Year	Lost time injuries (LTI)		Disabling injuries (DI)		Serious accidents (SA)		High potential incidents (HPI)		LTI days lost†		DI days*		LTI frequency rate		HPI frequency rate		Million hours worked		Permanent incapacities		Fatalities	
	16–17	17–18	16–17	17–18	16–17	17–18	16–17	17–18	16–17	17–18	16–17	17–18	16–17	17–18	16–17	17–18	16–17	17–18	16–17	17–18	16–17	17–18
Coal surface	141	164	199	243	32	50	1 240	1 404	7 002	5 191	5 434	6 520	2.7	2.8	24	24	52.2	59.0	19	23	1	1
Coal underground	93	63	117	71	28	27	304	372	5 016	2 055	4 206	2 610	7.8	5.2	25	31	12.0	12.1	11	4	0	0
All coal	**234**	**227**	**316**	**314**	**60**	**77**	**1 544**	**1 776**	**12 018**	**7 246**	**9 640**	**9 130**	**3.6**	**3.2**	**24**	**25**	**64.1**	**71.1**	**30**	**27**	**1**	**1**
Mineral surface	32	31	33	55	2	8	163	180	1 171	829	1 278	1 819	2.3	1.6	12	9	14.1	19.9	0	1	1	0
Mineral underground	20	17	60	78	7	4	112	128	2 033	890	3 470	2 930	1.9	1.5	10	11	10.7	11.4	1	1	0	0
All minerals	**52**	**48**	**93**	**133**	**9**	**12**	**275**	**308**	**3 204**	**1 719**	**4 748**	**4 749**	**2.1**	**1.5**	**11**	**10**	**24.8**	**31.3**	**1**	**2**	**1**	**0**
Quarries	**23**	**17**	**11**	**8**	**6**	**5**	**69**	**80**	**591**	**220**	**125**	**149**	**10.2**	**7.4**	**31**	**35**	**2.3**	**2.3**	**0**	**1**	**0**	**0**
All sectors	**309**	**292**	**420**	**455**	**75**	**94**	**1 888**	**2 164**	**15 813**	**9 185**	**14 513**	**14 028**	**3.4**	**2.8**	**21**	**21**	**91.2**	**104.7**	**31**	**30**	**2**	**1**

† Days lost to LTIs includes lost time days and days on alternative duties ** Number of disabling injury days includes days on alternative duties*

QUEENSLAND MINES AND QUARRIES SAFETY PERFORMANCE AND HEALTH REPORT

2017–2018

Background

The Queensland Mines Inspectorate administers state mining safety and health legislation, working with industry, unions and other stakeholders.

Industry is encouraged to use the performance indicators outlined in the Queensland Mines and Quarries Safety Performance and Health report, and the detailed data available for download, to improve safety and health management systems and processes.

Key Regulation Indicators

The number of high potential incidents (HPIs) in mines has risen, but given the increased employment and hours worked, the HPI frequency rate has remained steady.

In the last two years we have observed a significant increase in the frequency rate for high potential incidents for underground coal mines and quarries.

Fatality

Mr Daniel Springer, was fatally injured on 5 August 2017 when an external wear plate that he was in the process of removing from an excavator bucket unexpectedly sprung up and struck him in the head. Mr Springer had been using an air carbon arc gouger to cut pieces of the wear plate into smaller sections, as part of maintenance activities.

An investigation by the Queensland Mines Inspectorate identified a number of factors that contributed to the incident. These included deficiencies in risk assessment prior to modifications to equipment, insufficient knowledge of what could cause build-up of stored tension and not recognising the level of risk associated with the hazard of elastic spring-back.

Gas management

Gas management in underground coal mines continues to be a concern, with incidents of methane greater than 2.5 per cent still occurring during 2017-18. The Queensland Mines Inspectorate conducted gas management audits at seven of the ten operating underground coal mines.

Lost Time Injury and Permanent Incapacity

The Queensland Mines Inspectorate has moved away from LTI as a measure of safety and health performance due to its aggregation of a wide range of injury severity. The metric may be distorted by a high proportion of low consequence injuries and illnesses and may provide industry with only a general indicator of relatively minor events.

Analysis of a subset of LTI injuries resulting in permanent incapacity show a flat or increasing trend and should be the target of attention for mine management

Respirable Dust

Data show there has been a major reduction in measured respirable dust levels in underground coal mines since 2017. These reductions are due to regulatory changes requiring reporting of respirable dust data, including single sample exceedances and the introduction of engineering controls by industry.

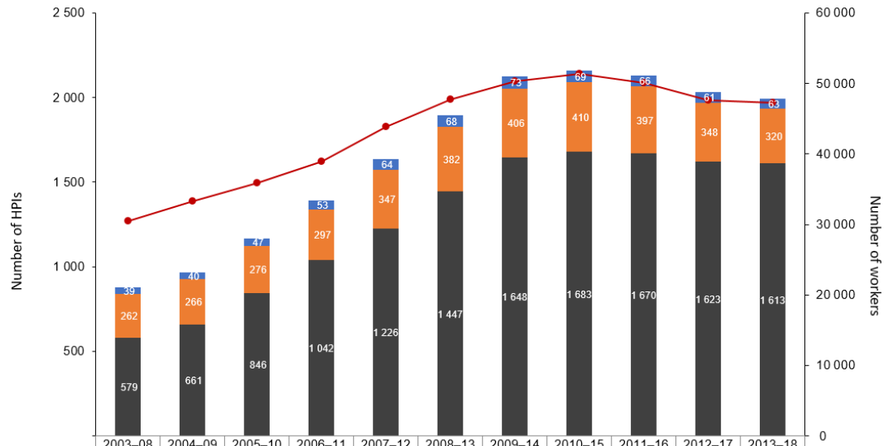
Respirable Crystalline Silica

Data show the levels of respirable crystalline silica in coal mines are generally well below the occupational exposure standard and in compliance with the regulation, however we are seeing an increasing trend in silica exceedances.

