#### **INJURIES BY MINERAL MINED DURING 2008-09**

Mineral mined	No. of employees	No. of LTIs	No. of serious LTIs	No. of minor LTIs	Incidence rate	Frequency rate	Duration rate	Injury index	Days Iost	No. of fatalities
Iron ore	25,237	129	109	20	5.1	2.5	23.5	59	3,033	6
Gold	15,572	64	52	12	4.1	1.9	26.5	51	1,695	1
Nickel	10,084	49	46	3	4.9	2.4	17.2	41	845	0
Bauxite and alumina	8,154	45	37	8	5.5	2.8	20.6	58	928	0
Mineral sands	2,464	18	16	2	7.3	4.1	20.3	84	365	0
Base metals	1,927	18	16	2	9.3	4.7	40.3	191	726	0
Diamonds	1,871	13	10	3	6.9	2.8	20.4	57	265	0
Salt	921	7	3	4	7.6	4.8	7.7	37	54	0
Manganese ore	602	2	2	0	3.3	1.7	48.5	81	97	0
Construction materials	601	5	4	1	8.3	4.0	8.2	33	41	0
Tin-Tantalum-Lithium	366	4	2	2	10.9	4.8	16.5	79	66	0
Other	1,853	27	12	15	14.6	9.0	8.8	79	238	0
Surface metalliferous	62,340	347	281	66	5.6	2.8	21.6	60	7,509	7
Underground metalliferous	7,312	34	28	6	4.6	2.1	24.8	51	844	0
Total metalliferous	69,652	381	309	72	5.5	2.7	21.9	59	8,353	7
Coal	915	16	7	9	17.5	11.1	22.4	249	359	0
Total - all mining	70,567	397	316	81	5.6	2.8	21.9	61	8,712	7
Exploration	2,350	32	19	13	13.6	6.5	26.4	172	844	0
TOTAL	72,917	429	335	94	5.9	2.9	22.3	65	9,556	7

• An engineering technician conducting maintenance work on a purpose-built scissor-lift at an iron ore rail workshop died when the lift collapsed on him.

• A workshop supervisor at an iron ore mine was changing a dump truck tyre with another employee when the tyre handler malfunctioned and he was fatally struck by flying parts from the tyre handler.

• An apprentice heavy duty fitter at an iron ore mine met his death following a collision between the light vehicle he was driving and a Caterpillar 789C haul truck.

# FATAL ACCIDENTS 08 - 09

# There were seven fatal accidents in the Western Australian mineral industry during 2008-09

- A haul truck operator at a gold mine died after falling from a Caterpillar 777 haul truck. It is believed that she had been cleaning the truck's windscreen.
- A rail track maintenance worker was fatally injured when struck by a train at a siding on an iron ore railway. It appears that he had been walking between a tamping machine on the second track at the siding and the passing train.
- · A scaffolder undertaking construction work at an iron ore mine expansion project was fatally injured when he fell through a grid mesh floor to a floor 7 metres below.
- · A fitter at an iron ore mine was fatally injured when a bulldozer belly plate fell on him during maintenance work on the bulldozer at the mine waste dump.

# DEFINITIONS +

## LOST TIME INJURY (LTI)

Work injury that results in an absence from work for at least one full day or shift any time after the day or shift on which the injury occurred

#### **SERIOUS INJURY**

Work injury that results in the injured person being disabled for a period of two weeks or more

#### MINOR INJURY

Work injury that results in the injured person being disabled for a period of less than two weeks

# **DISABLING INJURY (DI)**

Work injury (not LTI) that results in 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, regardless of whether or not the person is rostered to work, and where alternative or light duties are performed or hours are restricted

#### **INCIDENCE RATE**

Number of lost time injuries per 1,000 employees for a 12 month period

#### FATAL INJURY **INCIDENCE RATE**

Number of fatal injuries per 1,000 employees for a 12 month period

#### FREQUENCY RATE Number of lost time injuries per million hours worked

**DURATION RATE** Average number of workdays

#### lost per injury INJURY INDEX

Number of workdays lost per million hours worked

### **METALLIFEROUS MINES**

All mines other than coal mines are classed as metalliferous mines

#### NOC Not otherwise classified

# **EXPLORATION**

Exploration activities not under the control of a Registered Mine Manager, usually associated with exploration leases.

NOTE: For more detailed information on safety performance, see the annual compilations at www.dmp.wa.gov.au/ ResourcesSafety in the accidents and incidents section.

