Number of workplace minor injuries by cause of injury, 2017-2021

DANGEROUS OCCURRENCES

7 cases of DOs were reported to MOM in 1H 2021, 1 case more than 2H 2020 and fewer than the 12 cases in 2H 2019. Amongst the DO cases, 6 cases were from Collapse/Failure of Structures & Equipment and there was 1 case from Fires & Explosion in 1H2021.

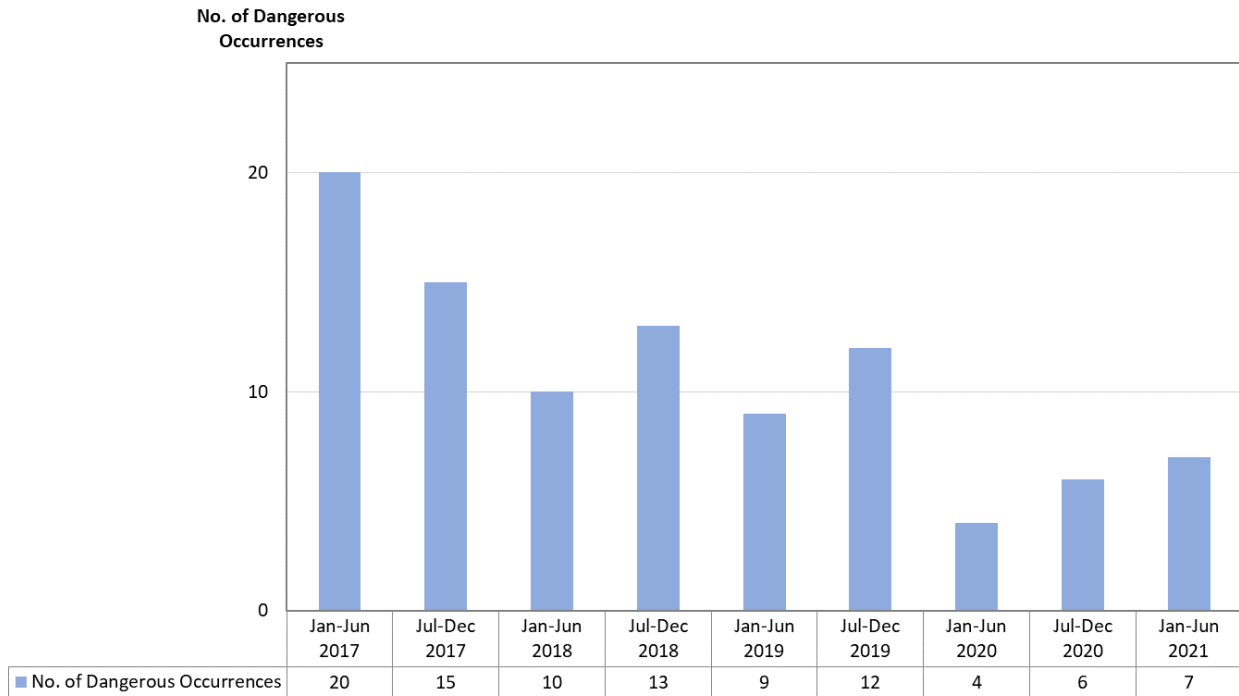


Figure 15: Number of dangerous occurrences, 2017-2021

Construction was the top contributor accounting for 5 of the 7 cases in 1H 2021. The other 2 DO cases each occurred in the Manufacturing and Transportation & Storage.