Compliance Activities

Compliance activities will continually be reviewed and amended to reflect emerging risks and priorities. The report details the effectiveness of these compliance actions. Data show a reduction in high potential incident frequency rates for fatal hazards in response to directives and reporting of sub-standard conditions.

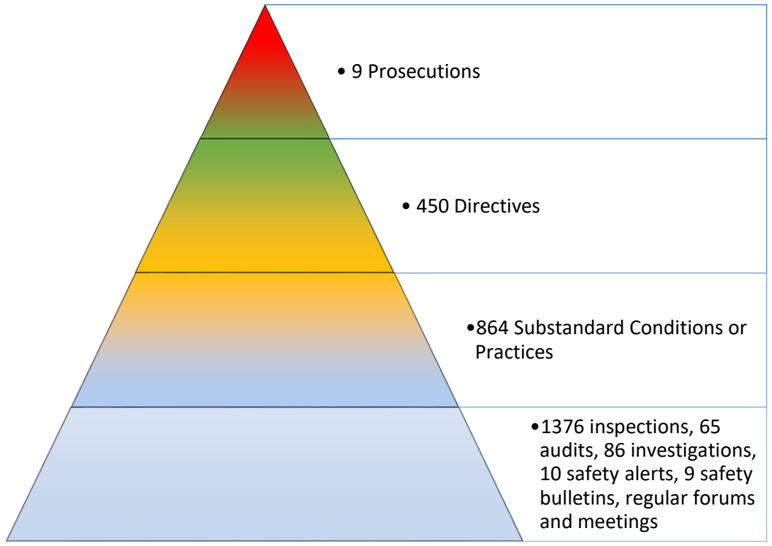
FIVE-YEAR ROLLING AVERAGE OF HIGH POTENTIAL INCIDENTS vs FIVE-YEAR ROLLING AVERAGE EMPLOYMENT NUMBERS, 2003--18



	2003–08	2004–09	2005–10	2006–11	2007–12	2008–13	2009–14	2010–15	2011–16	2012–17	2013–18
Total HPIs	879	967	1 169	1 392	1 637	1 897	2 126	2 162	2 133	2 032	1 996
Quarry HPIs	39	40	47	53	64	68	73	69	66	61	63
Minerals HPIs	262	266	276	297	347	382	406	410	397	348	320
Coal HPIs	579	661	846	1 042	1 226	1 447	1 648	1 683	1 670	1 623	1 613
No. of workers	30 515	33 337	35 929	38 890	43 811	47 741	50 302	51 420	50 109	47 570	47 290

Financial year

COMPLIANCE AND ENFORCEMENT ACTIVITIES UNDERTAKEN IN 2017-18



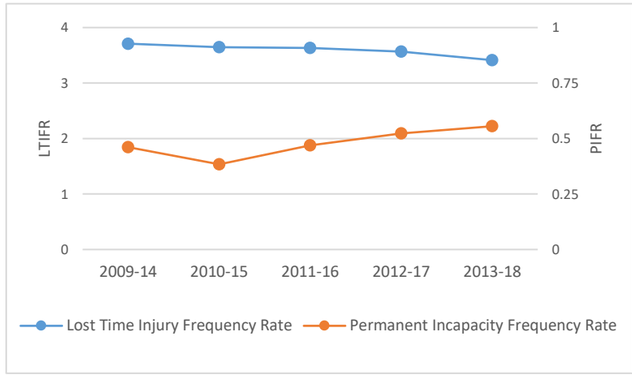
RESPIRABLE DUST: SINGLE EXCEEDANCE RATE – UNDERGROUND COAL SITES

1H 2016	1H 2017	1H 2018
10%	1%	0.6%

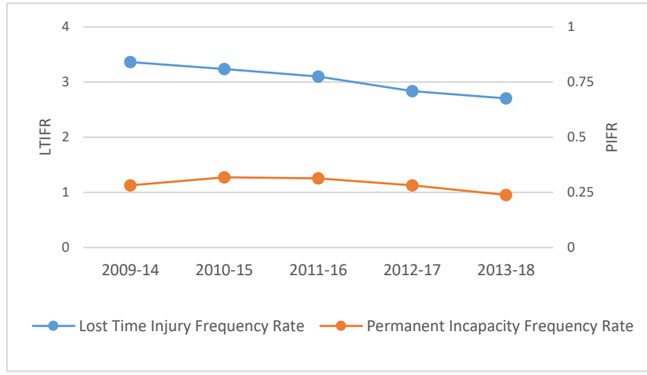
RESPIRABLE CRYSTALLINE SILICA: SINGLE EXCEEDANCE RATE – OPEN CUT AND UNDERGROUND COAL SITES

1H 2015	1H 2016	1H 2017	1H 2018
1.6%	2.6%	0.7%	1.5%

COAL – 5 YEAR ROLLING AVERAGE LTI AND PI



MMQ – 5 YEAR ROLLING AVERAGE LTI AND PI



IMPACT OF COMPLIANCE ACTIVITIES