Strain or sprain Fractur Crushing Bruise or contusion Laceration Effect of chemicals Foreign body Superficial NOC

> Treatment plant Open p

Surface aeneral

Administration

Crushed ore areas

# SAFETY PERFORMANCE IN THE WESTERN AUSTRALIAN MINERAL INDUSTRY 08-09

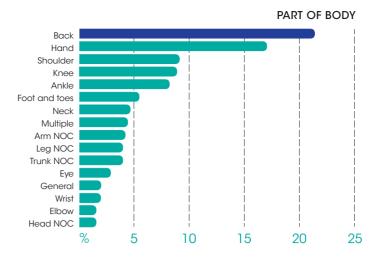
# **STATISTICAL** SUMMARY

## MINING

- There were seven fatal accidents during 2008–09 — six at iron ore operations and one on the surface at a gold mine.
- There were 397 LTIs during 2008-09, 38 less than the previous year (435 injuries in 2007-08).
- There was an average workforce of 70,567 employees in 2008–09, an increase of 7% over the previous year (66,183 employees in 2007-08).
- The overall LTI duration rate deteriorated by 8% during 2008–09, rising from 20.2 to 21.9.
- The overall LTI frequency rate improved by 13% during 2008–09, falling from 3.2 to 2.8.
- The overall injury index improved by 6% during 2008–09, down from 65 to 61.
- Serious LTIs in the mining industry during 2008–09 totalled 316, which is 15 less than for 2007–08.
- The overall serious LTI frequency rate improved by 12% during 2008–09, falling from 2.5 to 2.2.
- The iron ore sector LTI frequency rate deteriorated significantly by 39% during 2008–09, rising from 1.8 to 2.5.
- The bauxite and alumina sector LTI frequency rate improved by 26% during 2008–09, falling from 3.8 to 2.8.
- The gold sector LTI frequency rate improved significantly by 41% during 2008–09, falling from 3.2 to 1.9.
- The nickel sector LTI frequency rate deteriorated by 4% during 2008–09, rising from 2.3 to 2.4.
- There were 608 DIs during 2008-09, 123 less than the previous year (731 injuries in 2007–08).
- The overall DI frequency rate improved by 22% during 2008–09, falling from 5.5 to 4.3.

#### EXPLORATION

 There was an average workforce of 2,350 in 2008-09. There were 32 LTIs during 2008-09, resulting in a LTI frequency rate of 6.5.



Overexertion or strenuous movement

Caught by or between operating machinery

Fall getting on or off equipment or vehicle

Chemical absorption and inhalation

Caught by or between objects

Vehicle or equipment jolting

Slipping or tripping

Struck by object

Stepping

Fall from height

Struck against object 📃

Contact with tool Motor vehicle rollover

Other\*

COMPARISON OF INJURY INDEX & COMPENSATION PREMIUM RATE

200 \_\_\_\_\_ 4

Rockfall (underground)

Injury index 🔵 🛛 Premium rate 🔵

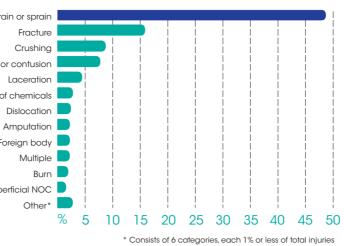
TYPE OF ACCIDENT

% 5 10 15 20 25 30

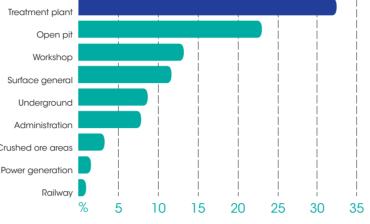
\* Consists of 11 categories, each 1% or less of total injuries

2004-05 2005-06 2006-07 2007-08 2008-09 2009-10

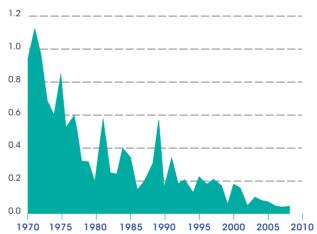
#### NATURE OF INJURY

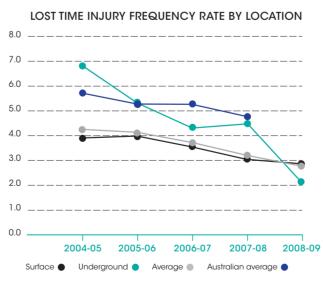


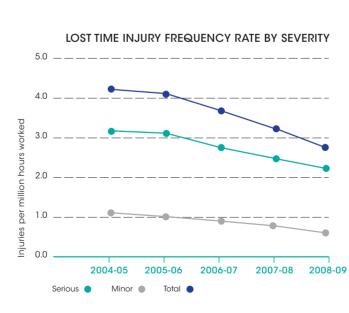
## LOCATION OF ACCIDENT















overnment of Western Australia partment of Mines and Petroleum