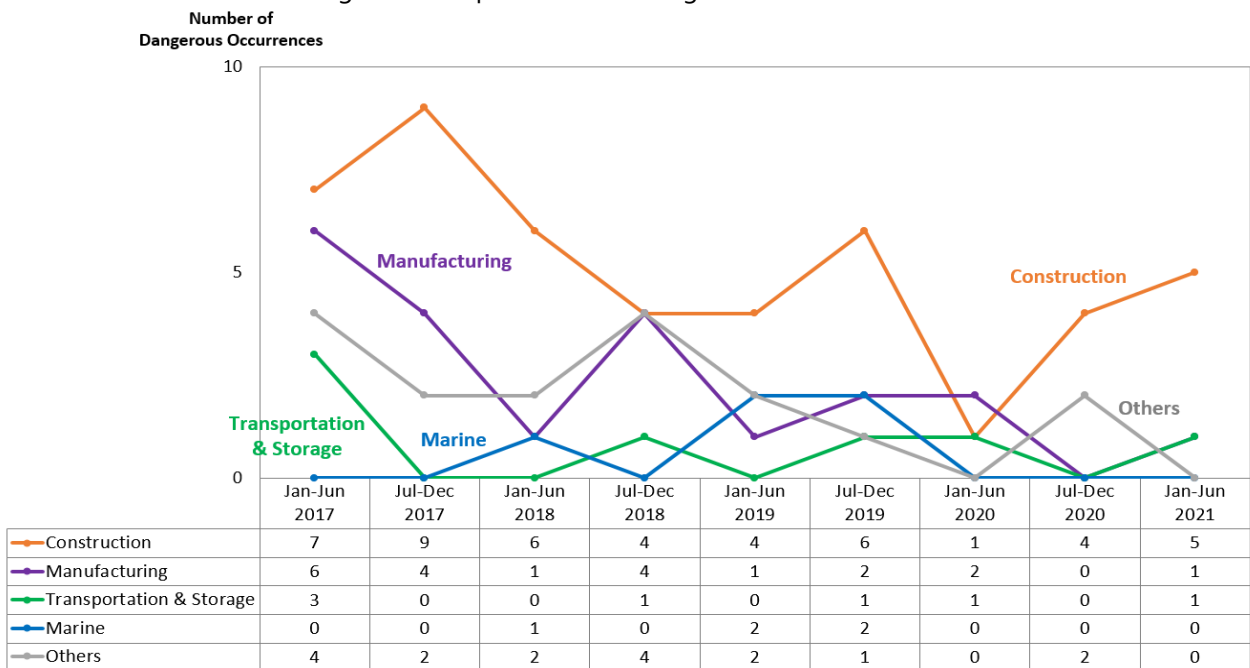


Figure 16: Number of dangerous occurrences by industry, 2017-2021

OCCUPATIONAL DISEASES

There were 401 cases of OD confirmed for 1H 2021, higher than 326 OD cases in 2H 2020. This was mainly due to the clearance of backlog from delayed assessments in the earlier periods as well as infectious diseases contributed by Covid-19 infections. Consequently, the 6-month OD incidence rate increased from 9.9 per 100,000 workers in 2H 2020 to 12.1 in 1H 2021. (The 12-month rolling OD incidence rate had also increased to 21.9 confirmed cases per 100,000 workers as at end of June 2021 from 16.0 as at end of Dec 2020).

