The state of safety reporting culture

in Queensland's mining industry

Commissioner for
Resources Safety and Health

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Acknowledgements

The Commissioner for Resources Safety and Health would like to acknowledge the work of Safer Together as a partner in the development of the *Queensland mining industry safety reporting survey*. The survey was adapted from the *Safety culture survey tool* that Safer Together developed as a workforce engagement tool to provide managers and supervisors in the petroleum and gas industry with information about the overall safety attitude and feelings of a team, department, and organisation.

The development of the survey was supported by the two tripartite working groups formed by the Coal Mining Safety and Health Advisory Committee and the Mining Safety and Health Advisory Committee.

Working group members kindly provided their time, knowledge, and expertise to ensure the survey was suited to the specific requirements of the Queensland mining and quarrying industries. The success of the survey would not have been possible without their contribution.

In addition, the Commissioner would like to acknowledge Sentis as the co-authors of this report. Sentis lent their expertise in organisational safety culture to their independent analysis of the survey results and in validating the survey data and methodology.

Contents

Dedications	2
Message from the Commissioner	3
Introduction	4
Key findings	6
Development	8
Survey dimensions	10
Survey analysis	11
How to interpret the results	12
Chapter 1—Mining industry overall	**14**
Mining industry survey sample	16
Overall state of reporting culture in the Queensland mining industry	18
Key findings—mining industry overall	20
Notable sector differences	23
Notable demographic differences	23
Participant suggestions for improvement	25
Chapter 2—Coal	**28**
Coal sample	30
Key findings—coal	32
Notable coal sub-sector differences	35
Notable coal demographic differences	36
Participant suggestions for improvement—coal	40
Comparison of employment types in the coal sector	42

Chapter 3—Mineral **44**
Mineral sample 46
Key findings—mineral 48
Notable mineral sub-sector differences 51
Notable mineral demographic differences 52
Participant suggestions for improvement—mineral 56

Chapter 4—Quarrying **58**
Quarrying sample 60
Key findings—quarrying 62
Notable quarrying demographic differences 64
Participant suggestions for improvement—quarrying 65

Conclusion **66**
Conclusion 68
Glossary 72

Appendices **74**
Appendix A—Survey results 76
Appendix B—Suggested areas of opportunity from participants 106

Figures

Figure 1: Topics included in the survey 10
Figure 2: Percentage of mining industry participants by age group 16
Figure 3: Percentage of mining industry participants by gender 16
Figure 4: Percentage of mining industry participants by education level 17
Figure 5: Percentage of mining industry participants by industry tenure 17
Figure 6: Percentage of mining industry participants by employment type 17
Figure 7: Percentage of mining industry participants by responsibility level 18
Figure 8: Percentage of frontline leaders and senior leaders in the mining industry sample, split by length of time in leadership role at their site 18
Figure 9: Sentis safety culture maturity model 19
Figure 10: The percentage of mining industry participants who rated each of the dimensions in the positive, fair, and negative ranges 20
Figure 11: The percentage of participants within each age group with the intent to leave the mining industry in the next three years 24
Figure 12: The top 10 improvement suggestions by frequency of mention 25
Figure 13: Percentage of coal participants by education level 30
Figure 14: Percentage of coal participants by industry tenure 30
Figure 16: Percentage of coal participants by employment type 31
Figure 17: Percentage of coal participants by responsibility level 31
Figure 15: Percentage of coal participants by size of mine 31
Figure 18: Percentage of frontline leaders and senior leaders in the coal sample, split by length of time in leadership role at their site 31
Figure 19: The percentage of coal participants who rated each of the dimensions in the positive, fair, and negative ranges 32
Figure 20: The mean scores for each dimension across the three responsibility levels within coal underground 37
Figure 21: The mean scores for each dimension across the three responsibility levels within coal surface 38
Figure 22: The mean scores for each dimension across the three responsibility levels within coal exploration 39
Figure 23: Percentage of mineral participants by education level 46
Figure 24: Percentage of mineral participants by industry tenure 46
Figure 26: Percentage of mineral participants by employment type 47
Figure 27: Percentage of mineral participants by responsibility level 47
Figure 25: Percentage of mineral participants by size of mine 47
Figure 28: Percentage of frontline leaders and senior leaders in the mineral sample, split by length of time in leadership role at their site 47
Figure 29: The percentage of mineral participants who rated each of the dimensions in the positive, fair, and negative range 48
Figure 30: The mean scores for each dimension across the three responsibility levels within mineral underground 53
Figure 31: The mean scores for each dimension across the three responsibility levels within mineral surface 54

Figure 32: The mean scores for each dimension across the three responsibility levels within mineral exploration 55
Figure 33: Percentage of quarrying participants by education level 60
Figure 34: Percentage of quarrying participants by industry tenure 60
Figure 35: Percentage of quarrying participants by employment type 61
Figure 36: Percentage of quarrying participants by responsibility level 61
Figure 37: Percentage of frontline leaders and senior leaders in the quarrying sample, split by length of time in leadership role at their site 61
Figure 38: The percentage of quarrying participants who rated each of the dimensions in the positive, fair, and negative ranges 62
Figure 39: The mean scores for each dimension across the three responsibility levels within quarrying 64
Figure 40: Sentis safety culture maturity model 68
Figure A1: The percentage of coal underground, surface, and exploration participants who rated each of the standards dimensions in the positive, fair, and negative ranges 77
Figure A2: The percentage of coal underground, surface, and exploration participants who rated each of the communication dimensions in the positive, fair, and negative ranges 79
Figure A3: The percentage of coal underground, surface, and exploration participants who rated each of the risk management dimensions in the positive, fair, and negative ranges 81
Figure A4: The percentage of coal underground, surface, and exploration participants who rated each of the involvement dimensions in the positive, fair, and negative ranges 83
Figure A5: The percentage of coal underground, surface, and exploration participants who rated each of the reporting dimensions in the positive, fair, and negative ranges 85
Figure A6: The percentage of mineral underground, surface, and exploration participants who rated each of the standards dimensions in the positive, fair, and negative ranges 87
Figure A7: The percentage of mineral underground, surface, and exploration participants who rated each of the communication dimensions in the positive, fair, and negative ranges 89
Figure A8: The percentage of mineral underground, surface, and exploration participants who rated each of the risk management dimensions in the positive, fair, and negative ranges 91
Figure A9: The percentage of mineral underground, surface, and exploration participants who rated each of the involvement dimensions in the positive, fair, and negative ranges 93
Figure A10: The percentage of mineral underground, surface, and exploration participants who rated each of the reporting dimensions in the positive, fair, and negative ranges 95
Figure A11: The percentage of quarrying participants who rated each of the standards dimensions in the positive, fair, and negative ranges 98
Figure A12: The percentage of quarrying participants who rated each of the communication dimensions in the positive, fair, and negative ranges 99
Figure A13: The percentage of quarrying participants who rated each of the risk management dimensions in the positive, fair, and negative ranges 101
Figure A14: The percentage of quarrying participants who rated each of the involvement dimensions in the positive, fair, and negative ranges 102
Figure A15: The percentage of quarrying participants who rated each of the reporting dimensions in the positive, fair, and negative ranges 103

Tables

Table 1: Total number of survey responses by industry sector 9
Table 2: Percentage of online and paper responses by industry sector 9
Table 3: The percentage of participants within each age group by their intent to leave the mining industry 24
Table 4: Percentage of coal participants by main department 31
Table 5: The mean scores for each dimension across all departments within the coal sample 36
Table 6: The top improvement suggestions for coal surface 40
Table 7: The top improvement suggestions for coal underground 40
Table 8: The top improvement suggestions for coal exploration 40
Table 9: The top improvement suggestions for worksite owner (within coal) 42
Table 11: The top improvement suggestions for contractors (within coal) 42
Table 10: The top improvement suggestions for major service provider (within coal) 42
Table 12: The top improvement suggestions for labour hire (within coal) 42
Table 13: Percentage of mineral participants by main department 47
Table 14: The mean scores for each dimension across all departments within the mineral sample 52
Table 15: The top improvement suggestions for mineral surface 56
Table 16: The top improvement suggestions for mineral underground 56
Table 17: The top improvement suggestions for mineral exploration 56
Table 18: The top improvement suggestions for quarrying 65
Table A1: The percentage of participants across coal, mineral, and quarrying who rated survey statements in each of the dimensions in the positive (always), fair (usually), and negative (sometimes or rarely) ranges 76
Table A2: The percentage of coal participants who selected always and usually for each survey statement within the standards dimension 78
Table A3: The percentage of coal participants who selected always and usually for each survey statement within the communication dimension 80
Table A4: The percentage of coal participants who selected always and usually for each survey statement within the risk management dimension 82
Table A5: The percentage of coal participants who selected always and usually for each survey statement within the involvement dimension 84
Table A6: The percentage of coal participants who selected always and usually for each survey statement within the reporting dimension 86
Table A7: The percentage of mineral participants who selected always and usually for each survey statement within the standards dimension 88
Table A8: The percentage of mineral participants who selected always and usually for each survey statement within the communication dimension 90
Table A9: The percentage of mineral participants who selected always and usually for each survey statement within the risk management dimension 92
Table A10: The percentage of mineral participants who selected always and usually for each survey statement within the involvement dimension 94

Table A11: The percentage of mineral participants who selected always and usually for each survey statement within the reporting dimension 97
Table A12: The percentage of quarrying participants who selected always and usually for each survey statement within the standards dimension 98
Table A13: The percentage of quarrying participants who selected always and usually for each survey statement within the communication dimension 100
Table A14: The percentage of quarrying participants who selected always and usually for each survey statement within the risk management dimension 101
Table A15: The percentage of quarrying participants who selected always and usually for each survey statement within the involvement dimension 103
Table A16: The percentage of quarrying participants who selected always and usually for each survey statement within the reporting dimension 104
Table B1: Frequently mentioned improvement suggestions 107

Dedications

Since fatality statistics started to be kept in 1877, there have been 1507 people killed while working in Queensland coal mines, mineral mines, and quarries.

I dedicate this report to those who have lost their lives while working in the Queensland mining and quarrying industries, and to those family members, friends, and colleagues whose lives have been affected in the most tragic way.

I also dedicate this report to the workers of Queensland's coal mining, mineral mining, and quarrying industries. Without your contributions and commitment to sharing and learning, this report would not have been possible.

Andrew Clough
Interim Commissioner for Resources Safety and Health

Message from the Commissioner

As Commissioner for Resources Safety and Health, one of my key messages is that a positive reporting culture is an essential element of any safe and healthy workplace and requires a commitment to engagement, learning and continuous improvement.

A positive safety reporting culture promotes the reporting and investigation of incidents to identify hazards and risks. This includes the verification of hazard controls and the sharing of learnings across work areas, sites, and industries.

This requires genuine engagement, communication, and a commitment to learning from past experiences. However, as an industry, we have been reliant on anecdotal evidence to inform us about the current state of the reporting culture in Queensland's coal mines, mineral mines, and quarries.

This survey has provided valuable insight into the reporting culture in Queensland and helps to identify the strengths of the industry, as well as opportunities for the industry to improve.

This type of survey, on this scale, has never been attempted in the Queensland mining industry before.

I would like to thank the thousands of mine and quarry workers who participated in the survey for taking the time to share their thoughts. I would also like to thank the numerous mine and quarry operators who helped facilitate the survey at their sites, particularly those who generously assisted in the completion of cognitive and pilot testing.

Responses received have been thoughtful and considered which has demonstrated to me that the workforce is engaged and committed to achieving a positive reporting culture.

Last, but not least, I would like to acknowledge the work of my predecessor, Kate du Preez who was the driving force behind this survey and without whom this report would not have been possible.

It is Kate's and my hope that this report can help guide the next steps in the journey to building and maintaining a positive reporting culture in Queensland's mining and quarrying industries.

Andrew Clough
Interim Commissioner for Resources Safety and Health

Introduction

In June 2023, the Commissioner for Resources Safety and Health, in collaboration with the Coal Mining Safety and Health Advisory Committee (CMSHAC) and the Mining Safety and Health Advisory Committee (MSHAC), launched a safety reporting survey across the Queensland coal mining, mineral mining, and quarrying industries, collectively referred to as Queensland's mining industry.

The survey was driven by the Queensland Coal Mining Board of Inquiry finding that:

> *An extensive study undertaken by CMSHAC on reporting culture in coal mines would benefit the industry in Queensland (Finding 91)*

and its recommendation that:

> *As part of carrying out its functions under section 76A of the Act, CMSHAC considers including within its five-year Strategic Plan activities that will facilitate improvements in the reporting culture in Queensland coal mines (Recommendation 28).*

Though the recommendation and finding were directed at the coal mining industry, the Commissioner expanded the scope to include the mineral mining and quarrying industries as MSHAC had independently identified the need to perform research on reporting culture in mineral mines and quarries.

The primary purpose of the *Queensland mining industry safety reporting survey* was to understand the state of the reporting culture across the Queensland mining industry to identify the reasons why people do, or do not, report high potential incidents, near misses and early warning signs. Reporting culture refers to the shared values, attitudes, and behaviours that people within a site or organisation have about reporting safety incidents and near misses. A positive reporting culture is one where people feel safe to speak up and are encouraged to report, incident investigations are fair, thorough, and focused on learning, and those learnings are shared throughout the organisation and wider industry.

The survey aimed to identify the key opportunities to achieving a responsive and effective reporting culture in the coal mining, mineral mining, and quarrying industries and to enable benchmarking of industry reporting culture by providing focus areas for industry and CMSHAC and MSHAC to target for further research and continuous improvement.

Reporting culture is difficult to observe. It is constantly evolving as people and organisational objectives change. The results of the survey provide an indication of the state of industry's reporting culture at a single point in time.

