

Safety performance

in the Western Australian mineral industry

Accident and injury statistics
2004–05

04–05



Department of Consumer
and Employment Protection
Government of Western Australia

Resources Safety 



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Summary

Statistics generated from Resources Safety's AXTAT database for the year 2004–05 show a slight but continuing improvement in the overall safety performance of the Western Australian mining industry.

The number of serious injuries recorded since 2000–01 has remained substantially constant from year to year and, although some variability is evident in the serious injury frequency rates, this is due primarily to fluctuations in the reported numbers of people employed. In 2004–05, the lost time injury frequency rate for serious injuries rose, as did the actual number of serious injuries reported.

There was only a small improvement in the lost time injury frequency rate (LTIFR), supporting the previous year's suggestion that the curve has plateaued.

For many years the focus has been on lost time injuries (LTIs) and how they can be managed more effectively, both in terms of the individual employee's welfare and the related issue of workers' compensation. Much has been achieved in this regard, and it is to industry's credit that considerable progress has been made in the areas of early return of employees to operational status, on-the-job post-accident rehabilitation, and retraining of personnel. However, the number of LTIs reported in recent years has become so small that the value of the LTIFR as an indicator of safety performance is questionable and recorded improvements in the rate are more marginal.

Disabling injuries statistics have been collected since the beginning of fiscal 2001–02. This program was initiated with a view to establishing a more effective safety performance indicator than the current LTI-based

system. Allegations that LTIs are 'managed' to provide favourable accident reporting data have been made by various parties in recent times. Disabling injuries are, generally, not amenable to the mechanism alluded to above and are more numerous than LTIs. There were 608 disabling injuries recorded for 2004–05, an increase of 112 on the 2003–04 figure of 496. The 51,207 employees in the mining industry (a rise of 12%) worked a total of 100.19 million hours. The disabling injury incidence and frequency rates both display a deterioration at 11.9 and 6.1 respectively.

All of the above suggest that the various indicator numbers are reaching plateaus and any further improvement is likely to be minimal. Equally, a deterioration in performance cannot be discounted. Renewed effort on the part of all stakeholders is required, and new approaches to the issue of accident prevention are necessary to continue to improve safety.

Two mining industry employees lost their lives during the year, two less than for the previous year.

Resources Safety continues to regulate the mining industry by statutory inspections, safety management system and high impact function audits. It plays an important role in providing education, training support and information to industry. During the year, safety meetings, presentations to mine site employees, and briefings to industry safety and health representatives complemented the inspection activities.

Resources Safety is also participating in and assisting with the development of the National Mine Safety Framework, an initiative of the Ministerial Council on Mineral and Petroleum Resources.

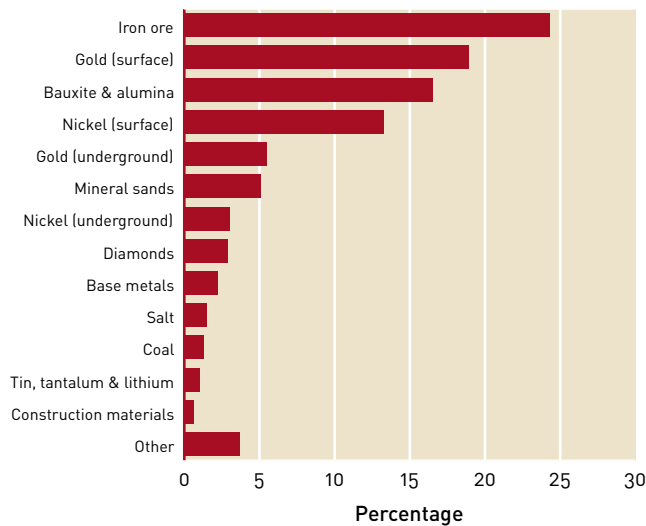
Statistical summary

- There were two fatal accidents during 2004–05, one was underground at a gold mine and the other was on the surface at iron ore operations.
- There were 425 LTIs during 2004–05, 31 more than the previous year (394 injuries in 2003–04). The breakdown of the number of injuries by commodity mined is shown in Appendix A.
- There was an average workforce of 51,207 employees in 2004–05, an increase of 12% over the previous year (45 771 employees in 2003–04). The breakdown of the number of employees by commodity mined is shown in Appendix A.
- The overall LTI duration rate improved by 10% during 2004–05, falling from 21.5 to 19.4. The breakdown of the work days lost for each commodity mined is shown in Appendix A.
- The overall LTIFR improved slightly by 2% during 2004–05, falling from 4.3 to 4.2.
- The overall injury index improved by 11% during 2004–05, down from 92 to 82.
- Serious injuries in the mining industry during 2004–05 totalled 316, which is 44 more than for 2003–04.
- The overall serious injury frequency rate deteriorated by 7% during 2004–05, rising from 3.0 to 3.2.
- The iron ore sector LTIFR improved by 33% during 2004–05, falling from 3.3 to 2.2.
- The bauxite and alumina sector LTIFR improved by 11% during 2004–05, falling from 2.8 to 2.5.
- The gold sector LTIFR improved by 9% during 2004–05, falling from 4.3 to 3.9.
- The nickel sector LTIFR deteriorated by 79% during 2004–05, rising from 3.9 to 7.0.

