

OIR Typology

Workplace Health and Safety Queensland

Typology: Manufacturing industry

Based on workers' compensation Manufacturing claims with 30 or more workdays compensated

Note: Data extracted April 2022

Contents

1. Executive summary	2
2. Introduction	3
2.1 What is a Typology?	3
2.2 Scope	3
2.2.1 Why focus on claims with 30 or more workdays compensated?	3
3. Background – Manufacturing industry	4
3.1 Incidence	4
3.2 Likelihood of ≥30 workdays compensated claims	4
3.3 Age distribution	5
4. Typology by mechanism (group)	6
4.1 Type 1 – body stressing	7
4.2 Type 2 – being hit by moving objects	8
4.3 Type 3 – falls, trips and slips	9
4.4 Type 4 – vehicle incidents	10
4.5 Type 5 – hitting objects with a part of the body	11
4.6 Type 6 – chemicals and other substances	12
4.7 Type 7 – heat, radiation and electricity	13
4.8 Type 8 – biological factors	14
4.9 Type 9 – sound and pressure	15
5. Typology – summary of key findings	16

1. Executive summary

This document provides a typology based on Queensland Manufacturing industry claims with 30 or more workdays compensated. The typology classifies the circumstances that resulted in the injury or disease using mechanism of incident, as outlined in the Types of Occurrence Classification System (TOOCS).

Claims with 30 or more workdays compensated account for 15 per cent of all Manufacturing claims over the period and account for 73 per cent of claim costs. The average claim rate was 8.9 claims per 1000 workers, which is noticeably higher than the average claim rate of 5.4 claims per 1000 workers for All industries. Workers in the Manufacturing industry are over 1.7 times as likely to experience a significant injury as workers in all other industries.

Manufacturing workers between the ages of 35 to 54 years represent nearly half of all Manufacturing claims with 30 or more workdays compensated.

Over three quarters of claims with 30 or more workdays compensated were the result of either body stressing, falls or being hit by moving objects.

Body stressing injuries represent almost a half of all relevant Manufacturing claims. Body stressing injuries were mainly the result of either carrying or lifting objects. There was one Manufacturing worker who was fatally injured over the period due to body stressing.

Injuries resulting from being hit by moving objects represent 18 per cent of all relevant Manufacturing claims. On average, one Manufacturing worker per year is fatally injured due to being hit by a moving object.

Fall related injuries represent 17 per cent of all relevant Manufacturing claims. Nearly three quarters of the fall related injuries were due to a fall on the same level.

2. Introduction

This document provides a typology based on mechanism of incident and relates to the Manufacturing industry only. The Types of Occurrence Classification System (TOOCS), developed by Safe Work Australia, has been used to describe the relevant mechanism. The mechanism is the action, exposure or event that best describes the circumstances that resulted in the injury/disease.

2.1 What is a Typology?

A typology is a scientific method of classification that helps explain what has happened previously. In this case, the classification is based on TOOCS mechanism of incident and the typology is comprised of two levels. The higher level (or type) contains the largest and most general groups of mechanisms of incidents. The second type or sub-grouping is a breakdown of these larger mechanisms of incident groups.

This typology is a form of pattern analysis that allows the reader to:

- identify common injury mechanisms and target areas of concern
- assess the effectiveness of targeted initiatives over time.

Note: The typology is restricted to two levels as it is based on TOOCS mechanism of incident, which is comprised of two levels. That is, an upper level (mechanism group) and a more detailed lower level (mechanism).

2.2 Scope

The typology was developed using accepted workers' compensation claims¹ data where:

- the industry division² is Manufacturing
- 30 or more workdays are compensated
- psychological and commuting claims are excluded
- the claim intimation date is between 1 July 2016 and 30 June 2021 (the period).

2.2.1 Why focus on claims with 30 or more workdays compensated?

Table 1 below shows the number of Manufacturing claims and overall costs for each claim category. Although claims with 30 or more workdays compensated make up only 15 per cent of all claims over the period, they account for 73 per cent of total claim costs.

Manufacturing claims with 30 or more workdays compensated include permanent and non-permanent impairment damage claims and involve injuries of a significant nature.

Table 1. Manufacturing claims by category (2016–17 to 2020–21)

Category	No. Of claims	% of claims	Total claim costs[^]	% of costs
Less than 30 workdays compensated	42,673	85%	\$128M	25%
30 or more workdays compensated	7,531	15%	\$379M	73%
Fatality Claims	21	0%	\$10M	2%
Total	50,225	100%	\$517M	100%

¹ Source: Queensland Employee Injury Database (QEIDB)

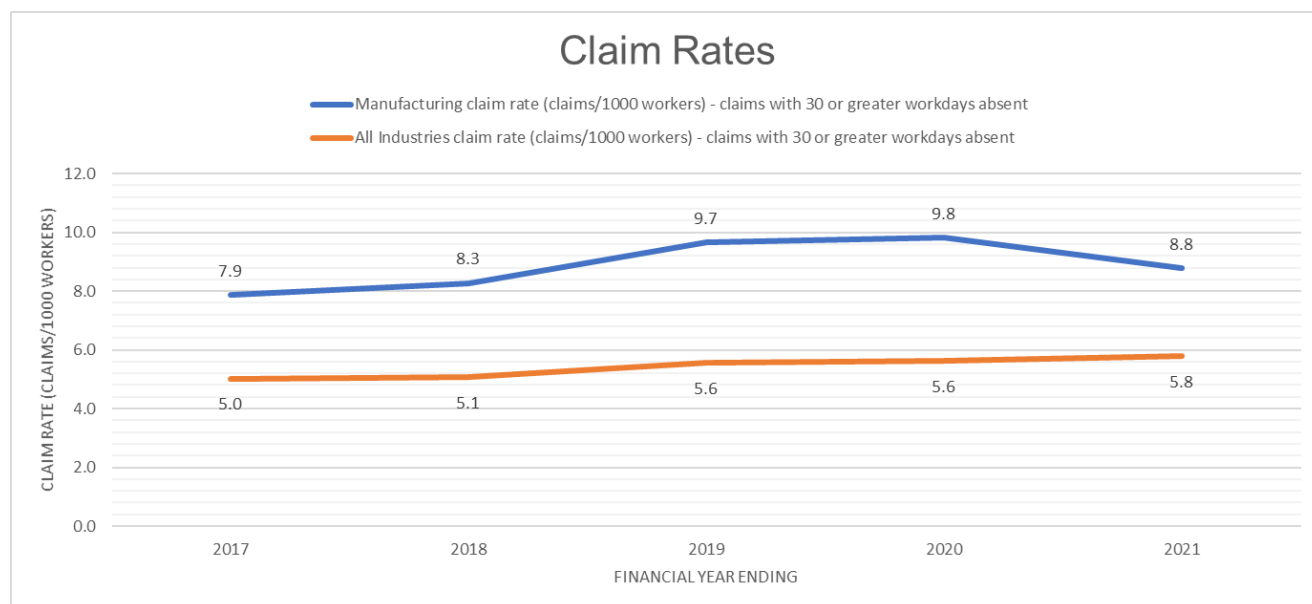
² Based on ABS: ANZSIC 2006 Classifications