The survey was open from May to September 2023 to all workers in the Queensland mining industry—from the frontline workforce to senior leadership—including permanent and part-time staff, contractors, labour hire workers, and contract specialists. A total of 7821 survey responses were received from the coal mining, mineral mining, and quarrying sectors.

Key findings

The aim of the *Queensland mining industry safety reporting survey* was to understand the state of the reporting culture across the Queensland mining and quarrying industries to identify the reasons why people do, or do not, report high potential incidents, near misses and early warning signs.

7821

survey responses were collected from the Queensland mining industry (from 28 May 2023 to 5 September 2023)

6492 responses from coal

1070 responses from mineral

232 responses from quarrying

The sample consisted of

68% frontline employees

20% frontline leaders

8% senior leaders

Strength areas

Refer to page 27

- Teams typically look out for each other and support each other to work safely, with this statement receiving 93% in *always* and *usually*.
- Safety prioritisation, safety knowledge, and risk management are key strengths for teams, with these statements receiving 90% or above in *always* and *usually*.
- Frontline leaders encourage teams to take appropriate action if something feels unsafe, with this statement receiving 90% in *always* and *usually*.
- Frontline and senior leaders encourage the reporting of near misses and high potential incidents, with these statements receiving above 89% in *always* and *usually*.
- Senior leaders are focused on investigating near misses and high potential incidents, with this statement receiving 89% in *always* and *usually*.
- There is high awareness of internal reporting escalation pathways, with 83% of participants knowing how to escalate a safety concern internally.

Participants were asked:

If there was one thing to focus on that would improve reporting at your site, what would it be?

The most frequently mentioned improvement areas were:

Opportunity areas

Refer to page 28

Simplifying reporting processes can make it easier and clearer for workers to report high potential incidents and hazards, as 28% of participants found the reporting process complex, unclear, and/or time-consuming.

Senior leaders who provide regular feedback to workers on safety concerns improve worker confidence in reporting, as 32% of participants found that senior leaders do not provide enough feedback.

Senior leaders who increase their interaction and visibility with frontline workers can inspire and influence a positive safety culture, as 32% of participants found that senior leaders do not visit work areas often.

Improving job planning around timeframes and resources can allow workers to focus on performing work safely, as 29% of participants found that timeframes and resources are not adequate to perform work safely.

Addressing complaints can improve workers' confidence to report bullying, discrimination, and harassment, as 25% of participants had low confidence that complaints of bullying, discrimination, and harassment would be addressed appropriately by leadership.

Frontline leaders can provide recognition to workers to reinforce good safety behaviours, as 26% of participants found that not enough recognition was provided by frontline leaders.

Development

Facilitating an industry-wide survey required an approach that could be adapted to suit the needs of participating mines and quarries. Engagement and support from industry, unions, and the regulator were critical to ensuring the survey was available to as many workers as possible.

Project design

To make sure the survey provided data that accurately showed the state of reporting culture across Queensland's mining industry, it was important to ensure the survey questions were not leading and that participants provided information from observation of others as well as their own personal experiences.

The Commissioner addressed this by collaborating with two tripartite working groups established by CMSHAC and MSHAC. The working groups included representation from:

- Australian Workers' Union
- Cement Concrete and Aggregates Australia
- Electrical Trades Union
- Mining and Energy Union
- Queensland Resources Council
- Resources Safety and Health Queensland.

In addition, a high response rate was necessary to provide an accurate picture of the reporting culture across the industry. The Commissioner engaged with mine and quarry operators to promote the survey to their workforce and, where possible, encourage them to allocate time to workers during their shifts to participate in the survey.

Ensuring privacy and confidentiality was paramount to establish trust in the survey from all stakeholders and to make sure participants felt secure to answer truthfully. To safeguard participants' privacy, the Commissioner was and remains the sole owner of the survey and all data collected, including the raw data. The industry, unions, Resources Safety and Health Queensland, and members of CMSHAC and MSHAC cannot access the survey data. All data has been de-identified and aggregated in this report. Data on individual mine sites will not be presented.

Questionnaire development

The survey was adapted from the *Safety culture survey tool* that was developed by Safer Together[1] to provide the petroleum and gas industry with information about the overall safety behaviours of frontline workers, frontline leaders, and managers.

The survey tool was broadly based on the *Behavioural safety standard framework*[2] developed by the Keil Centre and the safety leadership characteristics defined by the International Association of Oil and Gas Producers in Report 452 *Shaping safety culture through safety leadership*[3].

The survey questions were designed to understand participants' perceptions of the safety behaviours of members of their team, frontline leaders, and managers.

The working groups established by CMSHAC and MSHAC provided guidance and input in modifying the survey to suit the Queensland mining industry.

To ensure the robustness and suitability of questions for the target audience, the Commissioner's office undertook cognitive testing sessions at two coal mines, one mineral mine, and one quarry.

Cognitive testing was completed as a structured feedback session with randomly selected individuals representing workers, frontline leaders and managers at mines and quarries. Participants completed the survey and provided feedback on their understanding of the questions, providing an opportunity to identify if the wording was unclear and where adjustments needed to be made.

A pilot phase of the survey was performed from 1 May 2023 to 27 May 2023. The pilot phase ensured the survey was fit for purpose by working with participating mines and quarries to test its effectiveness. Data was then assessed for any potential issues in the questions or any issues with the administration of the survey.

1 https://www.safertogether.com.au/
2 https://keilcentre.co.uk/
3 https://www.iogp.org/bookstore/product/shaping-safety-culture-through-safety-leadership/

Fieldwork

The survey was open from 28 May 2023 to 5 September 2023.

Mine and quarry workers had the option of taking the survey online or by completing a paper copy. Where possible, mines and quarries provided time during work hours for workers to participate. Workers also had the option to complete the survey in private by taking a copy of the paper survey home or accessing the survey online from home.

The total number of survey responses received was 7821.

Table 1: Total number of survey responses by industry sector

Sector	Total
Coal—exploration	73
Coal—surface	5232
Coal—underground	1187
Mineral—exploration	58
Mineral—surface	814
Mineral—underground	198
Other[4]	27
Quarrying	232
Total	**7821**

Paper was the preferred response method overall, though this was largely due to the preference for paper in the coal sector.

Table 2: Percentage of online and paper responses by industry sector

	Online	Paper
Coal	37%	63%
Mineral	91%	9%
Quarrying	60%	40%
Total	**45%**	**55%**

Surveys were received from 52 coal mines, an estimated 12 mineral mines, and an estimated 30 quarries.[5] Surveys were also received from workers in the exploration sector.

The survey took, on average, 15 minutes to complete.

4 Participants categorised as *other* are workers in the Queensland mining industry who could not be identified as part of a specific sector.
5 Coal mine workers had the option of identifying the mine at which they worked, so a definitive number was able to be calculated. Site name was not collected in the mineral and quarry versions of the survey.

Survey dimensions

To assess the state of reporting culture in the mining industry, broader safety culture needed to be assessed in tandem. Safety culture refers to the shared values, attitudes, and behaviours that people within a site or organisation have about safety.

A positive safety culture is one where safety is a core part of everyone's job and is a shared responsibility for all, and where communication, shared learning, and continued improvement are valued. The overall safety culture of a site will directly influence a person's likelihood and confidence to report a high potential incident, near miss or early warning sign.

The survey was divided into five dimensions—standards, communication, risk management, involvement, and reporting. Within each dimension, the questions asked about the safety behaviours related to that dimension. The dimensions were assessed across the three groups—my team, frontline leaders, and senior leaders.

My team included everyone a person normally worked with. As a result, this group did not align completely with the frontline workforce, as frontline or senior leaders may have formed a part of a participant's team. *Frontline leaders* included leading hands, appointed supervisors, open cut examiners, deputies, and coordinators only. *Senior leaders* included managers, site senior executives, and superintendents only.

The survey statements were categorised into 15 topics as shown in Figure 1. The description of each topic contextualises the overarching behaviour each group should portray in each dimension—for example, for *my team* the overarching behaviour is adhering to standards.

Figure 1: Topics included in the survey

	My team	Frontline leaders	Senior leaders
Standards	Adhere to standards	Ensure compliance	Set high standards
Communication	Speak up	Encourage the team	Communicate openly
Risk management	Plan for safety	Promote risk awareness	Control for risk
Involvement	Get involved	Involve the team	Involve the workforce
Reporting	Report safety concerns	Support and promote	Encourage and action

Throughout the report, dimensions are reported for each group, followed by the dimension name—for example, team standards.

The addition of a range of demographic questions allowed assessment of whether there were any meaningful differences in the perceptions of reporting culture by responsibility level, age, gender, industry tenure, and employment type.

The application of dimensions to each group

The survey statements under each dimension considered the safety behaviours that should be displayed by each group if that organisation has a positive safety culture. The safety behaviours a person should exhibit will be different based on their level of responsibility.

For example, for the behaviour dimension of *standards,* the statements for *my team* covered the safety behaviours a team should demonstrate that show *adherence to standards*. For *frontline leaders,* the statements asked about the safety behaviours frontline leaders should demonstrate to *ensure compliance* from their team, and for *senior leaders,* the statements asked about the safety behaviours senior leaders should demonstrate to *set high standards* for the operation.

Participants were instructed to answer all statements, including those statements for the group that they belong to—for example, senior leaders answering statements on senior leaders' safety behaviours.

This allowed a 360-degree approach to analysis so the perspectives of participants on their own group's safety behaviours could be considered in analysis. Cognitive bias means that a participant is more likely to positively inflate their perspective on their own safety behaviours or behaviours of those at the same responsibility level. As such, a more comprehensive analysis could be performed by assessing the overall average for a statement in comparison to each group's average on the statement so instances of positive or negative inflation could be observed.

Survey analysis

Survey data was prepared for analysis using data cleaning techniques to ensure that the final sample was valid.

An assessment of sampling bias was also performed, with the recommendation that analysis should be conducted separately for coal, mineral, and quarrying (as well as mining overall). The data analysis approach consisted of identifying strength and opportunity areas for the mining industry overall and each of the sectors (coal, mineral, quarrying). Analysis was conducted on the open text responses (participant suggestions for improvement), where all responses were sorted by sector and organised into broad themes and more detailed subthemes.

How to interpret the results

The survey consisted of a series of statements about the safety behaviours displayed by the team, frontline leaders, and senior leaders.

Participants rated each of these statements as *always, usually, sometimes,* or *rarely.* All statements were positively worded, meaning *always* was the highest rating and *rarely* was the lowest rating. When interpreting results, *always* was considered positive, *usually* was considered fair (though still on the positive end of the scale), and *sometimes* and *rarely* were considered negative.

Throughout this report, results are often reported with the percentage of participants who rated the statement as positive, fair, or negative. Participant ratings were also assigned a value from 1 (rarely) to 4 (always) to calculate the mean (average) score. A mean score from 3.5 to 4.0 meant the average was as close to *always* as possible and considered a positive result, a mean score of 3.0 to 3.4 meant the average was *usually* and considered a fair result, and a mean score below 3.0 meant the average was sometimes to *rarely* and considered a negative result.

The criteria used when determining the key strengths and opportunities was the mean score, percentage of participants rating in the negative versus positive range, and how consistent those scores were across demographic groups. In general, survey statements that consistently had a lower mean and a higher percentage of negative ratings across demographic groups were identified as opportunity areas, and survey statements that consistently had a higher mean and higher percentage of positive ratings across demographic groups were identified as strength areas.

Participant ratings were averaged for each dimension—for example, team standards. The five dimensions (standards, communication, risk management, involvement, and reporting) were assessed for my team, frontline leaders, and senior leaders.

There were additional questions about reporting and perceptions of reporting culture at the end of the survey. Participants were asked about their awareness of escalation pathways, both within and external to the workplace, and were also asked to indicate if reporting culture had improved, stayed the same, or worsened since they first started working at their sites.

Finally, there was an open text question at the end of the survey, where participants were asked, *If there was one thing to focus on that would improve reporting at your site, what would it be?* Analysis was performed by identifying consistent suggestions (themes) for improvement. Themes identified in the responses were used to provide further context to the survey results. Suggestions from participants collected in an open text format provide an in-depth view of the perspectives of participants, allowing them the freedom to respond on what matters most to them without conforming to a rigid question structure.

Analysis of the open text question also considered if any demographic group formed a large majority in the response. Where a finding was identified as specific to a demographic group, the finding recognises the group in the description—for example, frontline workers. If there was no specific group contributing the majority of responses, the finding refers to participants broadly.

Some participants did not answer all the survey questions but answered enough questions in the survey to be considered a valid response, leading to some missing data. Differences in sample sizes across survey questions are noted in appendix A.


184

Chapter 1

Mining industry overall


38
CAUTION

Mining industry survey sample

Sub-sector participation	
Coal	6492
Mineral	1070
Quarrying	232

Coal makes up a large proportion of the overall sample (83%). This is reasonably representative of the Queensland mining industry, with coal being 73% of the mining industry.