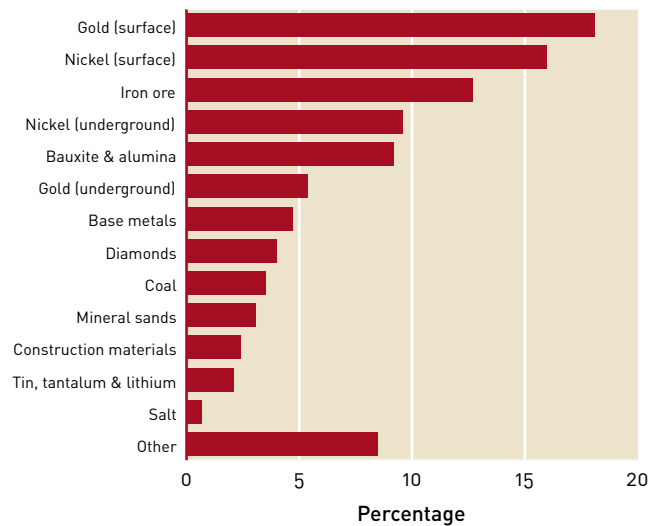
Appendix A

Western Australian mines 2004–05

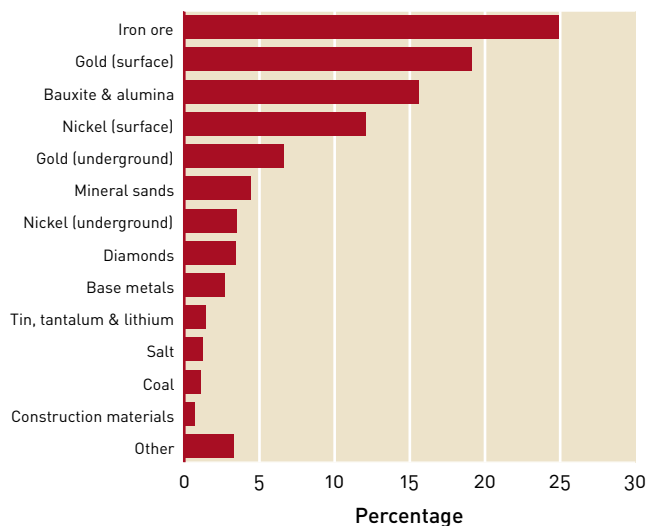
425 injuries



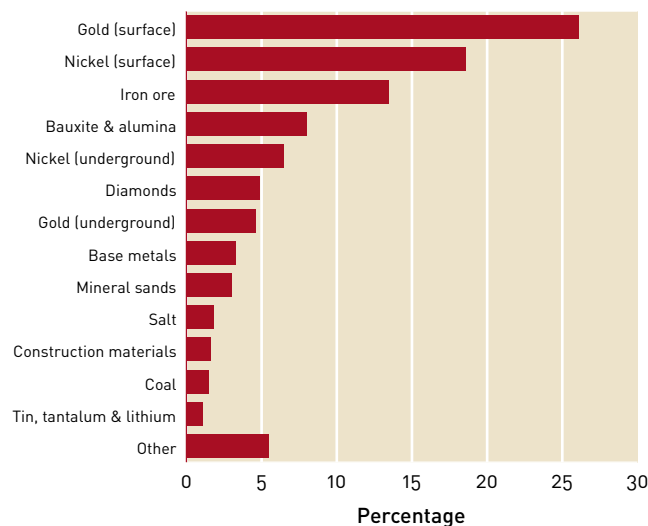
Percentage of employees



Percentage of injuries



Percentage of million hours worked

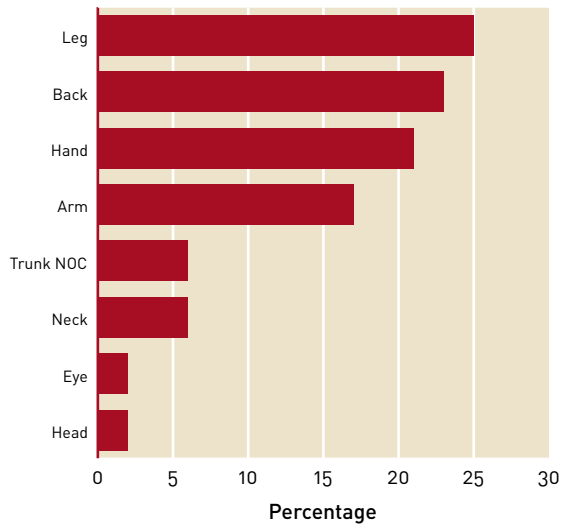


Percentage of work days lost

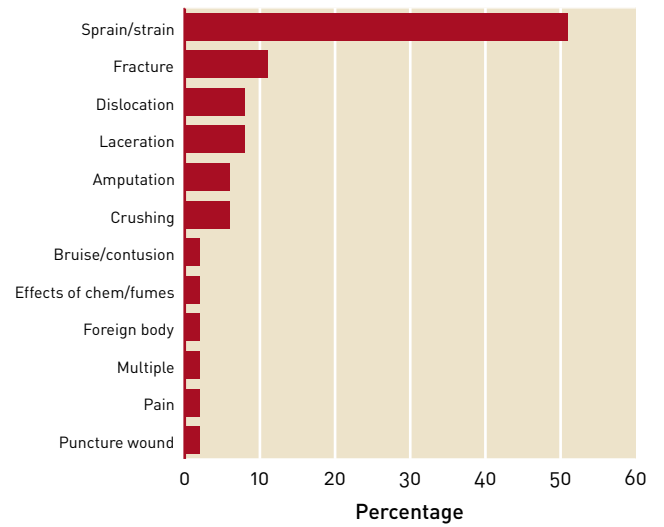
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Serious injuries underground 2004–05