3. Background – Manufacturing industry

3.1 Incidence

The claim rate for Manufacturing claims with 30 or more workdays compensated has increased over the five years to June 2021. Moreover, the Manufacturing claim rate sits above the claim rate for all Queensland industries. The average claim rate for Manufacturing over the period was 8.9 claims per 1000 workers, which is noticeably higher than the average claim rate of 5.4 claims per 1000 workers for all industries. Refer to chart 1 below.

Chart 1. Claim rates (2016–17 to 2020–21)



3.2 Likelihood of ≥30 workdays compensated claims

On average, one in every 113 Queensland Manufacturing workers each year will experience a significant injury (an injury which results in a claim requiring 30 or more workdays compensated). Notably, Manufacturing workers are 1.7 times as likely to experience a significant injury when compared to workers from all other industries. Refer to tables 2 and 3 below.

Table 2. Likelihood – Manufacturing claims with 30 or more workdays compensated

<i>Financial year ending</i>	<i>No. of claims</i>	<i>Labour force³</i>	<i>Likelihood (1 in X workers)</i>
2017	1,293	164,499	1 in 127
2018	1,410	170,384	1 in 121
2019	1,654	171,186	1 in 103
2020	1,615	164,436	1 in 102
2021	1,559	177,787	1 in 114
Average			1 in 113

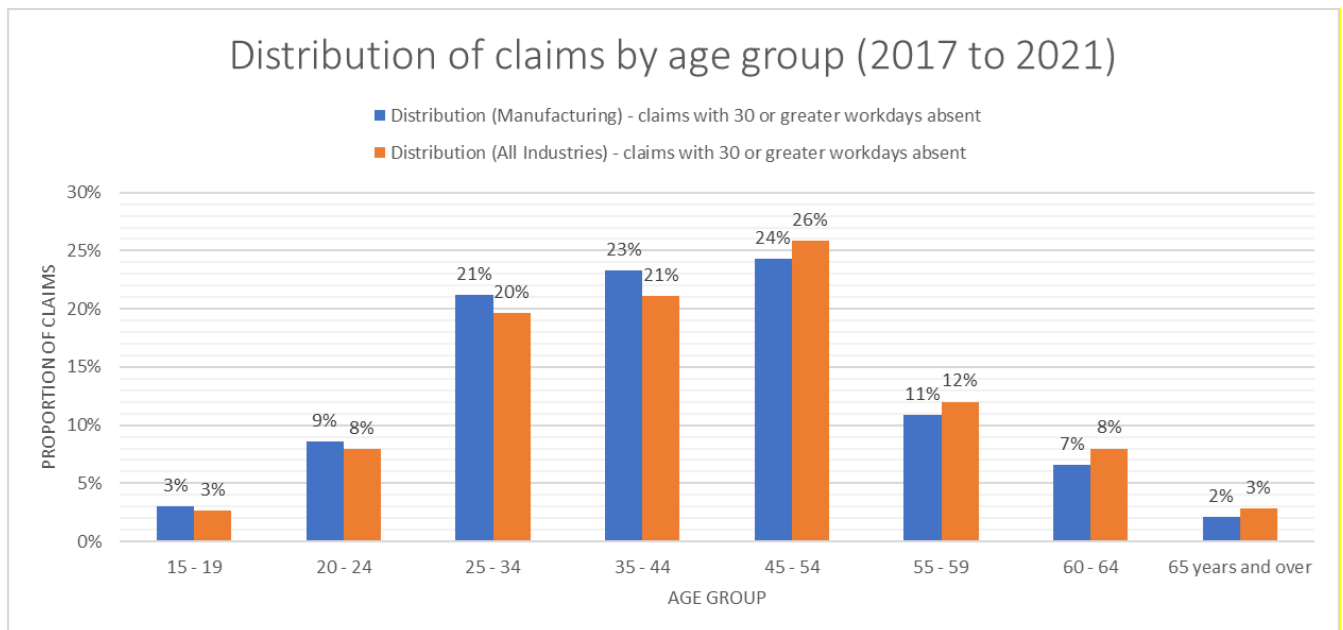
Table 3. Likelihood – All other industry claims (excluding Manufacturing) with 30 or more workdays compensated

<i>Financial year ending</i>	<i>No. of claims</i>	<i>Labour force³</i>	<i>Likelihood (1 in X workers)</i>
2017	10,606	2,205,811	1 in 208
2018	11,092	2,298,552	1 in 207
2019	12,289	2,337,012	1 in 190
2020	12,504	2,345,062	1 in 188
2021	13,374	2,404,122	1 in 180
Average			1 in 194

3.3 Age distribution

Nearly half of all Manufacturing claims with 30 or more workdays compensated were for workers between the ages of 35 and 54 years.