Figure 2: Percentage of mining industry participants by age group

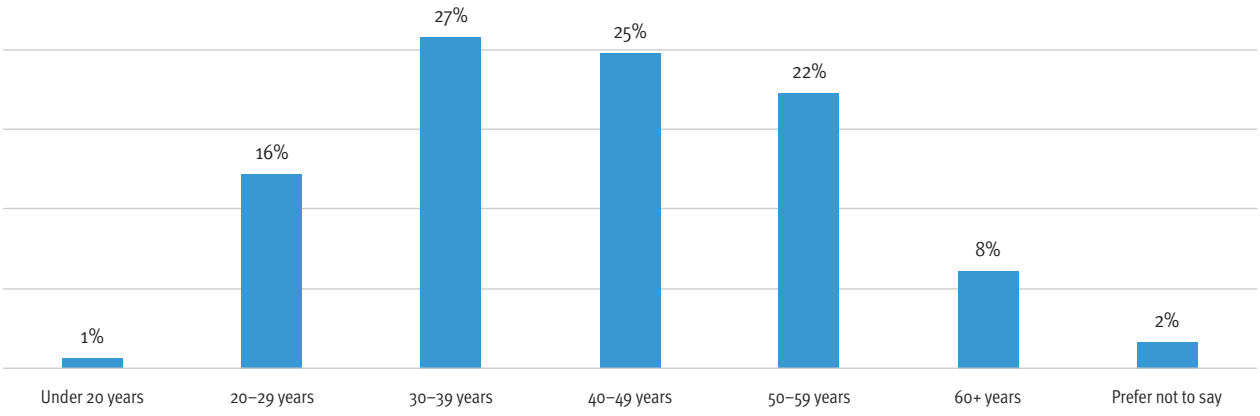
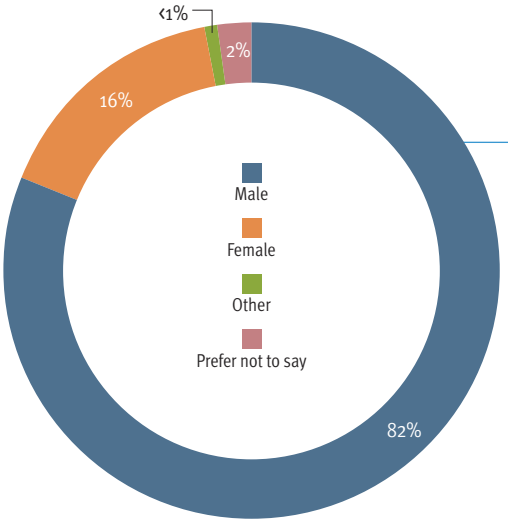


Figure 3: Percentage of mining industry participants by gender



The sample consisted of 82% males and 16% females, which is representative of the mining industry (18% females in mining industry).

Note: percentages may not add up to 100% due to rounding or where participants may not have answered all demographic questions.

Figure 4: Percentage of mining industry participants by education level

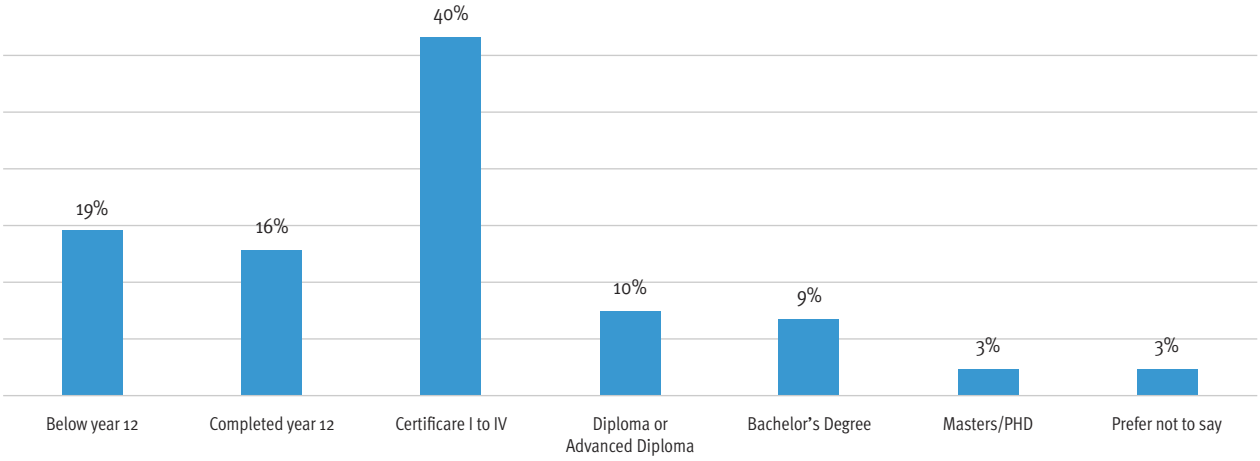


Figure 5: Percentage of mining industry participants by industry tenure

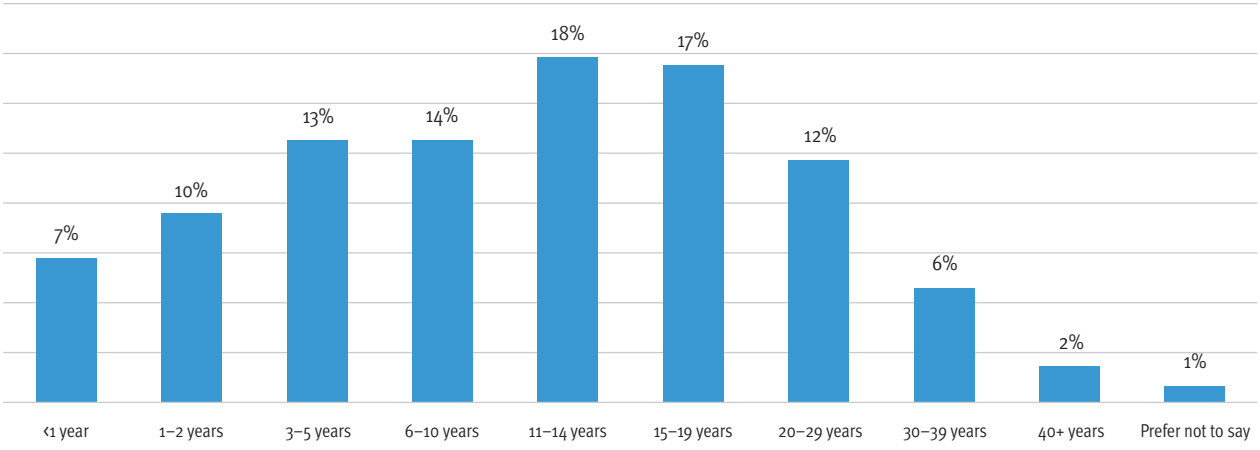
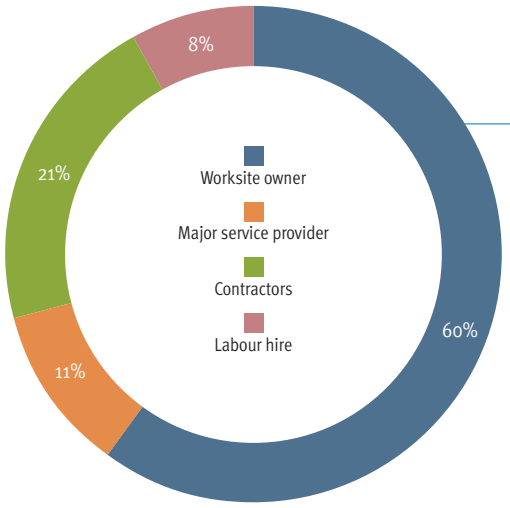


Figure 6: Percentage of mining industry participants by employment type



Employment type showed 60% of participants were employed by worksite owner, 11% were employed by a major service provider,[6] 21% contractors, and 8% labour hire.[7] Coal contributed the majority of major service provider, labour hire and contractor participants.

6 A major service provider is a contracting company that runs the operation or part of the operation on behalf of the owner.
7 Under current legislation, workers who are not employed directly by the mine operator (labour hire, major service provider, contractors) are classified as contractors. Contractors made up 40% of overall respondents to the survey. For FY2022–2023, contractors made up 54% of the industry workforce.

Figure 7: Percentage of mining industry participants by responsibility level

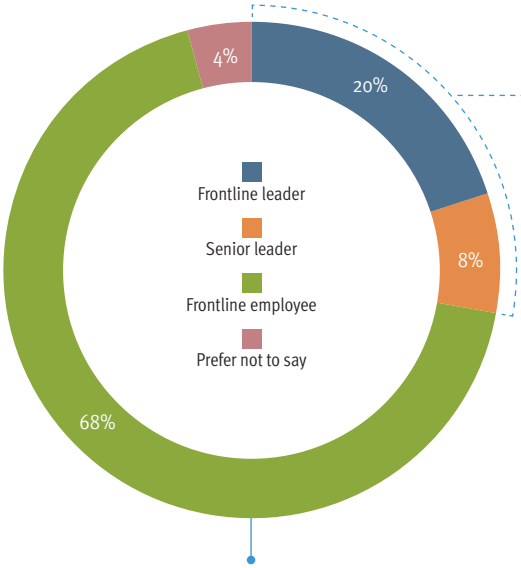
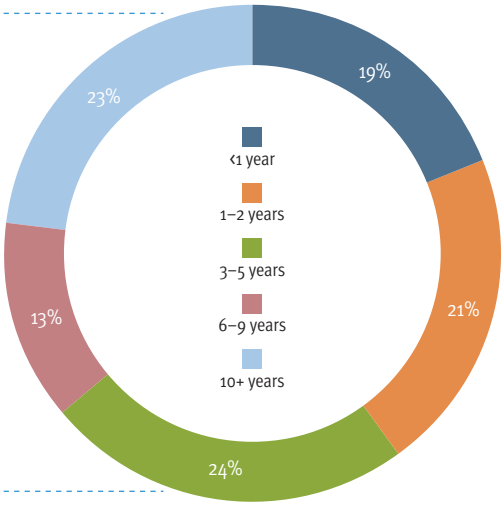


Figure 8: Percentage of frontline leaders and senior leaders in the mining industry sample, split by length of time in leadership role at their site



The sample consisted of 68% frontline employees, 20% frontline leaders, and 8% senior leaders. Coal had a higher proportion of frontline employees compared with other industry sectors, whereas quarrying had a higher proportion of senior leaders.

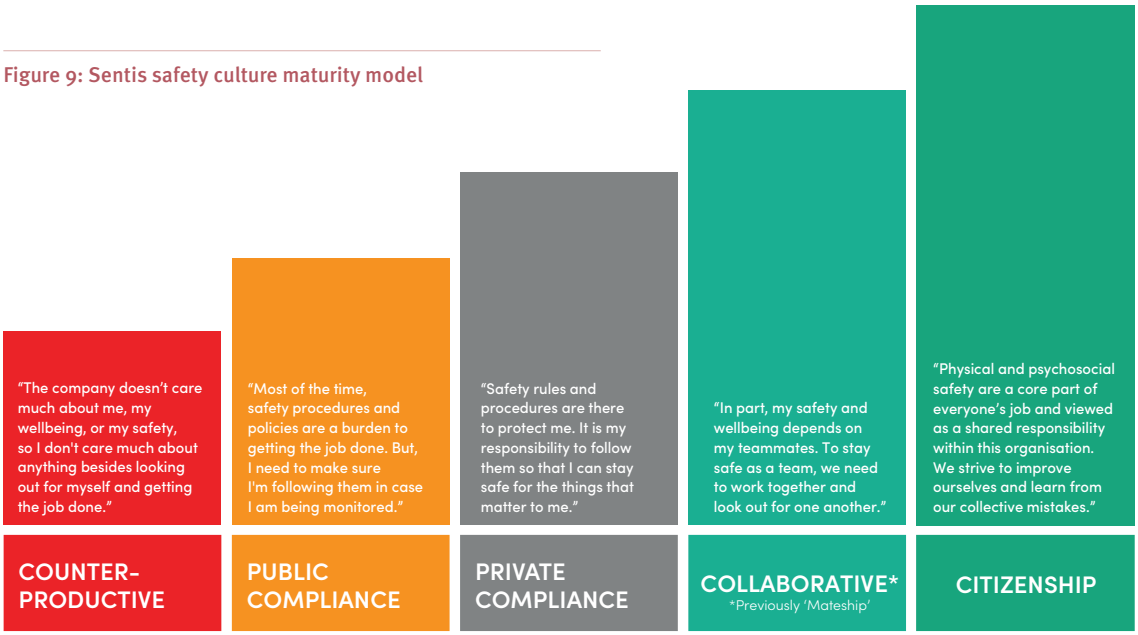
Overall state of reporting culture in the Queensland mining industry

The results of this survey were assessed against the *Sentis Safety Culture Maturity Model*[8] to establish an indicator of the state of reporting culture in Queensland's mining industry.

Maturity ratings are useful for collating a variety of data into a description that captures the current state of an organisation or industry. For instance, Foster and Hoult (2013) describe the successful use of a safety culture maturity approach within the UK mining sector to guide organisations to focus on learning and proactive improvements.[9] The *Sentis Safety Culture Maturity Model* presents five levels of safety maturity that can be used to assess an organisation's safety culture (see Figure 9). This approach to diagnosing safety culture has been widely used across high-risk industries. The Sentis model is comprised of 24 components, which are grounded in contemporary research in safety science and have been shown to impact on factors important to safety—such as discretionary effort in relation to safety and wellbeing, helpful safety attitudes and behaviours, and reduced risk of physical and/or psychological injury.

8 https://sentis.com.au/articles/sentis-safety-culture-maturity-model/
9 Foster, P. and Hoult, S., 2013. The safety journey: Using a safety maturity model for safety planning and assurance in the UK coal mining industry. *Mineral*, 3(1), pp.59-72.

Figure 9: Sentis safety culture maturity model



Sentis Safety Culture Maturity Model

Maturity levels can be assessed for all 24 components of safety culture. For the purposes of this report, survey data and open text data were examined against five of the 24 safety culture components, which were selected for their relevance to reporting culture.

The five safety culture components are:

- **Willingness to report**—Employee willingness to report hazards, near misses, and incidents. Clarity of reporting criteria and employee use of reporting channels. Extent to which incidents/errors are used as learning opportunities. Perceived repercussions for reporting.
- **Within-team support for safety**—Quality of relationships between team members. Level of care for co-workers' safety. Willingness to challenge co-workers on safety and wellbeing. Frequency and quality of safety briefings and discussion within teams.
- **Supervisor safety commitment**—Supervisor support for worker safety and wellbeing. Commitment to safety during periods of high work pressure. Quality of supervisor-team working relationship. Effectiveness of supervisor safety visits and interactions with employees.
- **Management safety commitment**—Perceptions of management support for employee safety and wellbeing. Management understanding of worker safety and wellbeing issues. Effectiveness of management safety visits and interactions with employees.
- **Psychological safety**—The extent to which people are comfortable being themselves and speaking up at work without fear of negative consequences.