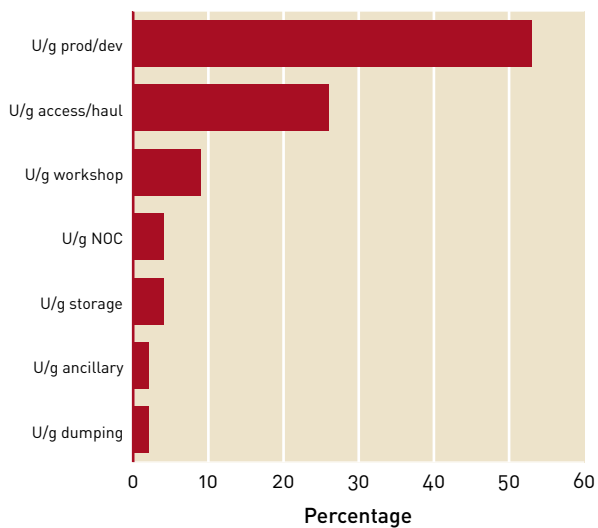
53 injuries



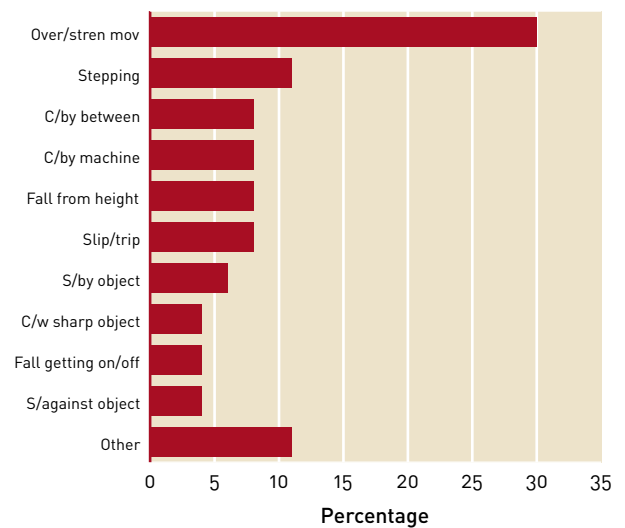
Part of body



Nature of injury



Location of accident

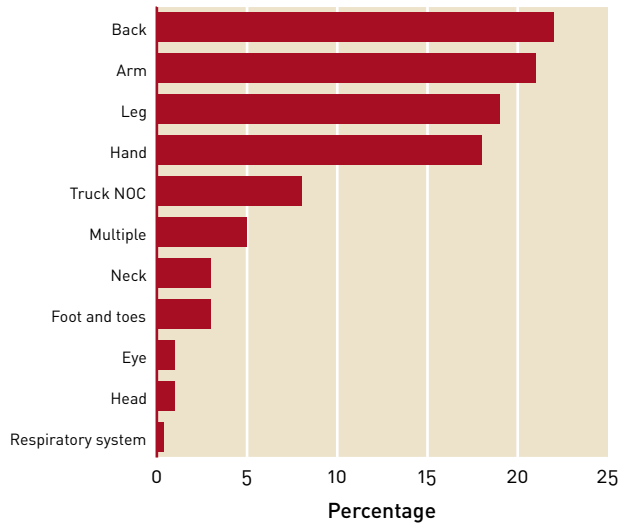


Type of accident

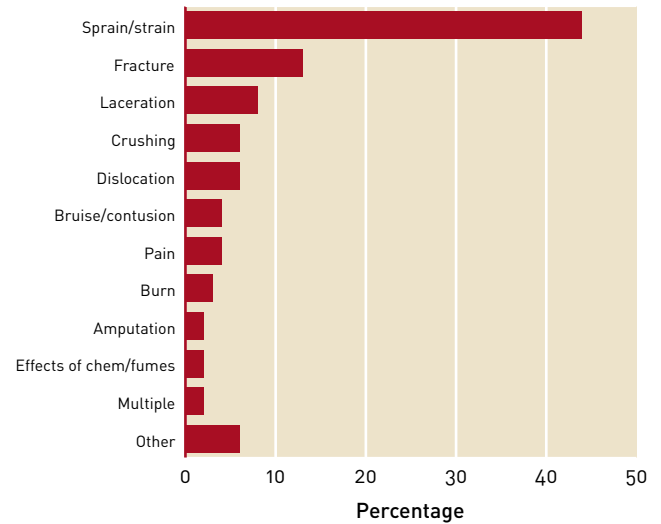
Appendix C

Serious injuries surface 2004–05

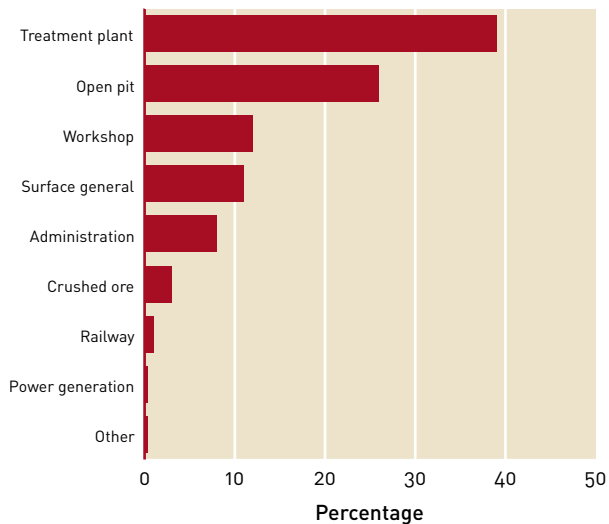
263 injuries



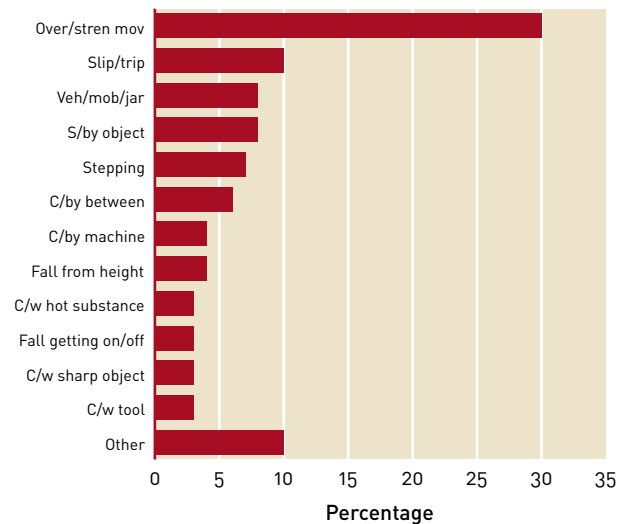
Part of body



Nature of injury



Location of accident

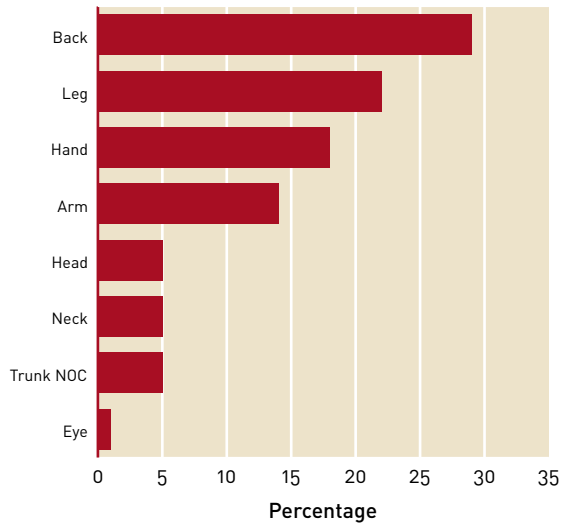


Type of accident

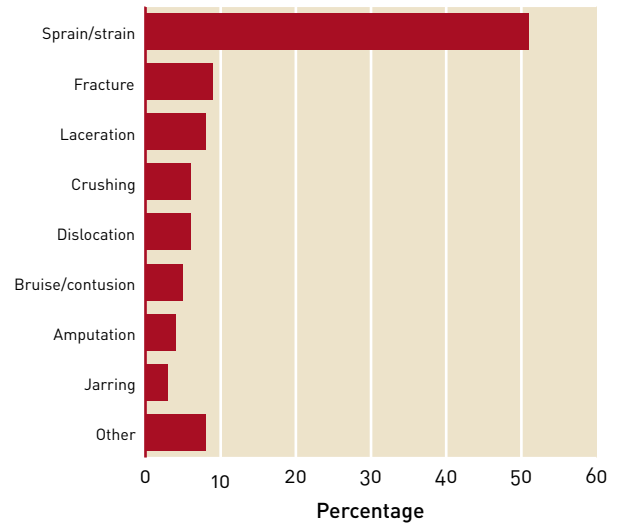
Appendix D

Metalliferous underground injuries 2004-05

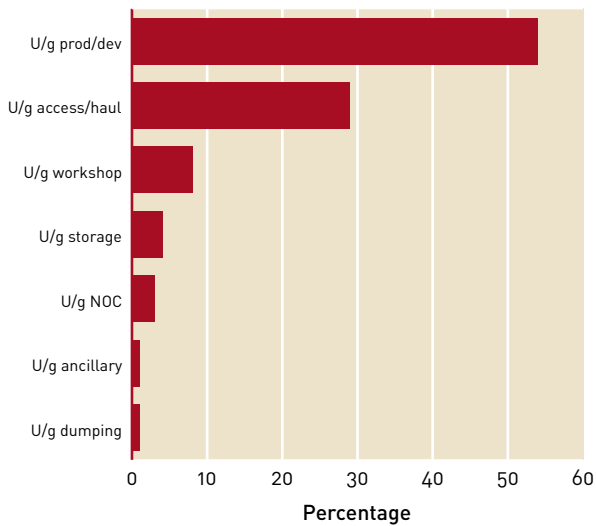
78 injuries



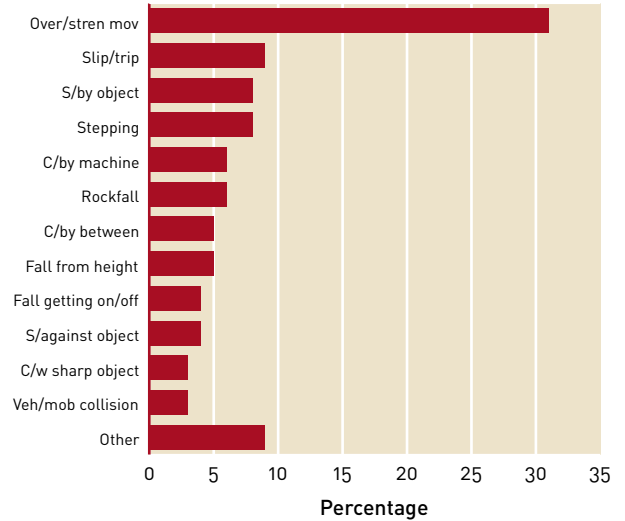
Part of body



Nature of injury



Location of accident

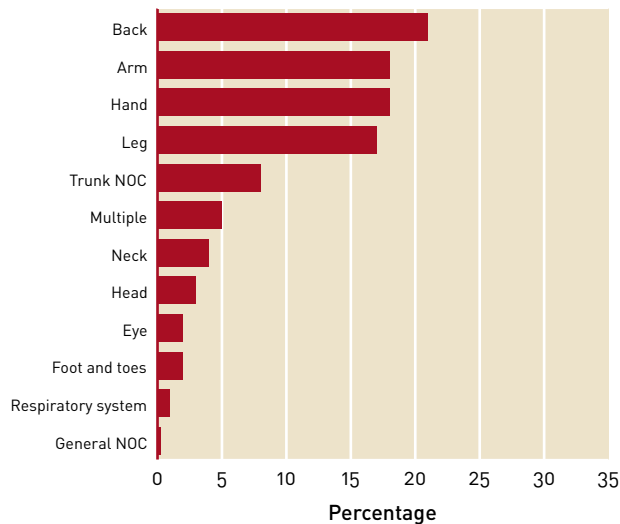


Type of accident

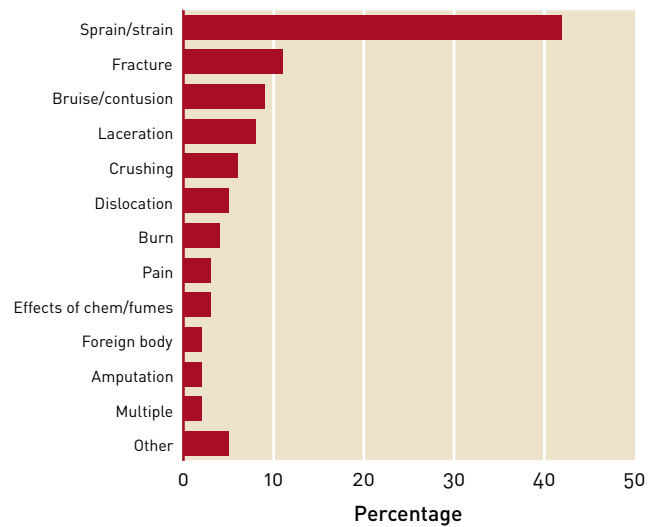