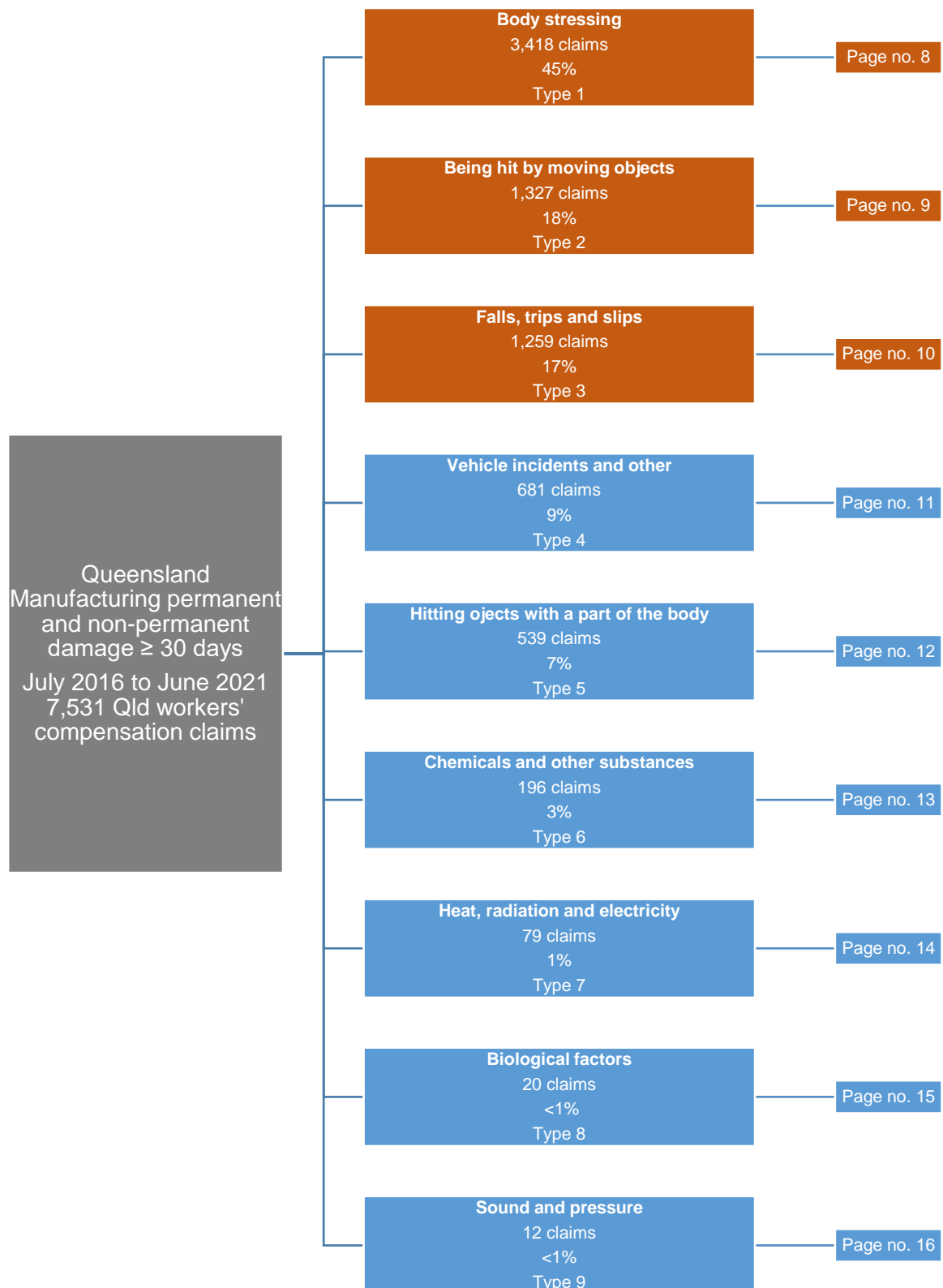
Chart 2 shows the distribution of claims with 30 or more workdays compensated by age group. Notably, the proportions for Manufacturing are higher than the proportions for all Queensland industries across the younger age groups up to and including the 35–44 age group.

Chart 2. Distribution of claims by age group (2016–17 to 2020–21)