Strengths and opportunities were considered from both survey and open text data across all three sectors.

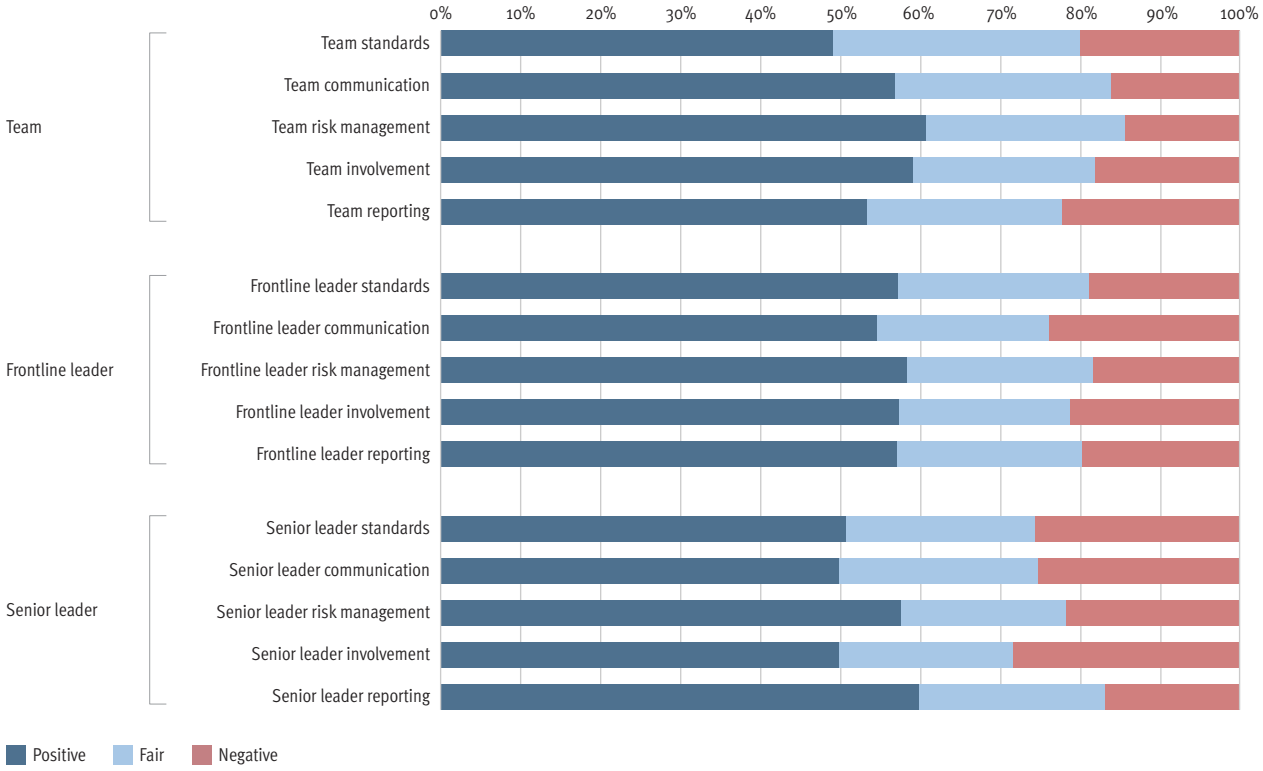
Based on the key results outlined in this report, the Queensland mining industry has been placed in the lower end of the *private compliance* range for reporting culture. This indicates that the majority of people in the industry tend to report hazards and incidents through appropriate channels with a reasonable understanding of how to do so, that leaders often encourage reporting, and efforts are made to improve confidence and trust with reporting. Team support for safety is also high, and people tend to look out for each other, stop the job if it's unsafe, and avoid taking shortcuts. Safety and wellbeing are discussed as needed. However, barriers exist that can decrease the likelihood of a person to report, such as the complexity of reporting systems (and access to them), fear or concern associated with reporting, and intermittent or absent feedback to workers on the outcomes of incidents and hazards.

This maturity ranking is an average across all mines and quarries in Queensland that contributed to the survey. It is important to note that individual mine and quarry sites will have their own unique reporting culture, and some may be higher or lower in maturity.

Sentis research (based on an international sample of 42 mine sites across 19 different organisations) has demonstrated that 90% of mine sites that have completed an onsite safety evaluation sit at *public compliance* or below when evaluated against all 24 components of safety culture. Therefore, achieving a rating of private compliance when evaluating the five components that are relevant to reporting culture can be viewed favourably for the state of reporting culture in the Queensland mining industry. When incidents are not reported, this can have ongoing impacts on the safety of people at work. Reporting should be consistently encouraged as a way to share, learn, and improve for the benefit of current and future workers.

Key findings—mining industry overall

Figure 10: The percentage of mining industry participants who rated each of the dimensions in the positive, fair, and negative ranges



The key findings for the mining industry were identified by analysing participant responses for the whole industry, as well as the consistency of results across different industry sectors (coal, mineral, quarrying). Coal accounts for a large proportion of the overall sample (83%). This is considered reasonably representative, with coal making up 73% of the mining industry. Each industry sector has unique results and may have strength or opportunity areas that are not mentioned at the overall mining industry level. Refer to the specific chapters for more detail on each sector.

Overall, most participants rated survey statements at the higher end of the scale as positive or fair (*always* or *usually*). There were many strength areas identified across the mining industry, with some of the top strengths outlined below. In general, survey statements that consistently had a lower mean and a higher percentage of negative ratings across demographic groups were identified as opportunity areas, and survey statements that consistently had a higher mean and higher percentage of positive ratings across demographic groups were identified as strength areas.

Sentis has found that team support for safety is one of the top strength areas for high maturity sites, indicating that it is an important driver of a positive safety culture.

Strengths

Overall, participants rated survey statements about their team higher than statements about frontline leaders and senior leaders. The statement consistently rated the highest across the mining industry was, *My team looks out for each other and supports each other to work safely,* with 60% of participants rating it always (coal 59%, mineral 65%, quarrying 60%). This indicates strong co-worker support for safety. Sentis has found that team support for safety is one of the top strength areas for high maturity sites, indicating that it is an important driver of a positive safety culture.[10] The statements, *My team keeps safety as the first priority at all times; My team performs work safely, without taking shortcuts;* and *My team stops the job if they believe it is unsafe,* were also rated highly, suggesting that in most instances the team prioritises safety.

Survey statements about the team's knowledge and understanding were rated highly, such as the team understanding and following safety standards and procedures, the team understanding what controls were in place to prevent an incident, and the team understanding their obligation to report all near misses and high potential incidents. Team risk management was also a strength, with results indicating that most people identified potential hazards before starting work, took action on hazards or potential hazards, and planned the necessary steps to do the job safely.

Strength areas for frontline leaders included encouragement to the team to take appropriate action if something felt unsafe, as well as encouragement to report near misses, high potential incidents, and hazards. The statement about frontline leaders ensuring that pre-start safety briefing information was relevant was also highly rated.

The strength areas for senior leaders were related to how they supported reporting. Specifically, the statements that were rated highly were about senior leaders encouraging workers to report and ensuring that all reported near misses and high potential incidents were investigated.

Additionally, participants were asked to indicate whether they knew who they could speak to within their workplace and outside of their workplace if they report a safety concern that is not being taken seriously. Overall, 83% of participants indicated that they know who to speak to within their workplace (coal 82%, mineral 84%, quarrying 88%), and 68% of participants indicated that they know who to speak to outside of their workplace (coal 69%, mineral 63%, quarrying 77%).

Finally, 38% of participants responded that the reporting culture has stayed about the same at their sites (coal 38%, mineral 36%, quarrying 29%), 35% responded that the reporting culture had got better (coal 34%, mineral 41%, quarrying 56%), and 10% responded that the reporting culture had got worse (coal 11%, mineral 8%, quarrying 4%).[11]

10 Sentis (2020). Driving a Positive Safety Culture.
11 The remaining 17% of the sample either indicated that they were unsure, or they did not respond to this question.

Opportunities

The survey statement that was consistently rated the lowest across the mining industry was, *My team finds the reporting process simple and straightforward,* with 28% of participants rating it *sometimes* or *rarely* (coal 28%, mineral 27%, quarrying 19%). This indicates that over a quarter of participants may find the reporting process complex, unclear, or time-consuming. In line with this, and based on an extensive multi-industry sample conducted by Sentis of more than 12,000 survey responses and more than 1800 focus group participants, issues with the reporting process was one of the top three drivers for under-reporting, with 25% of workers indicating they have under-reported due to issues with the reporting process.[12] The mining industry sample of 5500 responses from 22 mining organisations indicates the same issues with reporting processes.[13]

The top improvement suggestion from participants was to improve the reporting systems by making them clear, easy and quick to use, and accessible across the workforce.

One of the most frequently mentioned improvement areas was providing feedback on reports.

Generally, the survey statements about senior leaders had lower ratings. The statement that was consistently rated the lowest within the senior leader section was, *Senior leaders visit the work area/s at appropriate intervals,* with 32% of participants rating it *sometimes* or *rarely* (coal 32%, mineral 36%, quarrying 16%). Other statements about senior leaders' involvement were rated lower, such as statements about whether senior leaders provided feedback on concerns raised by the workforce in a timely manner, and whether senior leaders provided opportunities for the workforce to participate in safety initiatives.

These opportunity areas for senior leaders are in line with Sentis's findings[14] that leader consultation with workers on safety matters and senior management spending time interacting with workers are both common opportunity areas in the mining industry.[15]

The statement, *Senior leaders ensure there are realistic timeframes and adequate resources available to get the job done safely,* was also rated lower, with 29% of participants rating it *sometimes* or *rarely* (coal 30%, mineral 27%, quarrying 13%). This suggests that almost a third of participants feel that timeframes and resources may be impacting safe work. Further, the statement, *Senior leaders give workers confidence that complaints of bullying, discrimination, and harassment will be addressed appropriately,* was also rated lower.

For frontline leaders, the lowest rated item was, *Frontline leaders give recognition to good safety behaviours,* with 26% of participants rating it *sometimes* or *rarely* (coal 27%, mineral 22%, quarrying 15%).

This is consistent with Sentis's benchmark across eight components of safety leadership, where recognition is the lowest rated safety leadership competency overall and for mining organisations.[16]

12 Sentis. (2018). Underreporting of Safety Incidents in the Workplace.
13 Sentis. (2022). The State of Safety Culture in Mining.
14 Based on over 21,000 survey responses from 22 mining companies.
15 Sentis. (2022). The State of Safety Culture in Mining.
16 Sentis. (2017). The State of Safety Leadership.

Notable sector differences

There were differences observed in the results between the coal, mineral, and quarrying sectors. Each sector's chapter in the report covers the unique findings for that sector. From an overall perspective, results from quarrying participants were consistently more positive than mineral and coal participants, and results from mineral participants were generally more positive than coal participants. The quarrying sector had a higher proportion of responses from senior leaders (28% in comparison to 14% for mineral and 6% for coal), but the pattern of results remained similar when excluding senior leaders from analysis. This indicates that the more positive result in the quarrying sector is unlikely to be caused by a higher proportion of senior leaders in the sample.

There were some similarities observed in the strength and opportunity areas between the coal and mineral sectors. The strengths were predominantly about the behaviours of teams—i.e. standards and risk management—and the opportunity areas were predominantly about the behaviours of senior leaders—i.e. standards, communication, and involvement. In contrast, participants from the quarrying sector rated dimensions relating to leaders more favourably—i.e. frontline leader reporting, senior leader risk management, and reporting—and their team less favourably—i.e. communication and involvement.

Notable demographic differences

Average scores across all dimensions were compared between groups based on demographic categories. Comparisons were made at the industry level for age, gender, and education. Additional demographic comparisons will be provided in the chapters for each sector exploring differences in average scores across all dimensions based on department, tenure comparisons, responsibility (leadership) level, and employment type.

Age

Those under the age of 20 were more positive across all dimensions when compared with all other age groups.[17]

No other notable differences in ratings between age groups.

Gender

No notable differences in ratings based on gender.

Education level

No notable differences in ratings based on education level.

17 Under 20 was the smallest age group in all sectors, with participant numbers from 51–61 per sector.

Industry exit

Table 3 examines participants' intention to leave the industry, based on age. Those under 20 years old were less likely to have a clear intent to leave but were more likely to be unsure about whether they intended to remain or leave the industry. The proportion of participants unsure of their intention to remain or leave the industry declined progressively across each of the older age groups.

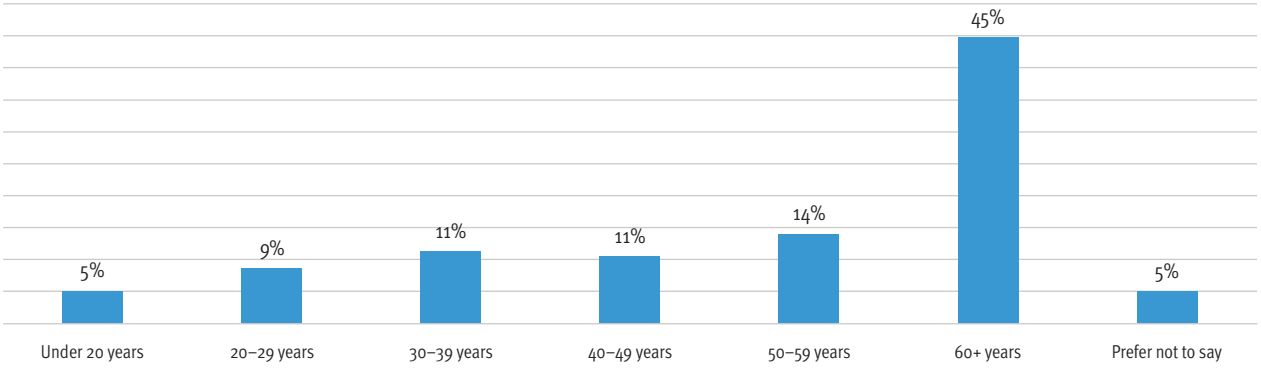
As expected, those over 60 years old were more likely to have plans to leave in the near future, consistent with planning for retirement. In all other age groups, the percentage intending to leave the industry was reasonably consistent.