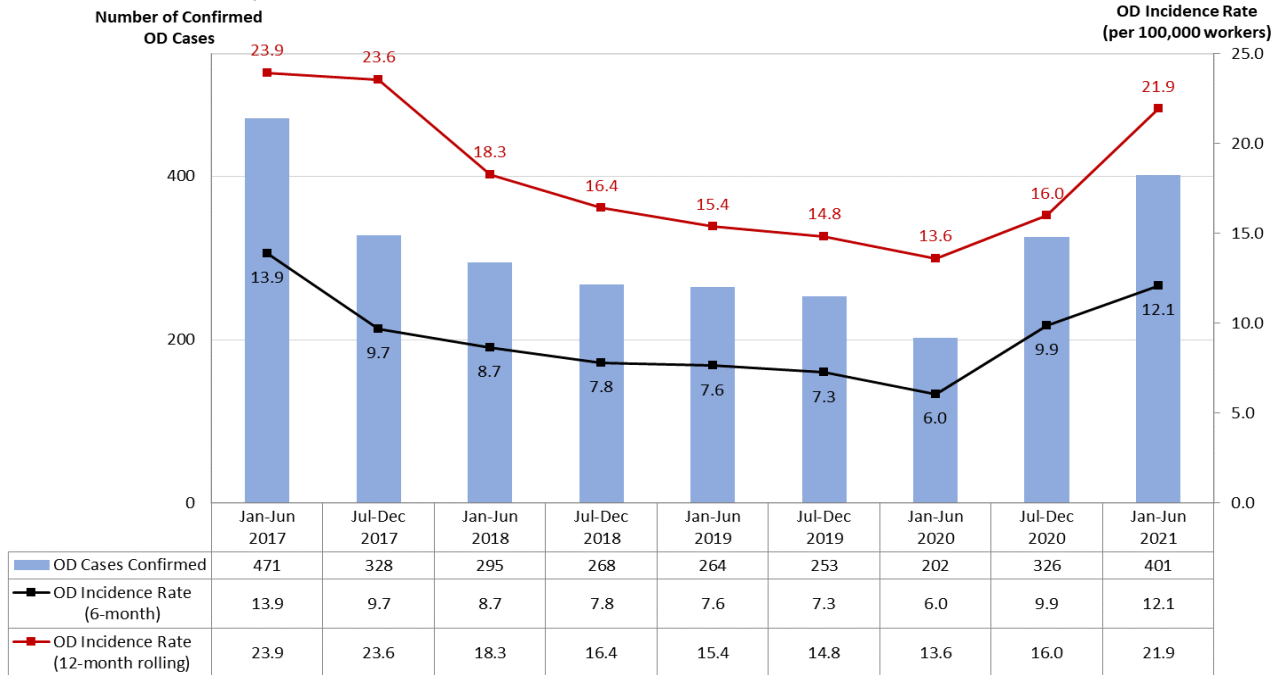


Figure 17: Number and rate of occupational diseases, 2017-2021

Manufacturing was the top contributor for OD cases in 1H 2021, with 94 OD cases. This was followed by Construction and Transportation & Storage with 75 and 41 cases respectively. These collectively accounted for 52% (210 cases) of all OD cases confirmed in 1H 2021.

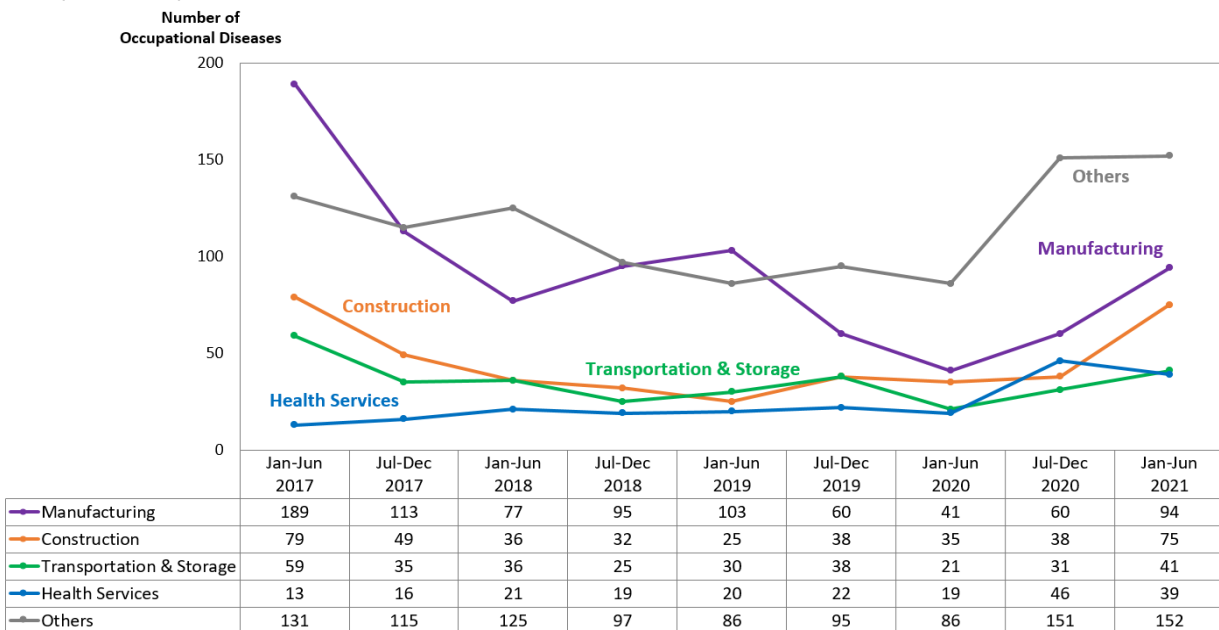


Figure 18: Number of occupational diseases by industry, 2017-2021

TYPES OF OCCUPATIONAL DISEASES

The top three types of OD cases confirmed were Work-related Musculoskeletal Disorders¹³, Noise-induced Deafness and Infectious Diseases¹⁴. In total, these accounted for 89% (356 cases) of all OD cases confirmed in 1H 2021.