³ Source: ABS labour force data

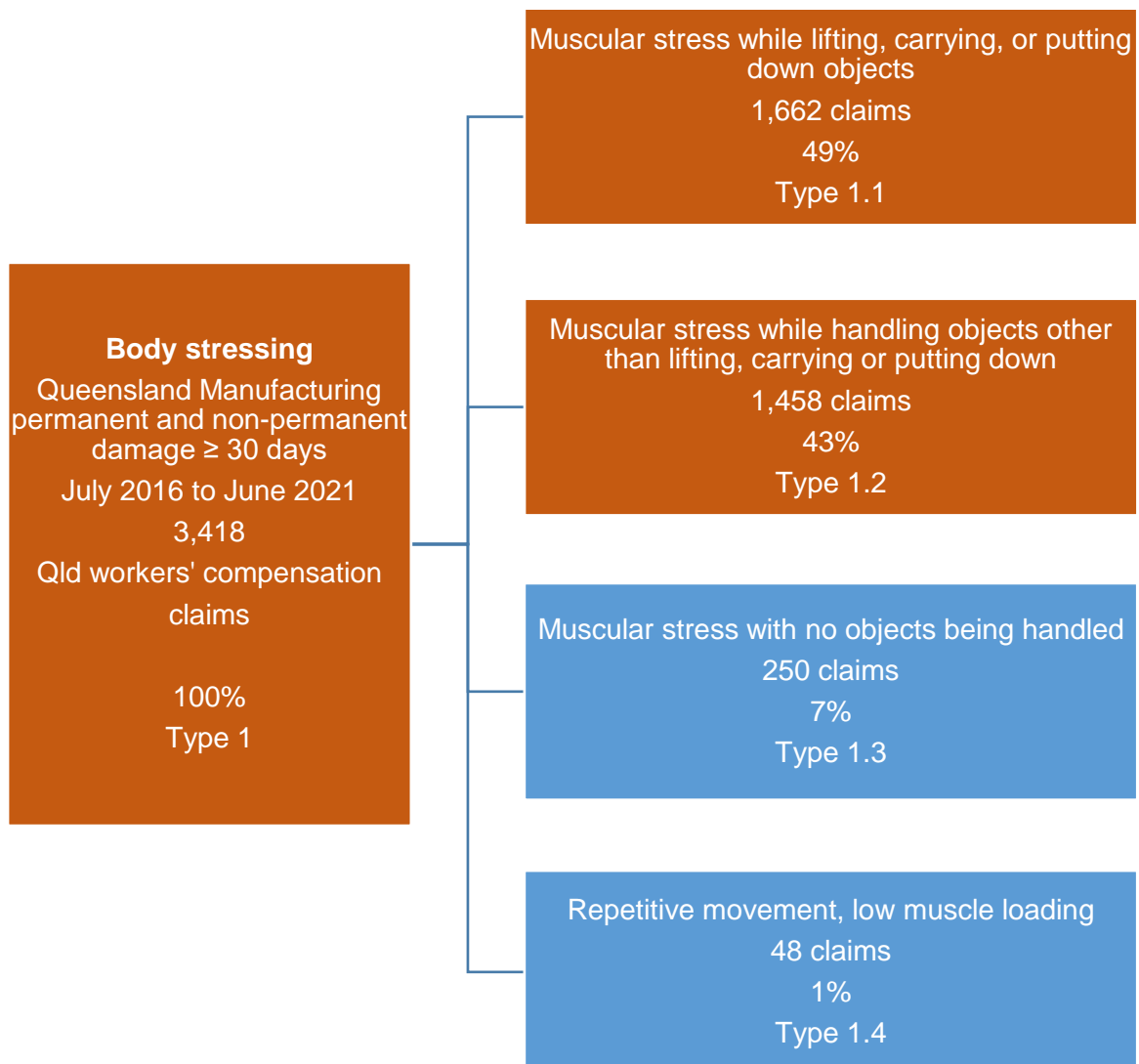
4. Typology by mechanism (group)

Note: **orange** indicates an area of concern whereas **blue** indicates an area of interest but of less importance.



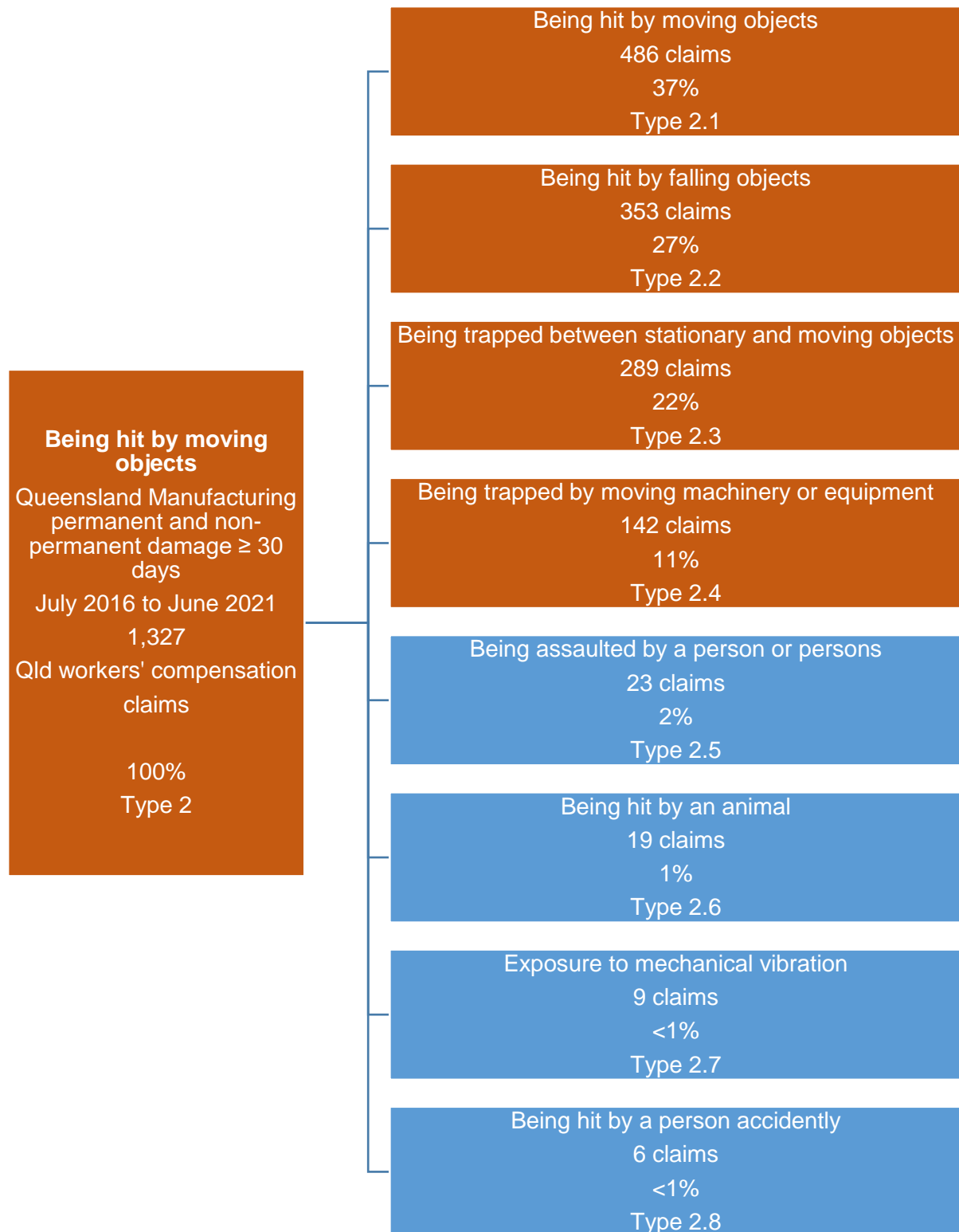
4.1 Type 1 – body stressing

Body Stressing represents 45 per cent of all Queensland Manufacturing claims ≥ 30 workdays compensated.