Table 3: The percentage of participants within each age group by their intent to leave the mining industry

	Under 20 years	20-29 years	30-39 years	40-49 years	50-59 years	60+ years	Total
Unsure	37%	27%	22%	19%	13%	9%	**19%**
No	49%	45%	46%	49%	44%	21%	**44%**
More than three years from now	9%	19%	21%	21%	29%	25%	**23%**
In the next three years	5%	6%	8%	9%	12%	33%	**11%**
In the next year	0%	3%	4%	2%	3%	12%	**4%**

Note: The colour gradient shows the distribution of responses across the categories. Percentage calculations excluded participants who did not indicate their age group or intention to leave the mining industry.

Figure 11: The percentage of participants within each age group with the intent to leave the mining industry in the next three years



When considering the ratings on each survey dimension for those with intention to leave in the next 12 months in comparison to those with no intention to leave, those intending to leave in the next 12 months rated all dimensions less favourably than those with no intention to leave. Senior leadership dimensions were also rated less favourably by those with intention to leave within the next three years (but not within the next 12 months) when compared with those with no intention to leave. Overall, people looking to leave industry had a less positive view of their workplace. However, there was insufficient data to conclusively state that this was their primary motivation for intending to leave. There were no other notable differences in ratings based on industry exit.

Participant suggestions for improvement

Participants were given the opportunity to write their own response to the question, *If there was one thing to focus on that would improve reporting at your site, what would it be?* In total, 4064 participants answered this question, providing 5062 mentions of improvement areas.

While there was a broad range of suggestions from all sectors, there were more findings identified in the coal sample due to a larger sample size.

As the question explicitly asked participants to suggest an area of improvement, suggestions from participants were largely on areas of opportunity. Although 39% of mentions did not focus on improvements to reporting specifically, but rather on improvements that could be made within the workplace or within the industry, they did provide insight around broader safety culture and were included. Quotes provided in this report are samples that reflected the overall sentiment of participants on the theme discussed.

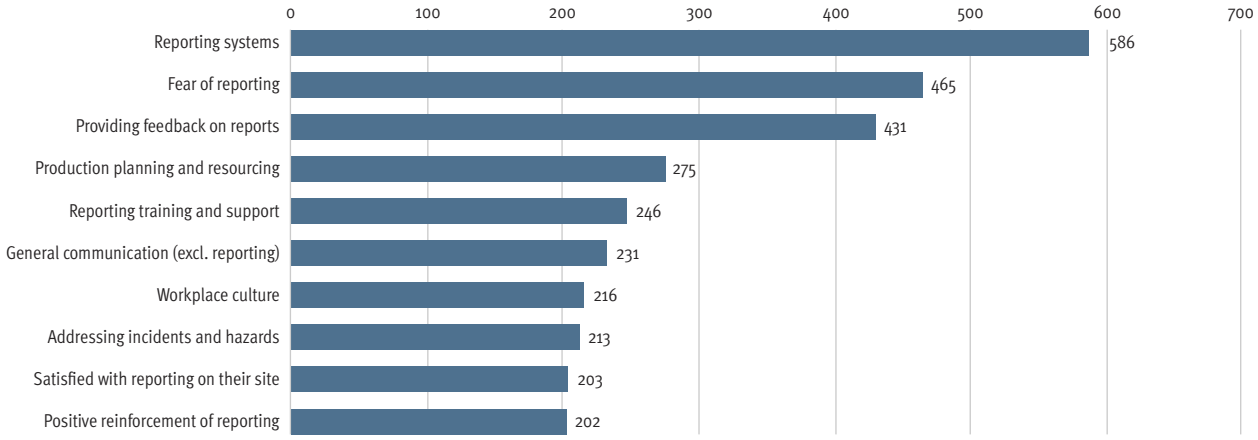
There were 203 responses that suggested that the participant was satisfied with reporting at their site, with 63% of these positive mentions coming from frontline workers—for example, "[mine site] is a great safe place to work; at this time I have no improvement ideas," and "I feel comfortable to speak out when I feel unsafe." Another 114 participants answered the question but specified they were unable to think of a suggestion.

The top 10 suggestions were identified by frequency of their mentions and are shown below in Figure 12. A more detailed overview is available in appendix B. The top five suggestions for each sector (and sub-sector) are discussed in the relevant chapters of the report.

The top three suggestions were identified by highest frequency of mention—improvements to reporting systems (586 mentions), addressing fear of reporting (465 mentions), and providing feedback on reports (431 mentions).

These three suggestions were consistent across the coal mining, mineral mining, and quarrying sectors. These suggestions are consistent with Sentis's finding[18] that fear of potential consequences, cumbersome reporting systems and processes, and a lack of action or feedback from leadership following a report are key drivers for reluctance to report at lower maturity sites.[19]

Figure 12: The top 10 improvement suggestions by frequency of mention



18 Based on interview and focus group data from 73 organisational sites across eight industries
19 Sentis (2020). Driving a Positive Safety Culture.

Participants shared that current reporting systems may be decreasing their likelihood to report due to complexities such as unclear wording, difficulty navigating digital systems, and the time it takes to report—for example, "Making incident reports easier to understand and fill out," "Reduce the paperwork and focus on the solution," and "Ease of reporting for all coal mine workers. Taking into account people's skill levels around technology."

Participants also shared that reporting systems can be hard to access, and this can affect some segments of the workforce more than others—for example, "What is available to the company is not available to the contractors," and "With all reporting and processes now to be done online, the accessibility of computers and safety systems to the people in the pit is next to nothing." This indicates that a portion of participants find current reporting systems difficult to access or interact with and is consistent with the survey result of 28% of participants rating the statement, *My team finds the reporting process simple and straightforward,* as *sometimes* or *rarely*.

Fear of reporting was the next highest suggestion, with responses fitting into three subthemes—fear of reprisal, blame culture, and social factors. Fear of reporting was most apparent in the coal sector, though fear of reporting was also present in suggestions from mineral mines participants. Quarry participants contributed to fear of reporting at an overall level, but responses were varied, so no subthemes could be clearly identified as applicable.

Of the three fear of reporting subthemes, fear of reprisal was the most frequent, with participants mentioning either their own fear, or commenting on the fear shown by other workers—for example, "Build a reporting culture where people aren't afraid of potential consequences," and "As long as there is risk of workers losing their jobs they will report as little as possible." This indicates that while there is a perception of reprisal present in industry, it was not a concern for all workers. However, as noted by the Queensland Coal Mining Board of Inquiry, "The existence of a perception, no matter how widespread, creates a risk that safety concerns will not always be raised."[20]

A further aspect of fear of reporting became apparent in comments on Resources Safety and Health Queensland. A small portion of response showed that participants had a negative view of the regulator's behaviour, perceiving it to be detrimental to a positive reporting culture—for example, "It would be helpful if the regulator would improve consistency and not exhibit behaviours that appear to be negative towards sites that have a high number of high potential incidents due to a proactive reporting culture," and "Clear examples that reporting to the inspectorate does not blow back in face as aggressive scrutiny but rather support in assurance of standards for safety." These comments are consistent with the *Review of all fatal accidents in Queensland mines and quarries from 2000–2019,* which stated, "The regulator should not consider HPIs to be a safety indicator. A safety indicator exists to be driven downwards, and the regulator should not do anything that encourages driving down HPI reporting."[21]

Providing feedback on reports received the third highest mentions. Coal and mineral participants shared that receiving feedback on reported incidents does not always take place, or it can take too long for the information to be returned—for example, "People would be more inclined to report issues if they received feedback in a timely manner," and "The loop is always left open." This was consistent with the survey result where 32% of participants rated the statement, *Senior leaders provide feedback on concerns raised by the workforce in a timely manner,* as *sometimes* or *rarely*. Quarry participants suggested improving communication around reporting, though more so to improve current standards rather than addressing a lack of communication—for example, "Currently have good system, just need to give more feedback to staff," and "Better communication and learnings from any hazards that have been identified."

20 Queensland Coal Mining Board of Inquiry Finding 85.
21 Brady Heywood, 2019. Review of all fatal accidents in Queensland mines and quarries from 2000–2019.

"Build a reporting culture where people aren't afraid of potential consequences."

Consistent suggestions across all sectors

Aside from the three key suggestions identified, another five suggested areas of improvement were consistent across all sectors. Consistent suggestions were identified by frequency of mention within each sector but did not necessarily receive some of the highest mentions across the whole of industry.

Positive reinforcement of reporting—Participants suggested that providing reassurance that reporting will not negatively affect those involved could improve reporting—for example, "I think people need to be reminded that if something happens, they won't get in trouble for reporting it," and "Reassure employees and contractors that reporting doesn't have to mean disciplinary action—we accept that humans can make errors." Further, mentions of encouragement suggested a continued focus on positive reinforcement—for example, "Communicating why reporting is so important to coal mine workers... most don't understand why it is a good thing to report," and "Encouraging reporting stuff as a positive for team."

Addressing incidents and hazards—Participants suggested ensuring actions take place to address reported incidents and hazards—for example, "If coal mine workers see that when something is reported, it will be resolved/fixed very quickly, they will be more confident to report issues, as they can actually see that something gets done in a timely manner," and "Reporting issues is not the problem at my site; the issue is things get reported and nothing changes for months at a time."

Reporting training and support—Participants suggested improving training on reporting systems—for example, "Training on the system used to capture the reporting," and "More training on how to do it and who can help." The contribution to this theme from quarry participants was more specific to improving understanding of high potential incidents—for example, "Having clear definitions of certain things e.g. near miss, so there's no grey area for different people's perception of what it is," and "HPI awareness training—ensure all workers know what falls under HPI category."

Listening to the workforce—Participants suggested that leaders should be more receptive to the safety concerns of workers—for example, "Listen to frontline people who have boots on the coal face," and "Pit supervisors to [be] more receptive of hazard reporting and less belittling when responding with the person raising concern."

General communication (excluding reporting)—Participants suggested a need to improve communication—for example, "Encourage open and honest dialogue from all members of the team during pre-start meetings."

Chapter 2

Coal

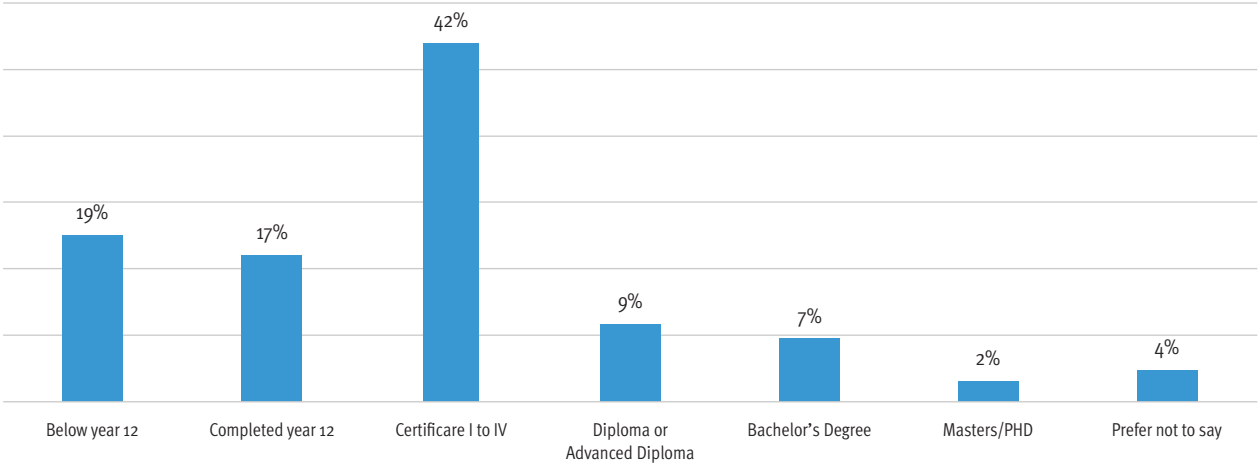
Coal sample

6492 participants

Sub-sector participation	
Exploration	73
Surface	5232
Underground	1187

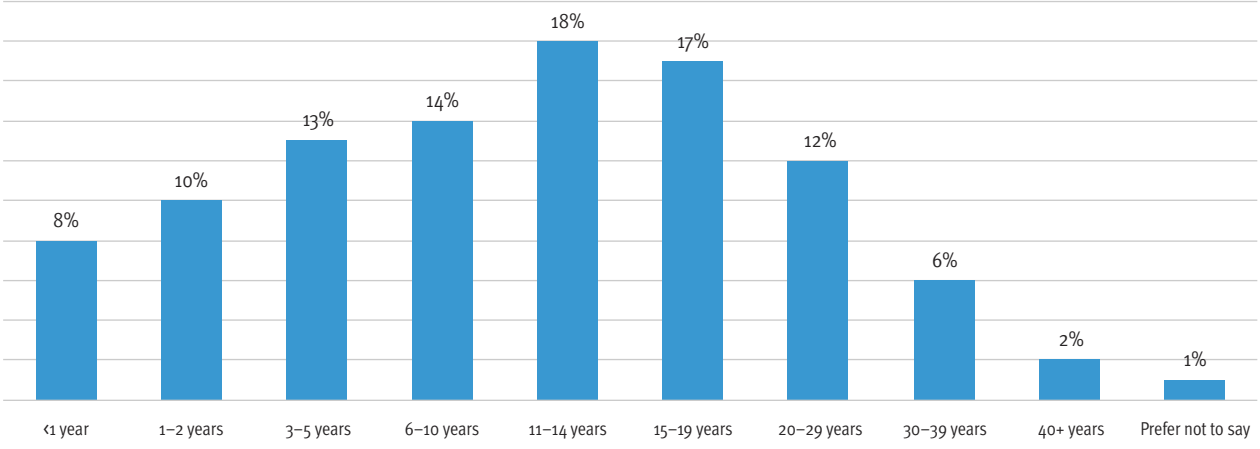
Distributions for age, gender, and intention to leave for coal participants were similar to the overall demographic distributions.