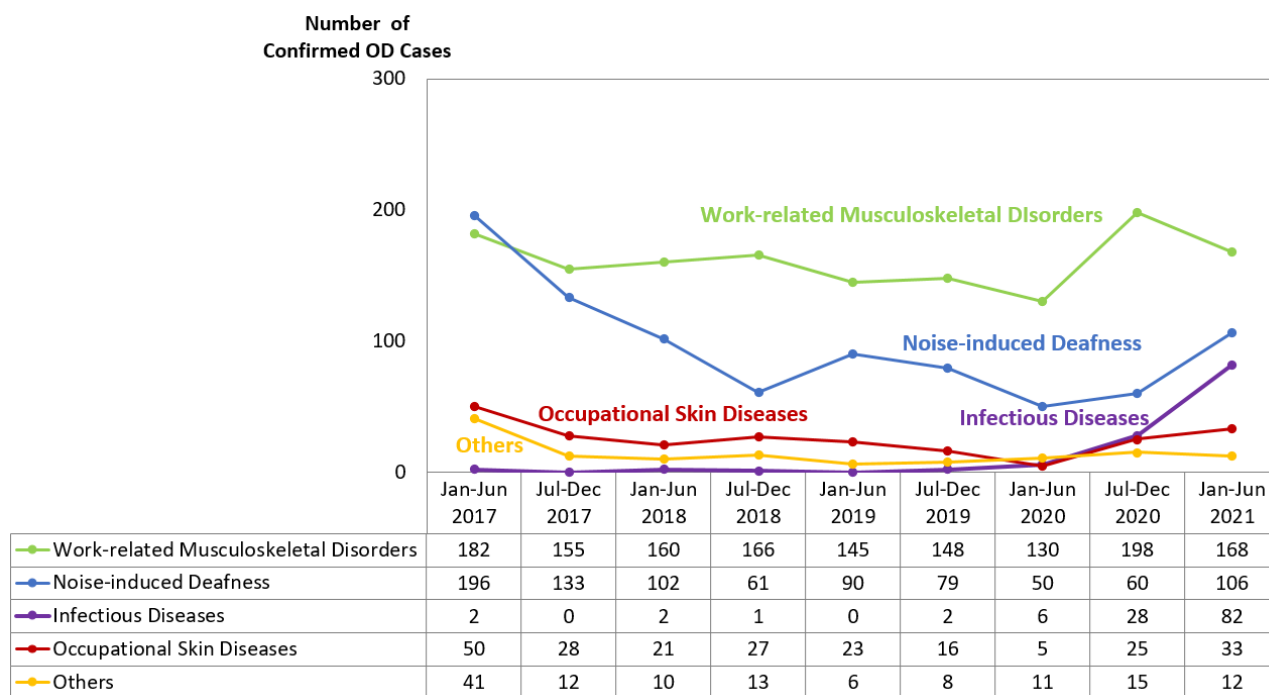


Figure 19: Number of occupational diseases by type, 2017-2021

¹³ Back injuries due to ergonomic risks were considered as Work-related Musculoskeletal Disorders and included as an occupational disease since 2013.

¹⁴ Infectious disease cases in 2020 and 2021 were largely caused by COVID-19 infections.

ANNEX A

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 and medical practitioners 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 and data on the average weekly hours worked used in the estimation of man-hours worked were extracted from records within the Ministry of Manpower.

ANNEX B

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 more than three days of medical leave, regardless of whether these were consecutive days;
 - 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 self-employed 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.
-

ANNEX C

CONCEPTS AND DEFINITIONS

Incident Type 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.

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, neck and hip
 - 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
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