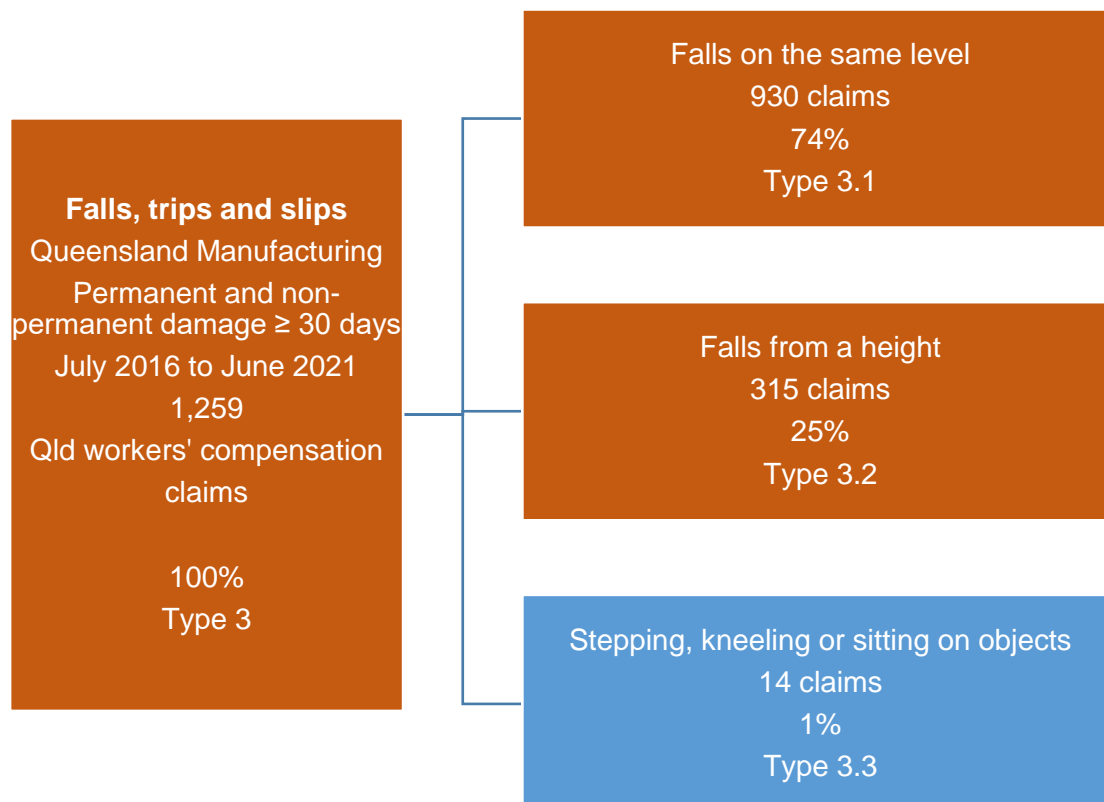
4.2 Type 2 – being hit by moving objects

Being Hit by Moving Objects represents 18 per cent of all Queensland Manufacturing claims ≥ 30 workdays compensated.