Appendix E

Metalliferous surface injuries 2004-05

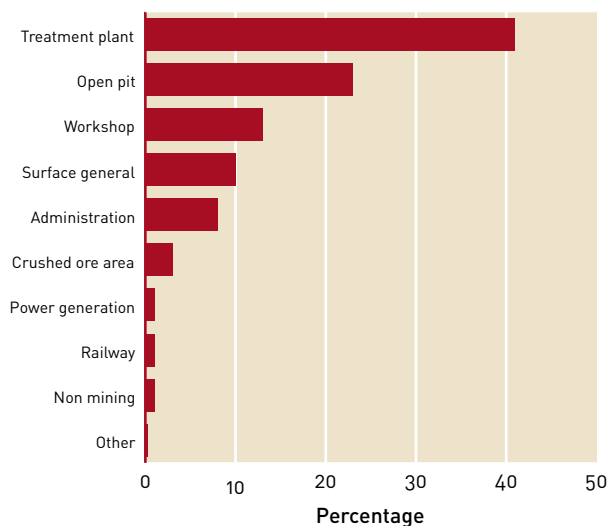
332 injuries



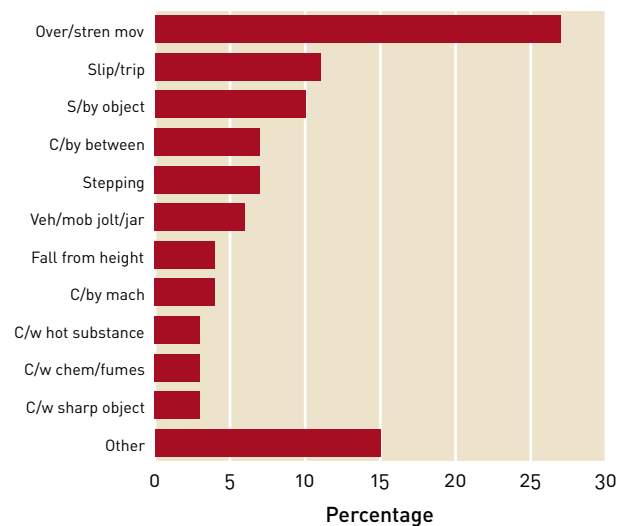
Part of body



Nature of injury



Location of accident

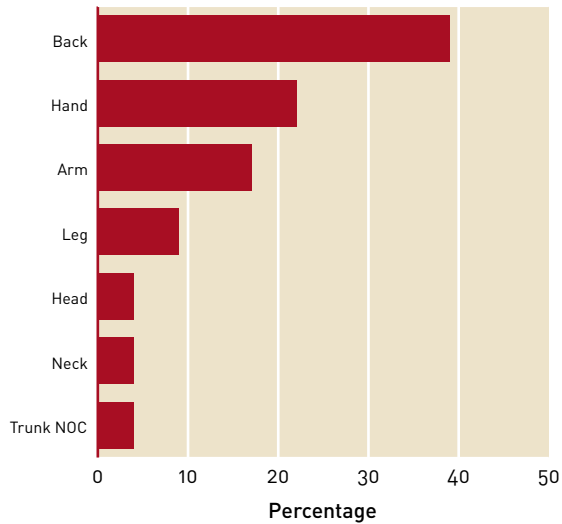


Type of accident

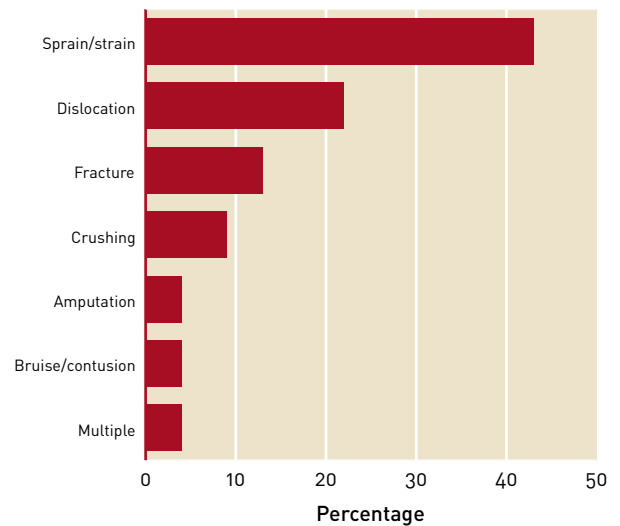
Appendix F

Gold underground injuries 2004-05

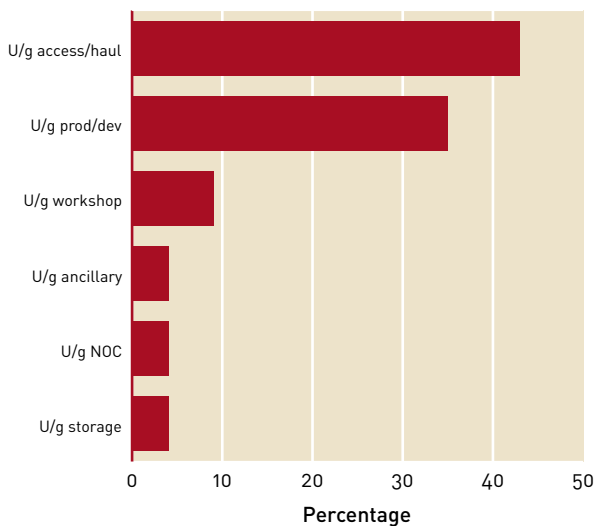
23 injuries



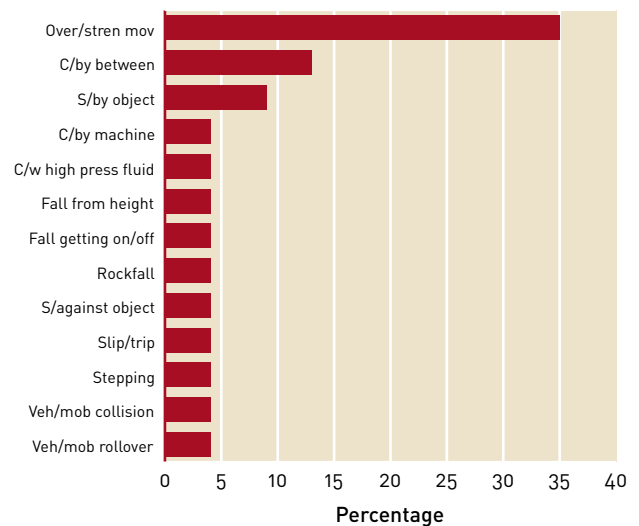
Part of body



Nature of injury



Location of accident

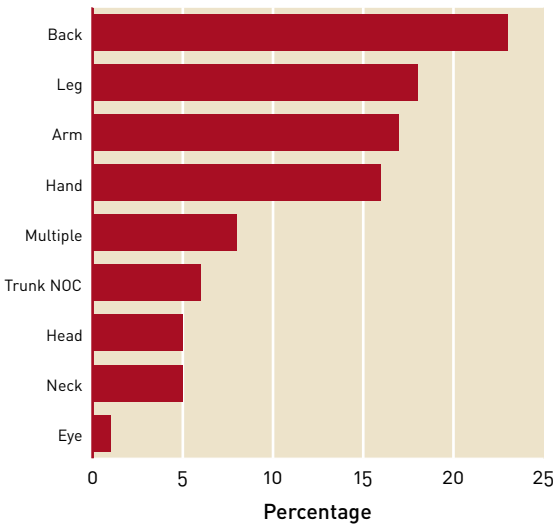


Type of accident

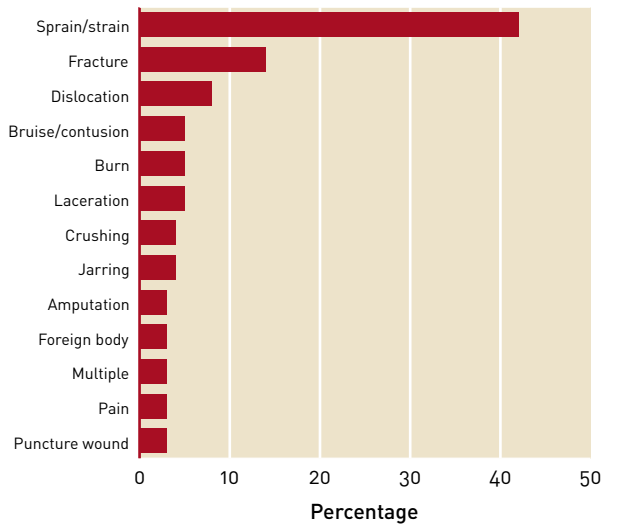
Appendix G

Gold surface injuries 2004–05

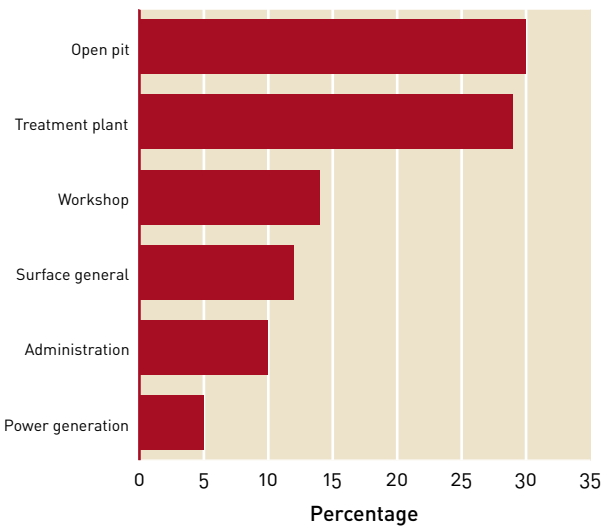
77 injuries



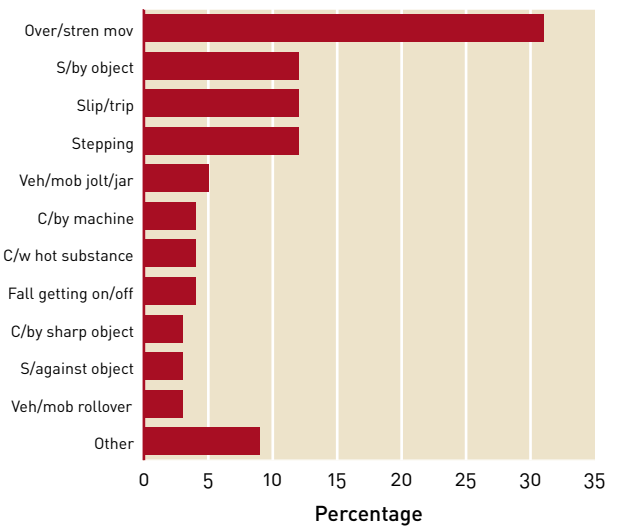
Part of body



Nature of injury



Location of accident

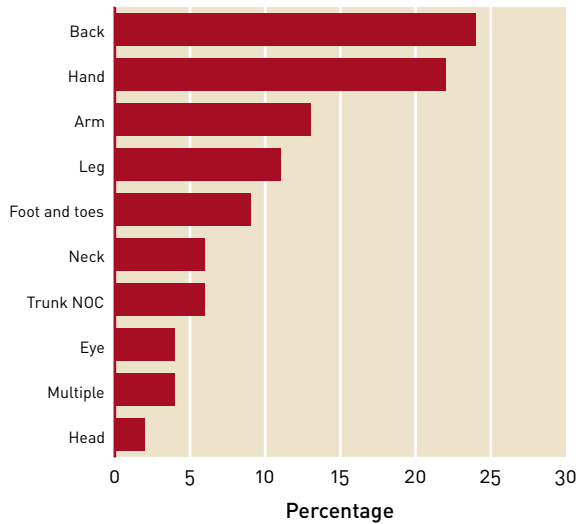


Type of accident