Figure 13: Percentage of coal participants by education level



In terms of education level, coal exploration had a higher percentage of participants with a diploma or higher (51%), compared with underground (23%) and surface (17%).

Figure 14: Percentage of coal participants by industry tenure



Note: percentages may not add up to 100% due to rounding or where participants may not have answered all demographic questions.

Table 4: Percentage of coal participants by main department

Main department	
Operational support	8%
Processing	4%
Maintenance	26%
Professional and technical support	5%
Mining	44%
Services	4%
Support functions	7%
Exploration	1%
Other/No response	2%

Figure 15: Percentage of coal participants by size of mine

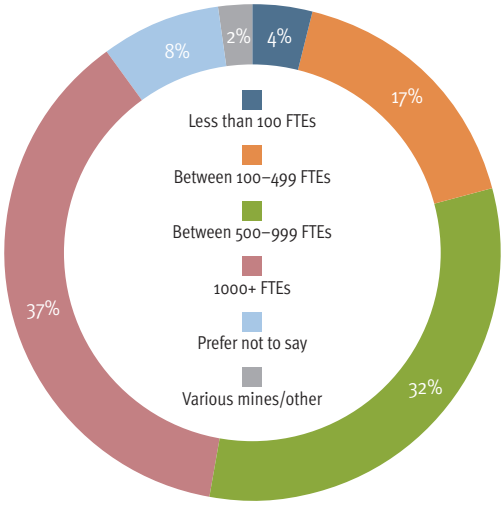
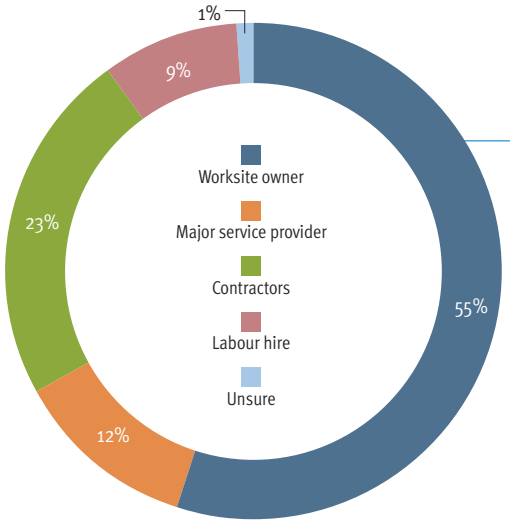


Figure 16: Percentage of coal participants by employment type



The coal sample consisted of 55% participants who were employed by the worksite owner, 23% contractors, 12% employed by a major service provider and 9% labour hire.[22] Coal had a higher percentage of contractors compared with mineral and quarrying. Further, within coal, exploration had the highest proportion of contractors (48%), followed by underground (31%), then surface (21%).

Figure 17: Percentage of coal participants by responsibility level

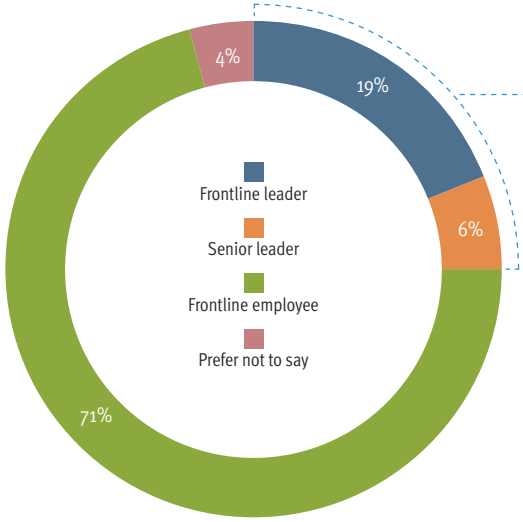
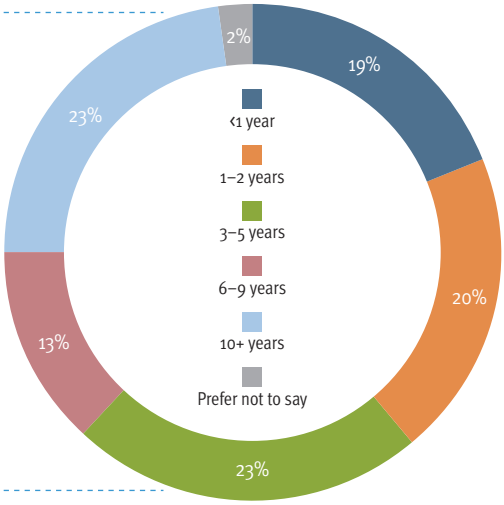


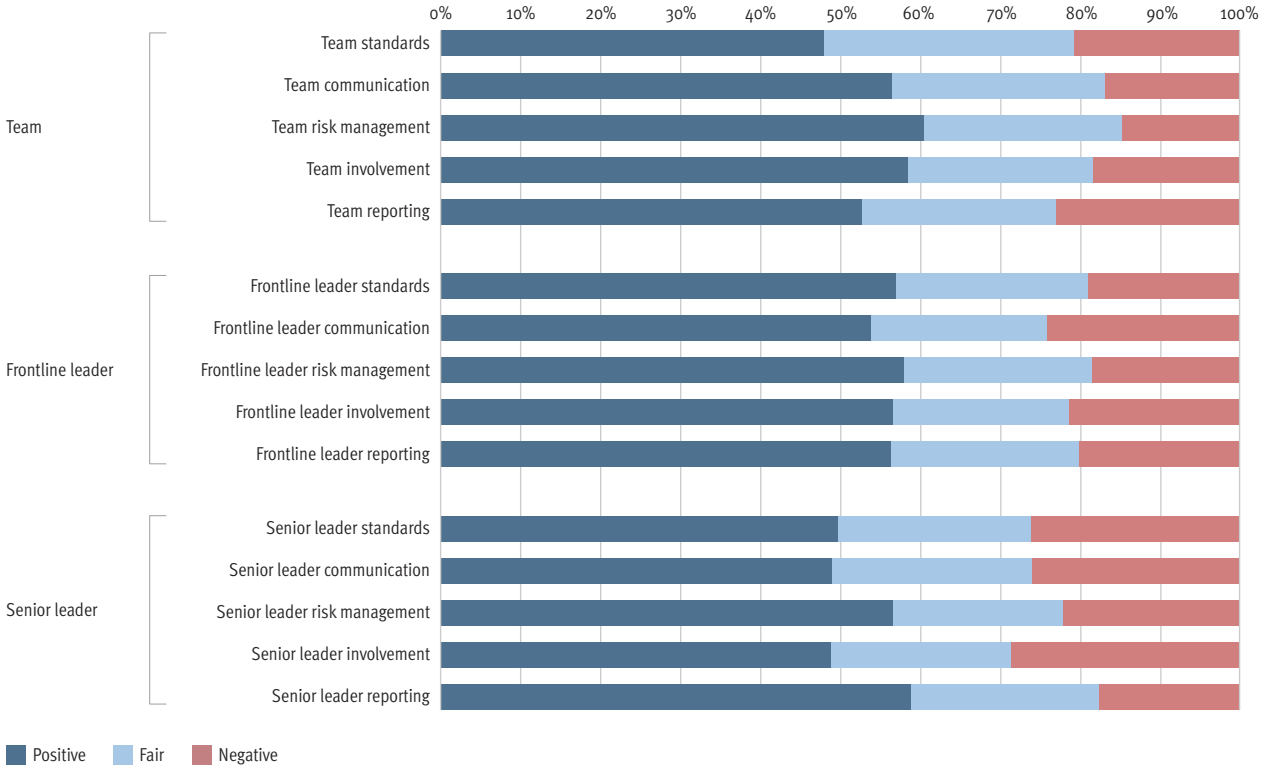
Figure 18: Percentage of frontline leaders and senior leaders in the coal sample, split by length of time in leadership role at their site



22 Under current legislation, workers who are not employed directly by the mine operator (labour hire, major service provider, contractors) are classified as contractors. 44% of coal participants were from the contractor category.

Key findings—coal

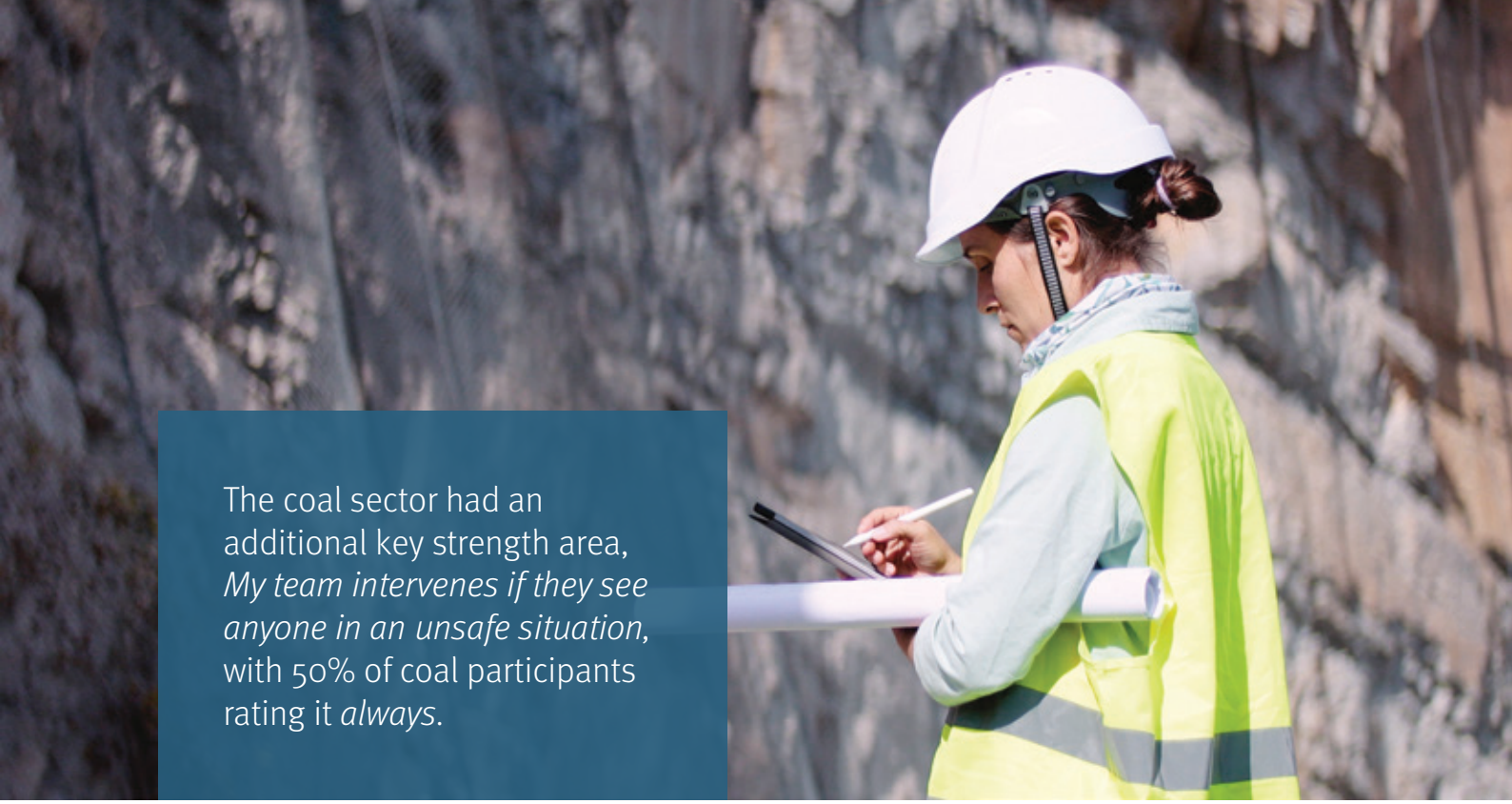
Figure 19: The percentage of coal participants who rated each of the dimensions in the positive, fair, and negative ranges



The key findings for the coal sector were identified by analysing participant responses for the coal sector, as well as the consistency of results across the three coal sub-sectors—underground, surface, and exploration.[23] The surface sub-sector accounts for a large proportion of the coal sample (81%) but is representative of worker distribution in the coal sector. Coal exploration had consistently higher scores compared with surface and underground. Each coal sub-sector had unique results and may have strength or opportunity areas that are not mentioned at the overall coal level. Notable sub-sector differences are highlighted in this chapter, and a full breakdown of sub-sector specific results are provided in appendix A.

As coal was 83% of the overall mining industry sample, many of the key strengths and opportunities for the mining industry were the same for coal. The overall mining industry chapter includes a discussion of those key strengths and opportunities.

23 In general, survey statements that consistently had a lower mean and a higher percentage of negative ratings across demographic groups were identified as opportunity areas, and survey statements that consistently had a higher mean and higher percentage of positive ratings across demographic groups were identified as strength areas.