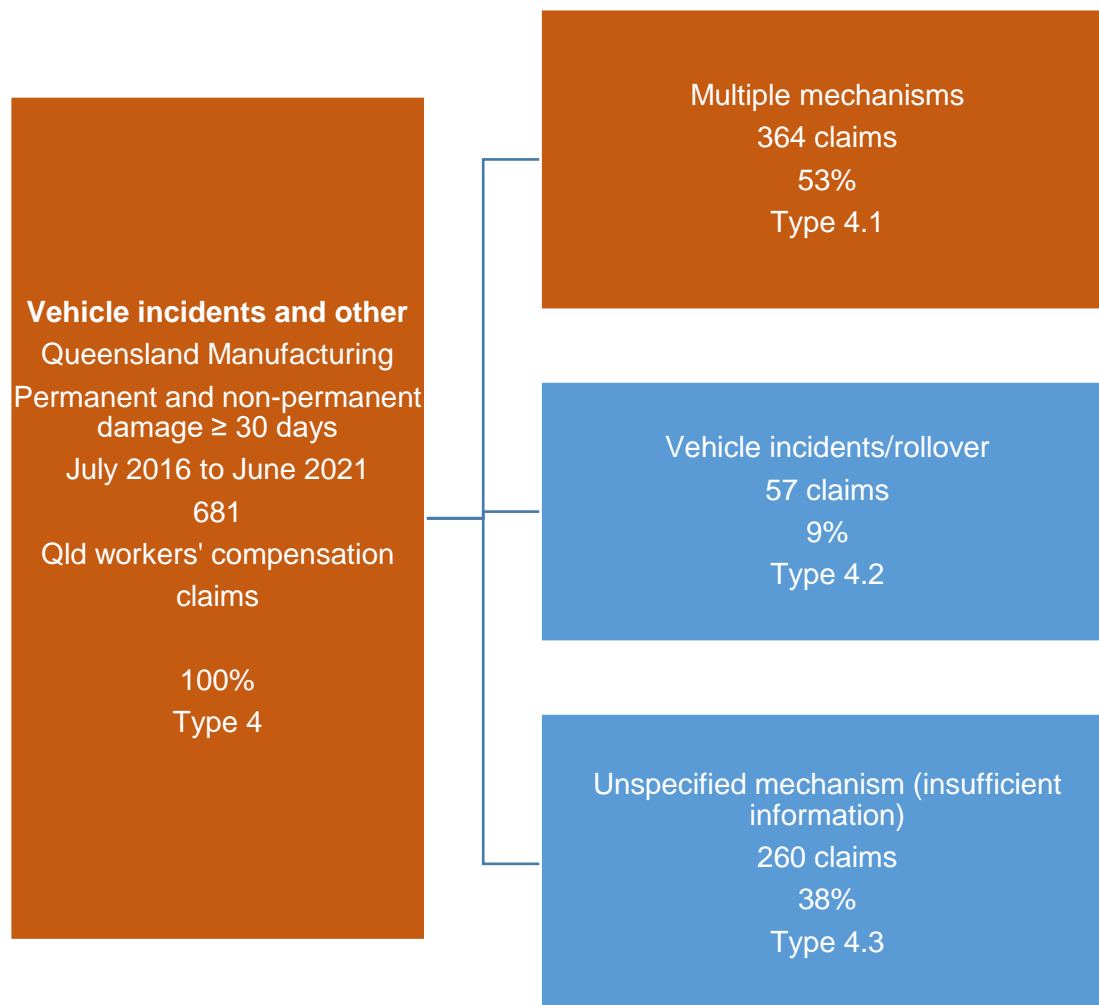
4.3 Type 3 – falls, trips and slips

Falls, Trips and Slips represents 17 per cent of all Queensland Manufacturing claims ≥ 30 workdays compensated.



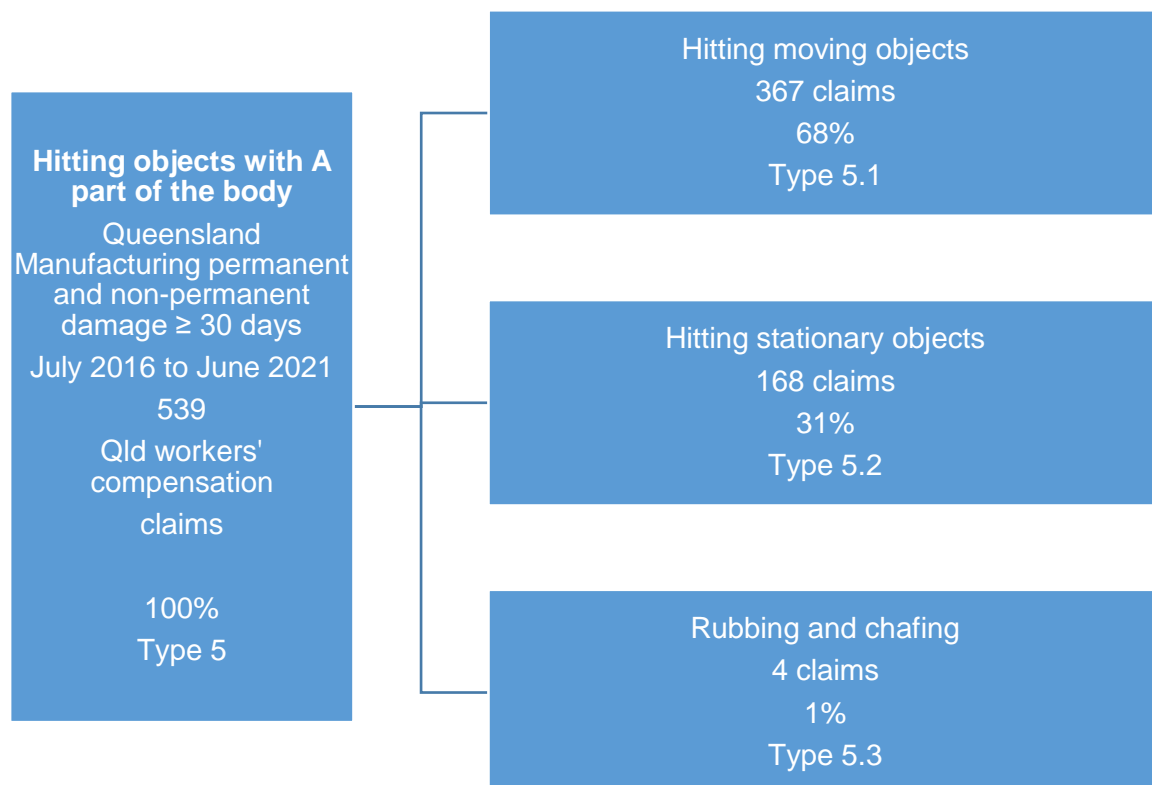
4.4 Type 4 – vehicle incidents

Vehicle Incidents and Other represents nine (9) per cent of all Queensland Manufacturing claims \geq 30 workdays compensated.