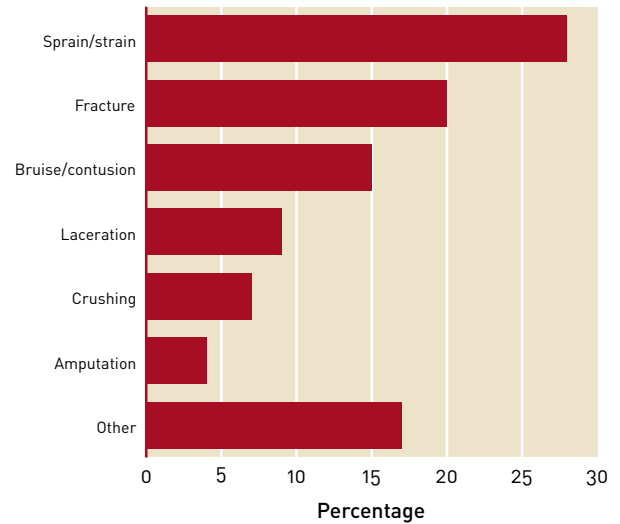
Appendix H

Iron ore injuries 2004–05

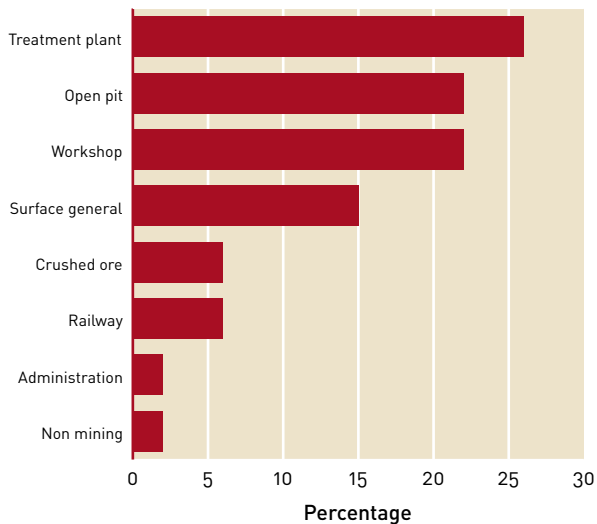
54 injuries



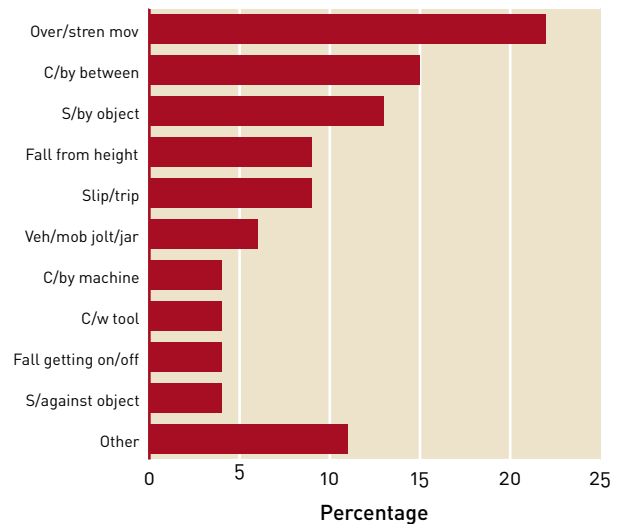
Part of body



Nature of injury



Location of accident

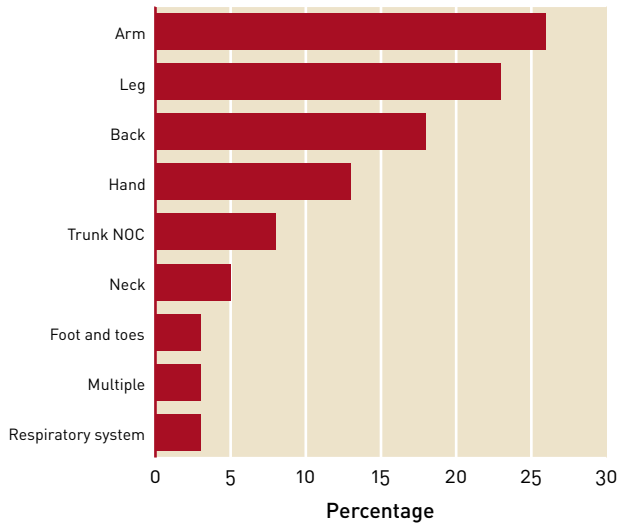


Type of accident

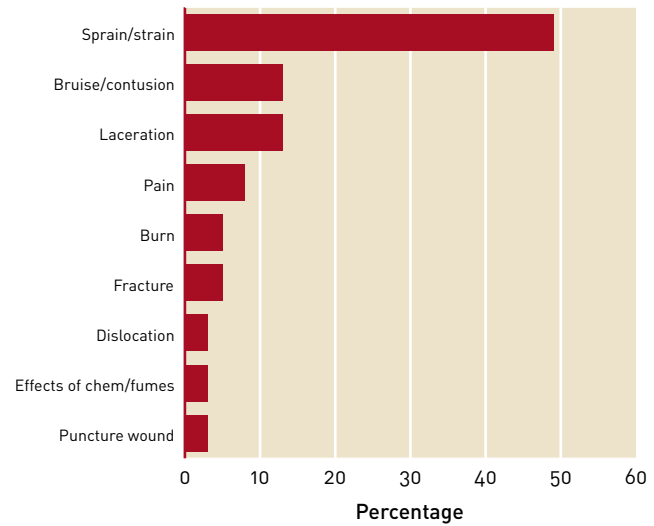
Appendix I

Bauxite and alumina injuries 2004-05

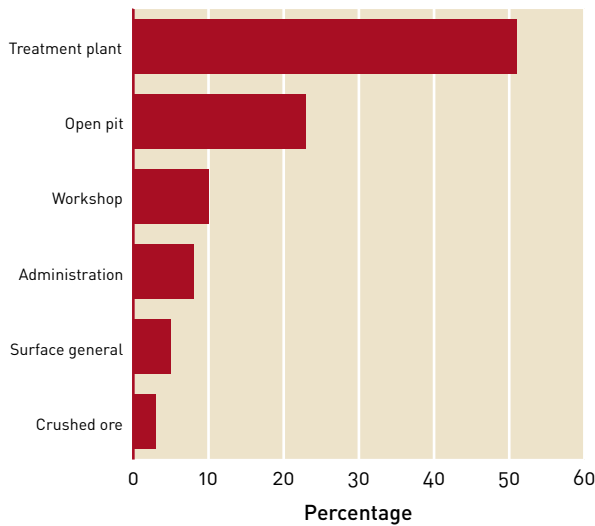
39 injuries



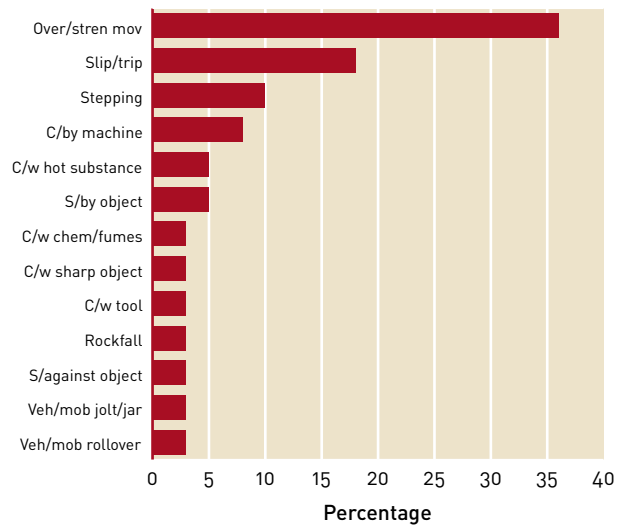
Part of body



Nature of injury



Location of accident

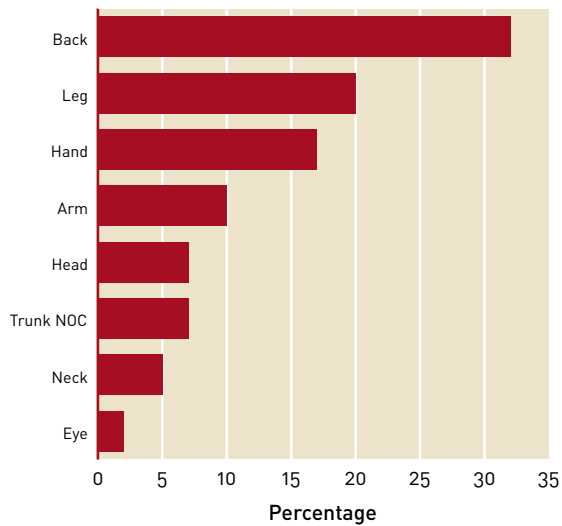


Type of accident

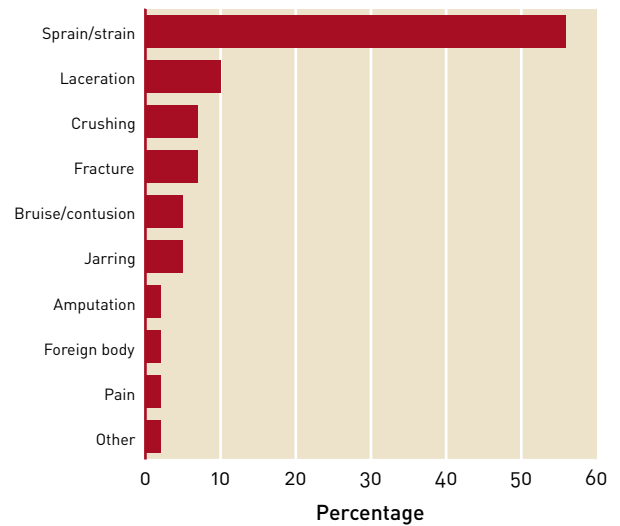
Appendix J

Nickel underground injuries 2004–05

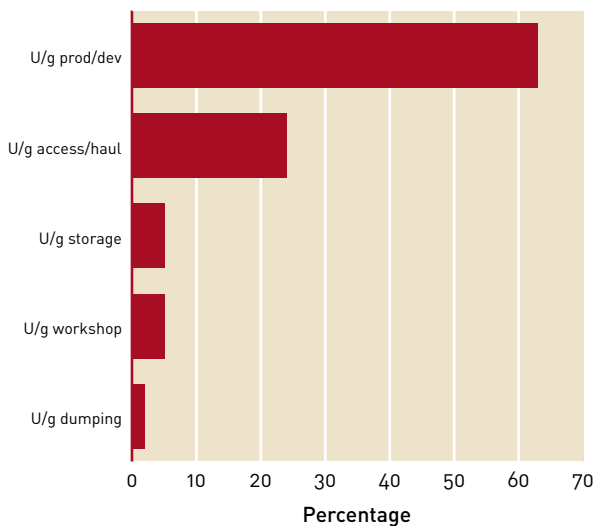
41 injuries



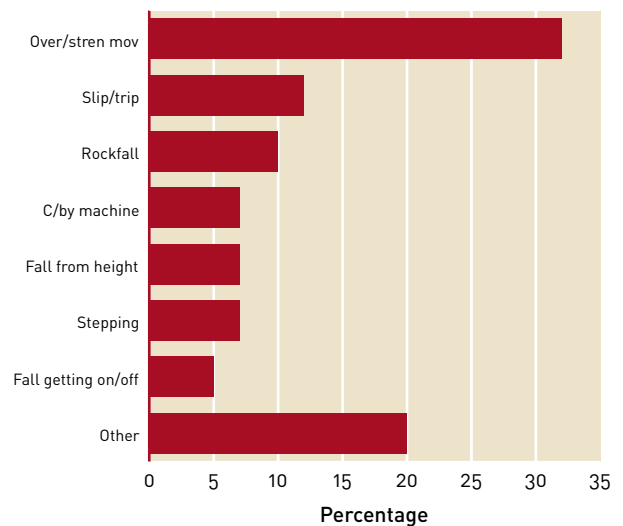
Part of body



Nature of injury



Location of accident