The coal sector had an additional key strength area, *My team intervenes if they see anyone in an unsafe situation*, with 50% of coal participants rating it *always*.

Strengths

The coal sector had a similar set of key strengths as the mining industry overall. Many of the same survey items were rated highly, with participants rating statements about their team higher than statements about frontline leaders and senior leaders. Statements about the team's safety prioritisation and co-worker support were rated highly:

- My team looks out for each other and supports each other to work safely.
- My team keeps safety as the first priority at all times.
- My team performs work safely, without taking shortcuts.
- My team stops the job if they believe it is unsafe.

The coal sector had an additional key strength area, *My team intervenes if they see anyone in an unsafe situation,* with 50% of coal participants rating it *always*.

Consistent with the overall mining industry results, survey statements about the team's knowledge, understanding, and risk management were rated highly:

- My team understands and follows safety standards and procedures.
- My team knows and understands what controls are currently in place that will prevent an incident.
- My team identifies potential hazards before starting work.
- My team takes action on hazards or potential hazards.
- My team takes the time to plan the necessary steps to do the job safely.
- My team understands their obligation to report all near misses and high potential incidents.

Finally, the key strength areas for frontline leaders and senior leaders were also consistent with the overall mining industry:

- Frontline leaders
  - Frontline leaders encourage the team to take appropriate action if something feels unsafe.
  - Frontline leaders encourage the team to report near misses, high potential incidents, and hazards.
  - Frontline leaders ensure pre-start safety briefing information is relevant.
- Senior leaders
  - Senior leaders encourage workers to report near misses, high potential incidents, and hazards.
  - Senior leaders ensure that all reported near misses and high potential incidents are investigated.

Fear of reporting was in the top three improvement suggestions in the open text question from coal surface and underground participants.

Opportunities

The coal sector had a similar set of key opportunities as the mining industry overall. Many of the same survey statements had lower ratings:

- My team
  - My team finds the reporting process simple and straightforward.
- Frontline leaders
  - Frontline leaders give recognition to good safety behaviours.
- Senior leaders
  - Senior leaders visit the work area/s at appropriate intervals.
  - Senior leaders provide feedback on concerns raised by the workforce in a timely manner.
  - Senior leaders provide opportunities for the workforce to participate in safety initiatives.
  - Senior leaders ensure there are realistic timeframes and adequate resources available to get the job done safely.
  - Senior leaders give workers confidence that complaints of bullying, discrimination, and harassment will be addressed appropriately.

The coal sector had some additional key opportunities in the psychosocial safety space. Psychosocial hazards are work factors that may cause psychological and/or physical harm that arise from the working environment, the design and management of work, the equipment and machinery, or workplace interactions and behaviours.[24] Around 25% of coal participants rated these statements as *sometimes* or *rarely*:

- Senior leaders are approachable for informal discussions on safety and health concerns.
- Frontline leaders are approachable for discussions about mental health and wellbeing.
- My team feels safe to speak up if they make a mistake.
- My team feels comfortable to report any instances of bullying, discrimination, or harassment.

24 Workplace Health and Safety Queensland (2022). Managing the risk of psychosocial hazards at work Code of Practice. https://www.worksafe.qld.gov.au/laws-and-compliance/codes-of-practice/managing-the-risk-of-psychosocial-hazards-at-work-code-of-practice-2022

Notable coal sub-sector differences

There were differences observed in the results between the coal sub-sectors—underground, surface, and exploration. Coal exploration generally had more positive scores, followed by underground, then surface. The strength areas differed slightly across coal sub-sectors. Generally, the strength areas were about the team—strengths for underground were team communication and risk management; strengths for surface were team standards and risk management; and strengths for exploration were team risk management and involvement. Coal underground had some survey statements that were identified as key strengths, in addition to the key strengths identified across coal. These additional strengths were mostly about the team:

- My team intervenes if they see anyone in an unsafe situation.
- My team questions if something could be done in a better/safer way and communicates these improvements to the appointed supervisor.
- My team asks questions to gain a better understanding of anything that is unclear.
- My team feels comfortable contributing to team safety discussions and meetings.
- Frontline leaders use their knowledge to help the team to recognise and manage hazards and risks.

Coal exploration also had a number of additional strengths—in addition to those identified across coal and for coal underground—mostly in the leadership space:

- My team
  - My team seeks advice if they are unsure if something needs to be reported.
- Frontline leaders
  - Frontline leaders clearly explain to the team what is expected of them to work safely when allocating tasks.
  - Frontline leaders work with the team to re-assess hazards and risks when changes occur.
  - Frontline leaders give the team confidence that risks are being controlled effectively.
  - Frontline leaders listen to the team's safety suggestions, concerns, and ideas.
  - Frontline leaders encourage respectful workplace behaviours in the team.
  - Frontline leaders regularly initiate team discussions about safety performance.
  - Frontline leaders are approachable for informal discussions about safety concerns.
- Senior leaders
  - Senior leaders ensure workers are aware of their safety and health obligations under Queensland legislation.
  - Senior leaders ensure that safety procedures are accessible.
  - Senior leaders provide safe ways for a worker to report near misses, high potential incidents, and safety concerns.
  - Senior leaders provide safe ways for a worker to make a complaint on bullying or harassment, including anonymous options where needed.

Coal sub-sectors had the same broad opportunity areas for senior leaders in the standards, communication, and involvement dimensions. Coal underground had some survey statements that were identified as key opportunities in addition to the key opportunities identified across coal:

- My team has received enough training to help them work safely.
- Senior leaders regularly share safety communications that reach all personnel.
- Senior leaders ensure adequate time is provided to support safety initiatives.
- Senior leaders ensure safety procedures are consistent with the way work is actually done.
- Senior leaders make sure safety messages are visible, impactful, and useful to workers.

Notable coal demographic differences

Average scores across all dimensions were compared between groups based on demographic categories. Comparisons were made at the coal sector level for department, industry tenure, and employment type—the employment type comparison is discussed in a later section (page 42). Additional comparisons were made at the coal sub-sector level for responsibility level—i.e. frontline employee, frontline leader, and senior leader. Any groups with fewer than 10 responses were not compared. Means (average scores) and mean ranges are provided for comparison, denoted with an M.

Department

Table 5 provides the mean scores for each dimension across all departments within the coal sample. A mean score of 3.5–4.0 meant the average was as close to *always* as possible and considered a positive result, a mean score of 3.0–3.4 meant the average was *usually* and considered a fair result, and a mean score below 3.0 meant the average was *sometimes* to *rarely* and considered a negative result.

Table 5: The mean scores for each dimension across all departments within the coal sample

	Operational support	Processing	Maintenance	Professional and technical support	Mining	Services	Support functions	Exploration
Team standards	3.4	3.37	3.33	3.49	3.23	3.43	3.47	3.46
Team communication	3.39	3.38	3.32	3.43	3.16	3.33	3.4	3.45
Team risk management	3.42	3.36	3.34	3.44	3.24	3.39	3.41	3.53
Team involvement	3.32	3.33	3.3	3.43	3.12	3.27	3.37	3.44
Team reporting	3.27	3.23	3.15	3.33	3.09	3.28	3.38	3.41
Frontline leader standards	3.32	3.31	3.23	3.38	3.22	3.3	3.21	3.36
Frontline leader communication	3.22	3.19	3.16	3.34	3.09	3.23	3.15	3.29
Frontline leader risk management	3.34	3.32	3.27	3.41	3.22	3.33	3.24	3.47
Frontline leader involvement	3.24	3.26	3.19	3.33	3.11	3.26	3.14	3.32
Frontline leader reporting	3.27	3.29	3.22	3.35	3.18	3.35	3.19	3.32
Senior leader standards	3.17	3.1	3.03	3.29	3.01	3.19	3.22	3.36
Senior leader communication	3.02	3.01	2.96	3.25	2.91	3.19	3.12	3.29
Senior leader risk management	3.27	3.17	3.14	3.45	3.11	3.26	3.32	3.4
Senior leader involvement	3.05	2.97	2.93	3.2	2.9	3.1	3.14	3.19
Senior leader reporting	3.35	3.25	3.24	3.5	3.22	3.34	3.43	3.4

Note: the colour gradient in Table 5 is to assist with interpretation, where a darker blue indicates a more positive score.

There are more similarities than differences when looking across each dimension—for example, most departments rated team risk management higher on average and most departments rated dimensions in senior leadership slightly lower. Overall, there were a number of comparisons that had notable differences in perceptions:

- The professional and technical support department rated team involvement, senior leader risk management and senior leader communication higher than the mining department.
- The professional and technical support department rated senior leader risk management and senior leader communication higher than the maintenance department.
- The exploration department rated team involvement, team reporting, senior leader standards and senior leader communication higher than the mining department.
- The exploration department rated senior leader standards and senior leader communication higher than the maintenance department.

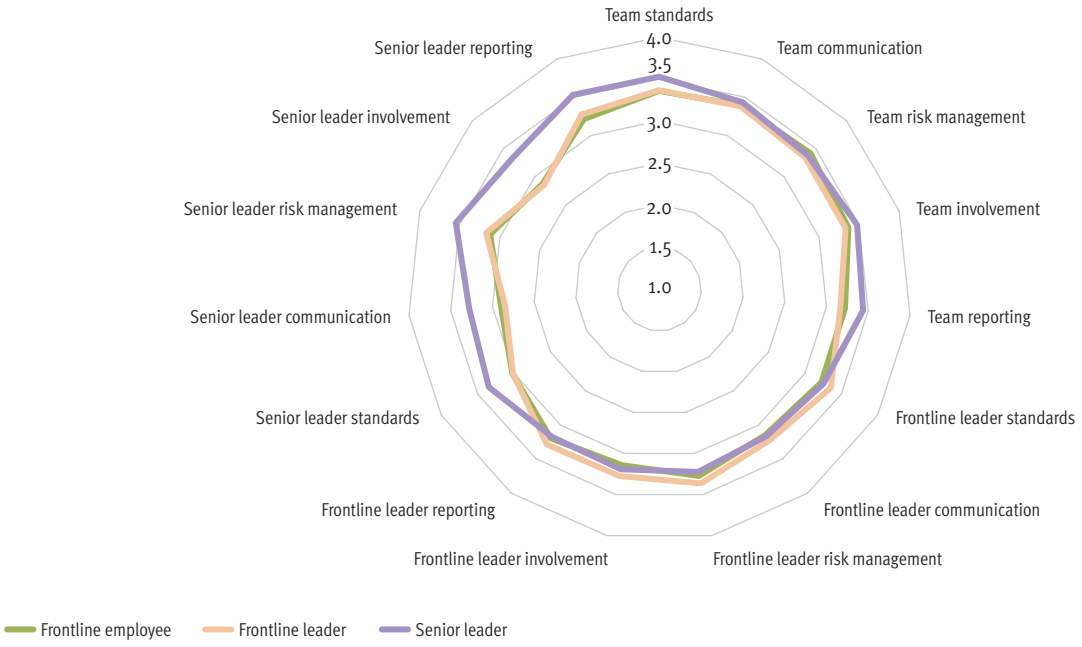
Industry tenure

- Ratings across all dimensions were highest among those employed in the mining industry for less than one year. Ratings slightly declined and then remained fairly consistent across those employed for between 3 to 39 years, and then slightly increased again among those with more than 40 years of experience.

Responsibility level—coal underground

- Senior leaders rated all five senior leader dimensions more positively than frontline employees and more positively than frontline leaders—average score range 3.27–3.55 for senior leaders compared with scores ranging 2.87–3.21 from frontline employees and 2.84–3.27 average scores from frontline leaders.
- Senior leaders were slightly more positive in some perceptions of team dimensions.
- There were no other notable differences in perceptions.

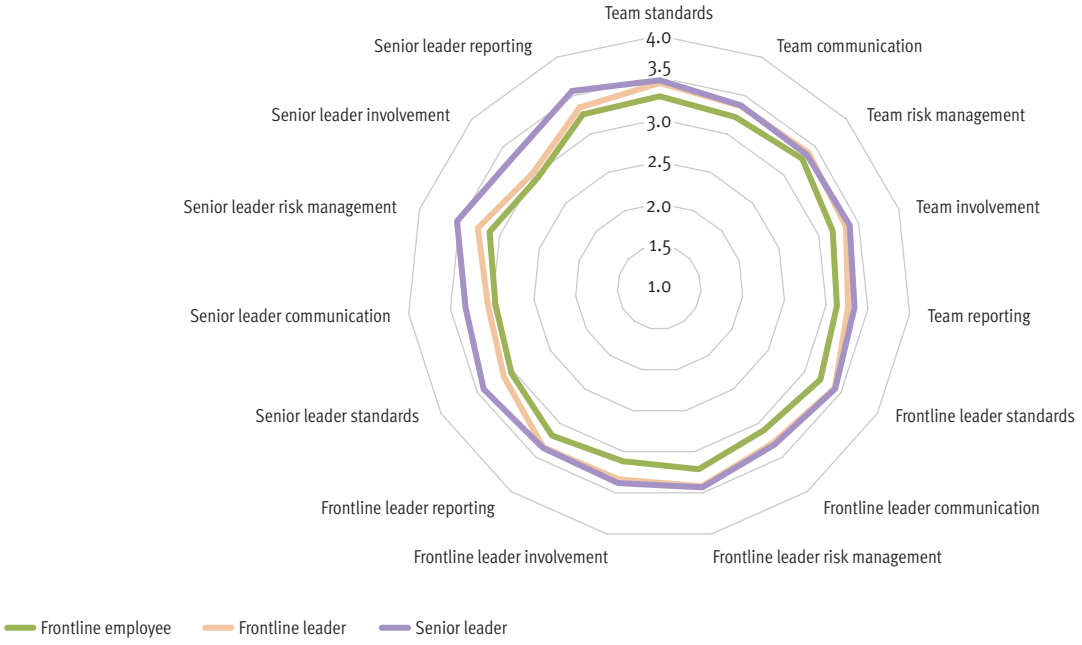
Figure 20: The mean scores for each dimension across the three responsibility levels within coal underground



Responsibility level—coal surface

- Senior leaders rated all five senior leader dimensions more positively than frontline employees—average scores were 3.32–3.55 from senior leaders compared to scores of 2.94–3.25 from frontline employees.
- Senior leaders also rated senior leader involvement (M=3.33) more positively than frontline leaders (M=3.03).