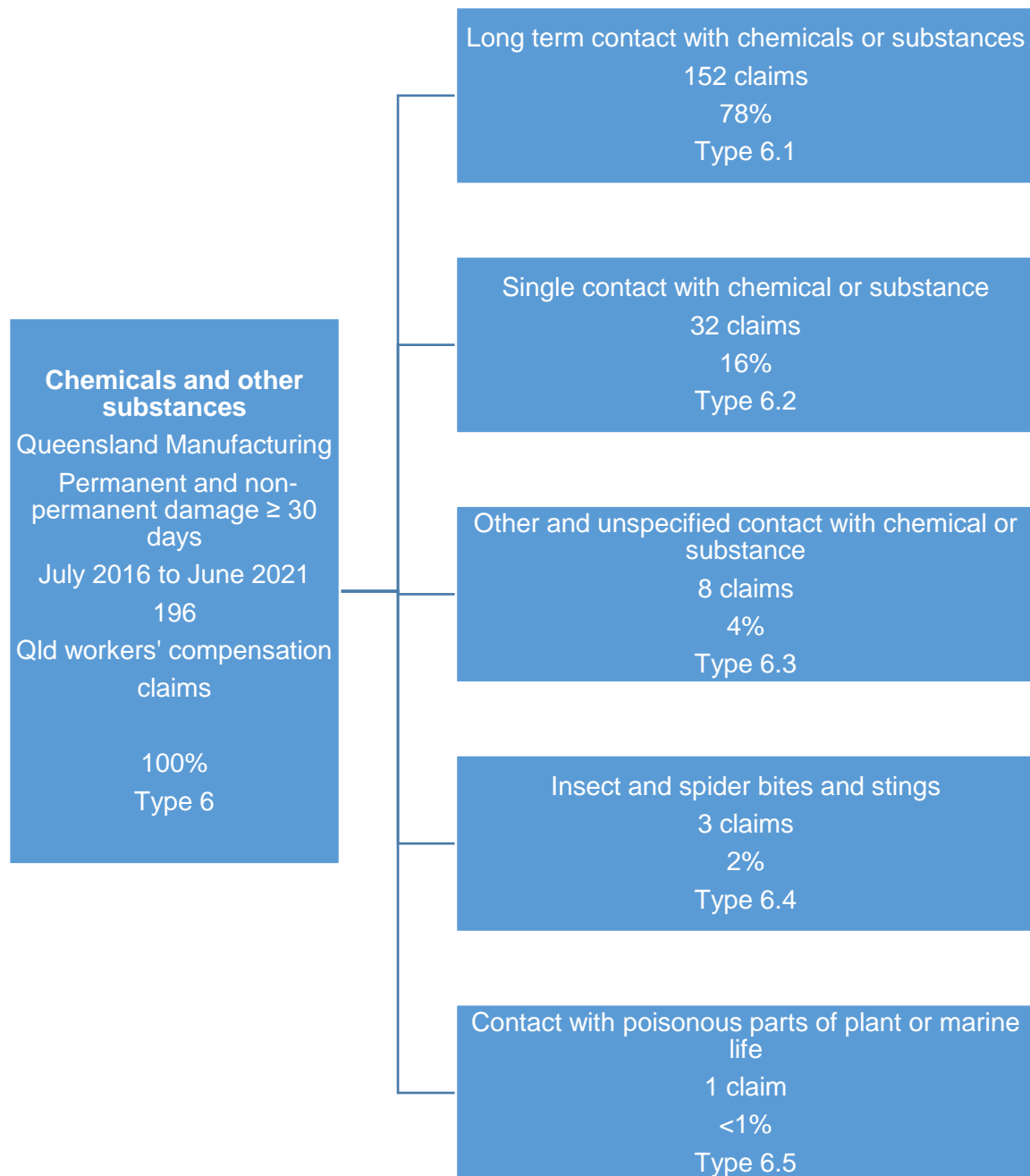
4.5 Type 5 – hitting objects with a part of the body

Hitting Objects with a Part of the Body represents seven (7) per cent of all Queensland Manufacturing claims ≥ 30 workdays compensated.



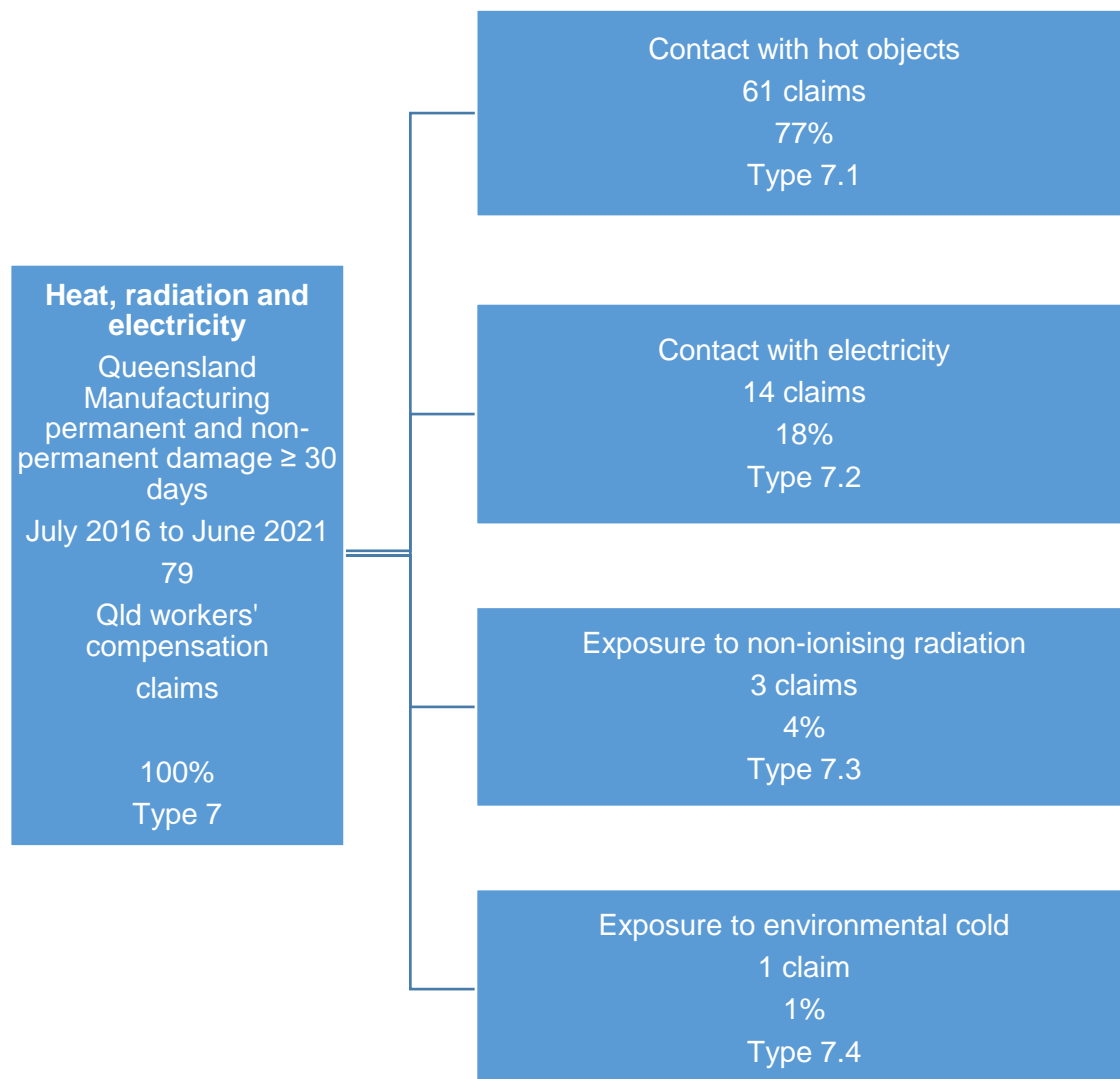
4.6 Type 6 – chemicals and other substances

Chemicals and other substances represent three (3) per cent of all Queensland Manufacturing claims ≥ 30 workdays compensated.