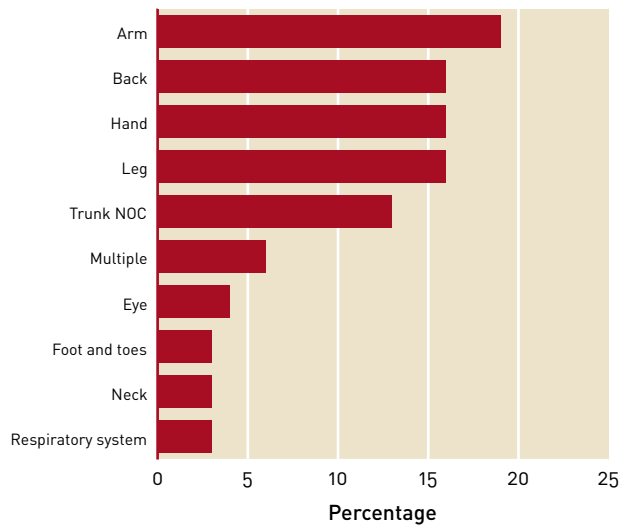


Type of accident

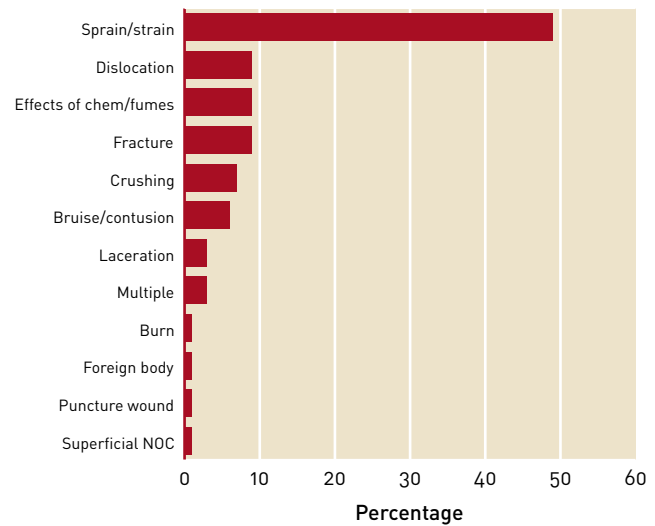
Appendix K

Nickel surface injuries 2004–05

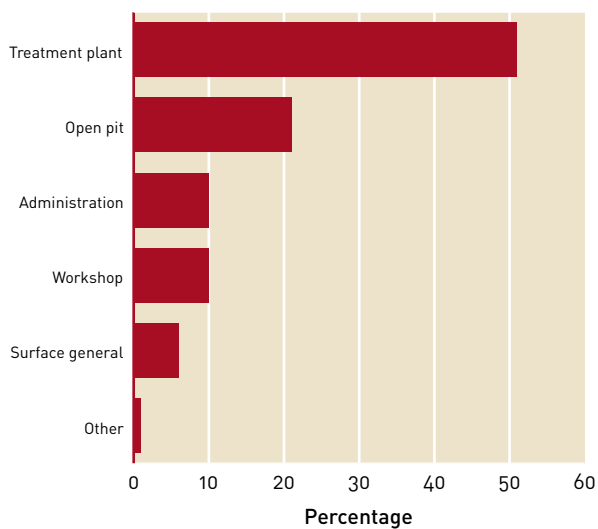
68 injuries



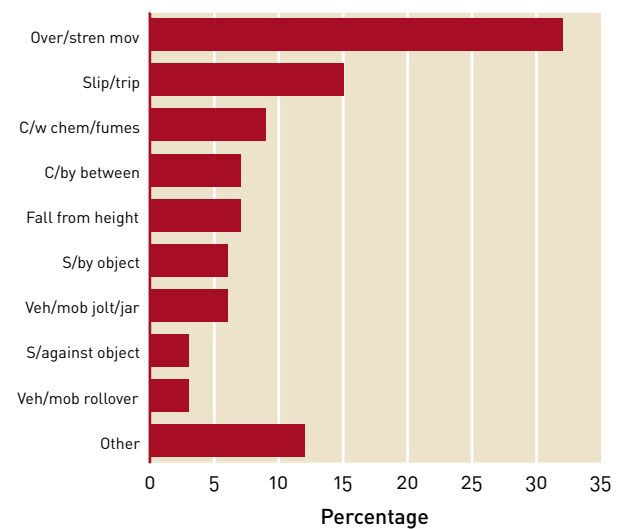
Part of body



Nature of injury



Location of accident



Type of accident

Appendix L

Disabling injuries 2004–05

608 injuries

In addition to the 425 LTIs during 2004–05, there were 608 disabling injuries (DIs) reported (606 in metalliferous mines and two in coal mines), bringing the total number of reportable injuries to 1,033. A breakdown of these data with performance indicators is shown in the tables below.

Of the disabling injuries, 346 resulted in the injured person being disabled for two weeks or more.

Disabling injuries during 2004–05

Mines	No. of employees	Disabling injuries			All injuries (DIs and LTIs)		
