

# Safety Performance

in the Western Australian Mineral Industry

### Statistical Summary

- There were four fatal accidents during 2003–04. All occurred on the surface at iron ore operations.
- There were 394 lost time injuries during 2003–04, 16 more than the previous year (378 injuries in 2002–03).
- There was an average workforce of 45 771 employees in 2003–04, an increase of 6% over the previous year (43 285 employees in 2002–03).
- The overall lost time injury duration rate deteriorated by 10% during 2003–04, rising from 19.6 to 21.5.
- The overall lost time injury frequency rate improved slightly by 2% during 2003–04, falling from 4.4 to 4.3.
- The overall injury index deteriorated slightly by 7% during 2003–04, up from 86 to 92.
- Serious injuries in the mining industry during 2003–04 totalled 272, which is one more than for 2002–03.
- The overall serious injury frequency rate improved by 6% during 2003–04, falling from 3.2 to 3.0.
- The bauxite and alumina sector lost time injury frequency rate deteriorated by 4% during 2003–04, rising from 2.7 to 2.8.
- The gold sector lost time injury frequency rate improved by 14% during 2003–04, falling from 5.0 to 4.3.
- The iron ore sector lost time injury frequency rate deteriorated by 38% during 2003–04, rising from 2.4 to 3.3.
- The nickel sector lost time injury frequency rate improved by 19% during 2003–04, falling from 4.8 to 3.9.

## Fatal Accidents 2003-04

 A demolition contractor's labourer, who was cutting a conveyor structure using oxy-acetylene, died after he was struck on the head by an electric cable and fell 11 metres from the conveyor structure. An adjacent section of the structure had started to collapse, pulling the cable with it.



Injuries by Mineral Mined During 2003–04										
Mineral mined	No. of employees	No. of LTIs	No. of fatalities	No. of serious LTIs	No. of minor LTIs	Incidence	Frequency rate	Duration	Injury index	Days Iost
Gold	13 150	118	0	90	28	9.0	4.3	30.1	129	3552
Iron ore	11 629	76	4	56	20	6.5	3.3	22.6	74	1717
Bauxite and alumina	6955	36	0	32	4	5.2	2.8	13.6	38	491
Nickel	5886	49	0	31	18	8.3	3.9	16.8	66	825
Mineral sands	2345	27	0	13	14	11.5	5.9	23.4	139	632
Diamonds	1213	25	0	19	6	20.6	9.7	13.2	128	329
Base metals	915	10	0	5	5	10.9	4.4	10.6	47	106
Salt	658	2	0			3.0	1.8	3.0	5	6
Tin, tantalum and lithium	479	5	0		4	10.4	3.9	12.0	47	60
Construction materials	289	2	0			6.9	3.6	2.5	9	5
Other	1611	28	0	14	14	17.4	10.3	19.9	205	557
Metalliferous surface	40 811	309	4	206	103	7.6	3.8	19.7	75	6077
Metalliferous underground	4319	69	0	57	12	16.0	6.6	31.9	211	2203
Total metalliferous	45 130	378	4	263	115	8.4	4.2	21.9	91	8280
Coal	641	16	0	9	7	25.0	14.8	12.4	183	198
Total — all mining	45 771	394	4	272	122	8.6	4.3	21.5	92	8478

- A fitter died after being struck on the head by the splitter gate in a transfer chute at a transport and processing facility. The chute door had been changed from one position to another (to divert the ore stream) using the compressed air-powered cylinder attached to it for the purpose, but the door would not relocate properly due to a blockage in the chute. It appears that the deceased had his head inside the chute and was attempting to clear the blockage. When the blockage was freed, air pressure in the system caused the door or gate to move.
- An apprentice fitter received a fatal head injury when he was struck on the head by a torque wrench while tightening a suspension strut on a haul truck using a ratchet-type torque wrench and torque multiplier.
- A maintenance coordinator, working outside a large open reactor vessel used to reduce oxide iron ore into iron, received fatal burns when a fireball and/or jet flame was emitted from within the vessel while it was being cleaned. He was one of eight employees injured in the incident.

#### Definitions

**Lost Time Injury (LTI)** - A 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** -A lost time injury that results in the injured person being disabled for a period of two weeks or more.

**Minor Injury** - A lost time injury that results in the injured person being disabled for a period of less than two weeks.

Incidence Rate – The number of lost time injuries per 1000 employees for a 12 month period.
Fatal Incidence Rate – The number of fatal injuries per 1000 employees for a 12 month period.
Frequency Rate (LTIFR) – The number of lost time injuries per million hours worked.
Duration Rate – The average number of workdays lost per injury.
Injury Index – The number of workdays lost per million hours worked.
Serious Frequency Rate – The number of serious injuries per million hours worked.
Metalliferous Mines – All mines other than coal mines are classed as metalliferous mines.
NOC – Not otherwise classified.

#### Note: Charts and tables on this poster do not include exploration.



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The Australian Average Lost Time Injury Frequency Rate for 2003-04 was not available at the time of publication