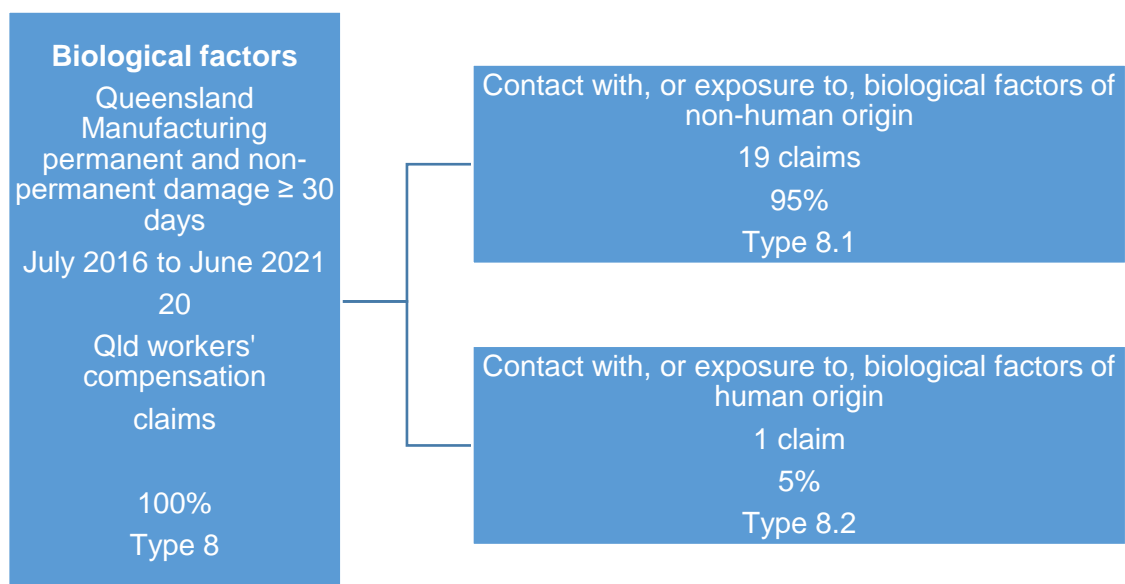
4.7 Type 7 – heat, radiation and electricity

Heat, radiation and electricity represents one (1) per cent of all Queensland Manufacturing claims \geq 30 workdays compensated.



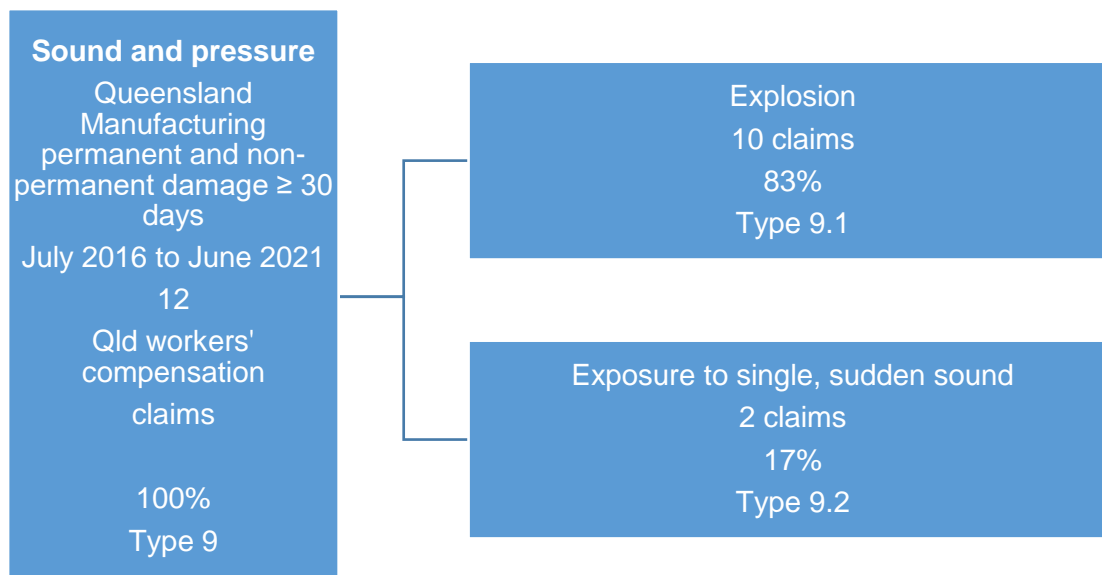
4.8 Type 8 – biological factors

Biological Factors represents less than one (1) per cent of all Queensland Manufacturing claims \geq 30 workdays compensated.



4.9 Type 9 – sound and pressure

Sound and Pressure represents less than one (1) per cent of all Queensland Manufacturing claims \geq 30 workdays compensated.



5. Typology – summary of key findings

Claims with 30 or more workdays compensated account for 15 per cent of all Manufacturing claims over the period and account for 73 per cent of claim costs. The average claim rate was 8.9 claims per 1000 workers, which is higher than the average claim rate for all Queensland industries. Workers in the Manufacturing industry are over 1.7 times as likely to experience a significant injury as workers in all other industries.

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