		No. of injuries	Incidence	Frequency	No. of injuries	Incidence	Frequency
Metalliferous surface	45,697	493	10.8	5.6	825	18.1	9.4
Metalliferous underground	4,828	113	23.4	10.0	191	39.6	16.8
Metalliferous total	50,525	606	12.0	6.1	1,016	20.1	10.3
Coal total	682	2	2.9	1.8	17	24.9	15.3
TOTAL MINING	51,207	608	11.9	6.1	1,033	20.2	10.3

Disabling injuries by mineral mines during 2004–05

Mines	No. of employees	Disabling injuries			All injuries (DIs and LTIs)		
		No. of injuries	Incidence	Frequency	No. of injuries	Incidence	Frequency
Gold	12,512	199	15.9	7.7	299	23.9	11.6
Iron ore	12,459	70	5.6	2.8	124	10.0	5.0
Bauxite and alumina	8,463	153	18.1	9.8	192	22.7	12.3
Nickel	8,369	128	15.3	8.2	237	28.3	15.1
Mineral sands	2,603	21	8.1	4.8	34	13.1	7.7
Diamonds	1,484	10	6.7	3.0	27	18.2	8.0
Base metals	1,112	8	7.2	2.9	28	25.2	10.2
Salt	768	1	1.3	0.8	4	5.2	3.2
Coal	682	2	2.9	1.8	17	24.9	15.3
Tin, tantalum and lithium	525	3	5.7	2.1	12	22.9	8.6
Construction materials	321	2	6.2	3.0	12	37.4	17.9
Other	1,909	11	5.8	3.3	47	24.6	14.4
TOTAL MINING	51,207	608	11.9	6.1	1,033	20.2	10.3

Disabling injury (DI) — a work injury, not a lost time injury, that results in the injured person being unable to fully perform his or her ordinary occupation (regular job) any time after the day or shift on which the injury occurred, and where either alternative or light duties are performed.

This category would include where the injured person:

- is placed in a different occupation or job, whether on full or restricted work hours
- remains in his or her normal occupation or job, but is not able to perform the full range of work duties
- remains in his or her normal occupation or job, but on restricted hours.

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