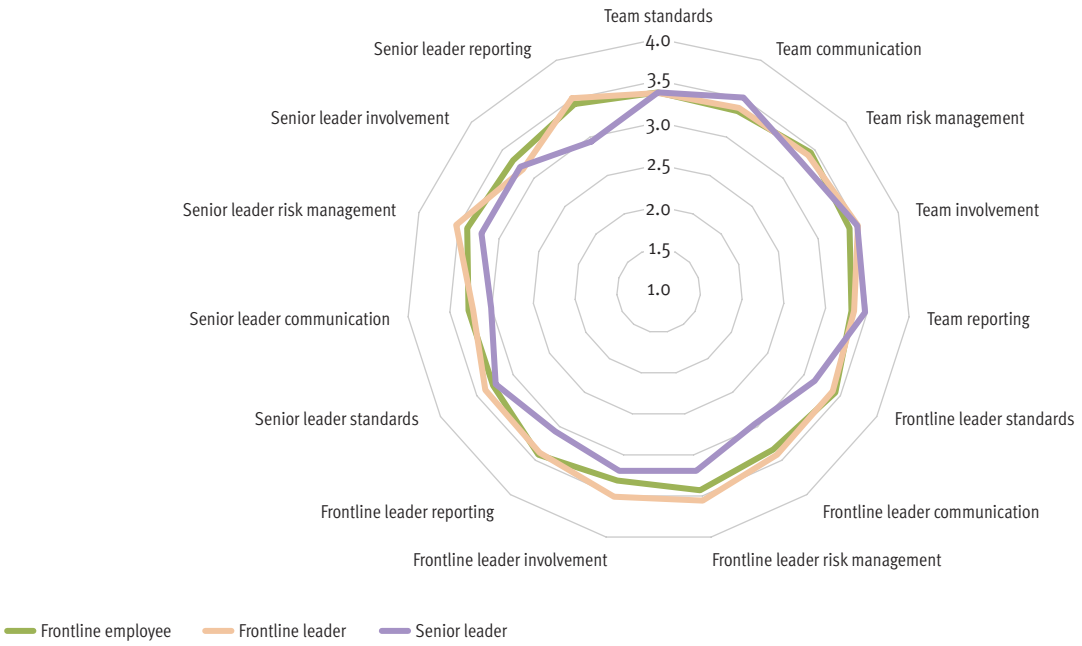
Figure 21: The mean scores for each dimension across the three responsibility levels within coal surface



Responsibility level—coal exploration

- Frontline leaders rated all five frontline leader dimensions more positively than senior leaders—average scores were from 3.39–3.56 from frontline leaders compared to scores of 2.97–3.20 from senior leaders.
- Frontline leaders had more positive ratings compared to senior leaders for senior leader risk management (M=3.53 compared to M=3.21) and senior leader reporting (M=3.51 compared to M=2.94).
- Frontline employees rated frontline leader communication more positively than senior leaders (M=3.34 compared to M=2.97).
- Frontline employees rated frontline leader reporting more positively than senior leaders (M=3.42 compared to M=3.08).
- Frontline employees rated senior leader reporting more positively than senior leaders (M=3.44 compared to M=2.94).

Figure 22: The mean scores for each dimension across the three responsibility levels within coal exploration



Participant suggestions for improvement—coal

Note: As the question explicitly asked participants to suggest an area of improvement, analysis of this question will largely discuss areas of opportunity. Due to the higher number of employees working within the coal sector, there were more open text responses collected for this sector, providing a wide range of suggestions for improvement.

Table 6: The top improvement suggestions for coal surface

Improvement suggestions	# of mentions
Reporting systems	338
Fear of reporting	309
Providing feedback on reports	235
Production planning and resourcing	174
Workplace culture	167

Table 7: The top improvement suggestions for coal underground

Improvement suggestions	# of mentions
Providing feedback on reports	113
Reporting systems	93
Fear of reporting	79
Production planning and resourcing	53
Addressing incidents and hazards	37
Reporting outcomes	37

Table 8: The top improvement suggestions for coal exploration

Improvement suggestions	# of mentions
Reporting systems	10
All other themes	<=4

Reporting systems was the only suggestion that was consistently in the top five across all sub-sectors. This was consistent with 28% of coal participants rating *My team finds the reporting process simple and straightforward* as *sometimes* or *rarely*. Due to the smaller, though proportionate, response from coal exploration, reporting systems was the only theme of note for this sub-sector.

Reporting systems received the highest mentions in all sectors and suggestions were consistent with overall industry.

Coal surface and coal underground had four consistent high-frequency suggestions. Where coal surface and underground were inconsistent was workplace culture for surface, and both reporting outcomes and addressing reported incidents and hazards (which received the same number of mentions) for underground.

Fear of reporting was in the top three suggestions for surface and underground. Mentions of fear of reporting largely focused on fear of reprisal, though the subthemes of social factors and blame culture contributed to the response. Frontline workers suggested moving to a no-blame culture—for example, "Stop looking for someone to blame when something goes wrong," and frontline workers also reported a fear of being treated differently by their team members or leaders for reporting—for example, "Everyone is happy to report against management, but dobbing a fellow worker in is a NO NO."

Suggestions of providing feedback on reports received the highest mentions in underground and third highest mentions in surface. Mentions largely focused on ensuring feedback was provided on reported incidents and hazards, consistent with overall industry, though participants also suggested that receiving updates on the status of reports they've submitted may help build confidence in the process—for example, "We used to get confirmation that a hazard report had been submitted. This way we knew the report was entered, not thrown in the bin." Other participants suggested focusing reporting communications on hazards that are relevant or pose legitimate risk—for example, "Important shares can be missed amongst too much info," and "Reporting papercuts and personal physical discomfort is not relevant information to be shared site wide."

Production planning and resourcing was present in the high-frequency suggestions for coal surface and underground. Participants shared that reducing resourcing pressures could alleviate production pressures—for example, "Remove perceived pressure in work task instructions," and "Improving job planning to allow realistic time for work to be safely completed." This was consistent with the survey finding of 30% of coal participants rating, *Senior leaders ensure there are realistic timeframes and adequate resources available to get the job done safely* as *sometimes* or *rarely*. Participants also suggested improving efforts to maintain a stable workforce—for example, "A high turnover of management at this site impacts consistent messaging and application of expectations," and "Maintaining a stable and consistent workforce…"

Workplace culture was suggested as an area for improvement by coal surface participants. This theme received fewer mentions compared to coal underground participants, suggesting it may be less of a concern in underground mines. Mentions of workplace culture covered the subthemes of equality and teamwork. Frontline workers suggested that everyone be treated equally—for example, "Treat everyone the same whether you clean the toilets or in management." Purple circles—exclusive groups of people in a workplace who are given better opportunities or treatment—were perceived by coal surface participants to be present on their sites—for example, "It's sad to see people leave this workplace, all because they don't fit in their purple circles." When considering the whole coal sector, 97% of mentions of purple circles came from coal surface participants, suggesting they may be unique to surface mines. Frontline workers also suggested teamwork and collaboration as areas of improvement, both within teams and between teams—for example, "Work as a team and not every man for themselves."

Addressing reported incidents and hazards, and reporting outcomes were the final high-frequency mentions for coal underground.

For addressing reported incidents and hazards, participants suggested ensuring actions take place in a timely manner—for example, "Reporting issues is not the problem at my site; the issue is things get reported and nothing changes for months at a time." Participants also suggested improving the effectiveness of actions taken to address reported incidents and hazards—for example, "There is a lot of knee jerk reactions and a lot of blanket interim controls instead of doing a thorough investigation first…"

For reporting outcomes, participants further suggested ensuring everyone was held accountable for their actions—for example, "A fair culture where if you are negligent you are held to account, but all factors are considered."

Comparison of employment types in the coal sector

Average scores across all dimensions were compared between the four employment types included in the survey—worksite owner, major service provider, contractor or sub-contractor, and labour hire. These comparisons were made at the coal sub-sector level—underground, surface, exploration.[25]

For coal surface and exploration, there were no notable differences in ratings based on employment type.[26] There were some differences noted for coal underground:

- Contractors (M=3.23) rated senior leader standards higher than those employed by a worksite owner (M=2.91).
- Those employed by a major service provider (M=3.10) and contractors (M=3.13) rated senior leadership communication higher than those employed by a worksite owner (M=2.75).
- Those employed by a major service provider (M=3.12), contractors (M=3.09), and labour hire (M=3.08) rate senior leadership involvement higher than those employed by a worksite owner (M=2.75).

When assessing the top five suggestions for improvement, four suggestions were present in all employment types, though with a different frequency in each group (see Tables 9–12 below).

Table 9: The top improvement suggestions for worksite owner (within coal)

Improvement suggestions	# of mentions
Reporting systems	441
Fear of reporting	388
Providing feedback on reports	352
Production planning and resourcing	229
Workplace culture	190

Table 10: The top improvement suggestions for major service provider (within coal)

Improvement suggestions	# of mentions
Reporting systems	41
Fear of reporting	38
Production planning and resourcing	31
Providing feedback on reports	29
Reporting training and support	26

Table 11: The top improvement suggestions for contractors (within coal)

Improvement suggestions	# of mentions
Reporting systems	96
Fear of reporting	68
Providing feedback on reports	55
Production planning and resourcing	45
Satisfied with reporting at their site	38

Table 12: The top improvement suggestions for labour hire (within coal)

Improvement suggestions	# of mentions
Fear of reporting	35
Reporting systems	28
Workplace culture	23
Providing feedback on reports	22
Production planning and resourcing	22

25 Any groups with fewer than 10 responses were not compared. Means and mean ranges are provided for comparison, denoted with an M.
26 Some smaller group sizes (<10) in the exploration sector limited the ability to compare some groups.

Improvements to reporting systems received the highest frequency of mention in all employment types except for labour hire participants, where fear of reporting received the highest frequency.

Providing feedback on reports and production planning and resourcing mentions were present in all employment types. Reporting training and support was a high-frequency suggestion only by those employed by a major service provider, and general workplace culture was a high-frequency suggestion only in labour hire and those employed by the worksite owner. The fifth most frequently mentioned suggestion from contractors was that they were satisfied with reporting at their sites.

Notably, the recent discussions about fear of reporting during the *Transport and Resources Committee's Inquiry into coal mining safety* and *Queensland Coal Mining Board of Inquiry*[27] have focused on fear of reporting as particularly an issue for contractors and labour hire. However, in the current survey results, fear of reporting was mentioned as an improvement area to a similar extent across all employment types, though slightly higher in those employed by the worksite owner (worksite owner 13%, major service provider 11%, contractors 10%, labour hire 12%).

Across the coal sector there were small or no differences in results when comparing the four employment type groups. In relation to the ratings of survey statements, the main difference was that contractors and major service providers within coal underground rated some senior leader dimensions higher. For the most part, the top improvement suggestions that came from the open text question were consistent between the employment type groups. Therefore, based on the survey results, there appears to only be some small differences in safety culture and reporting experiences when comparing different employment types within coal.

27 For example, Queensland Coal Mining Board of Inquiry Part 2 Report, Chapter 11 and Report no. 29, 57th Parliament – Inquiry into coal mining industry safety, Chapter 7

Chapter 3

Mineral

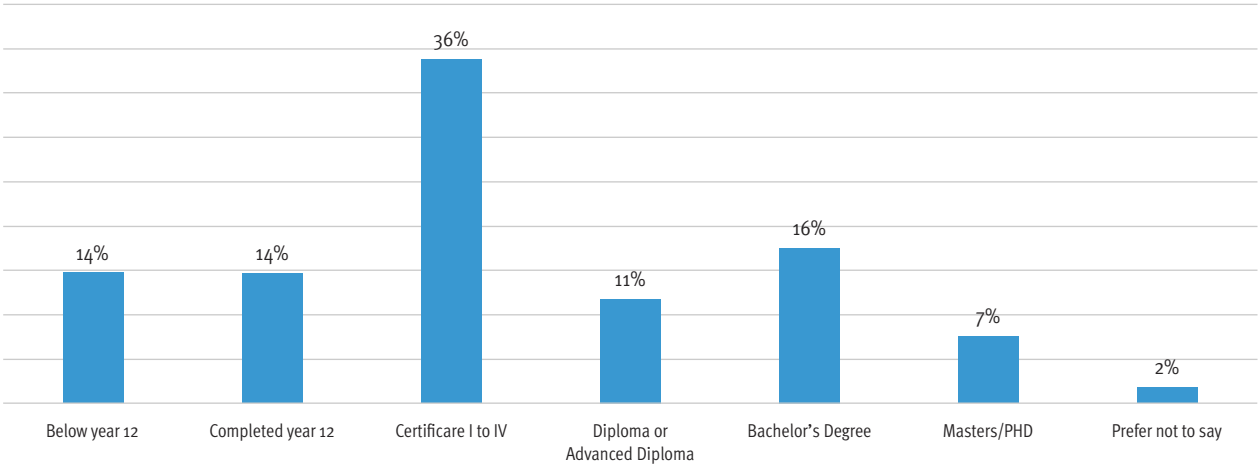
Mineral sample

1070 participants

Sub-sector participation	
Exploration	58
Surface	814
Underground	198

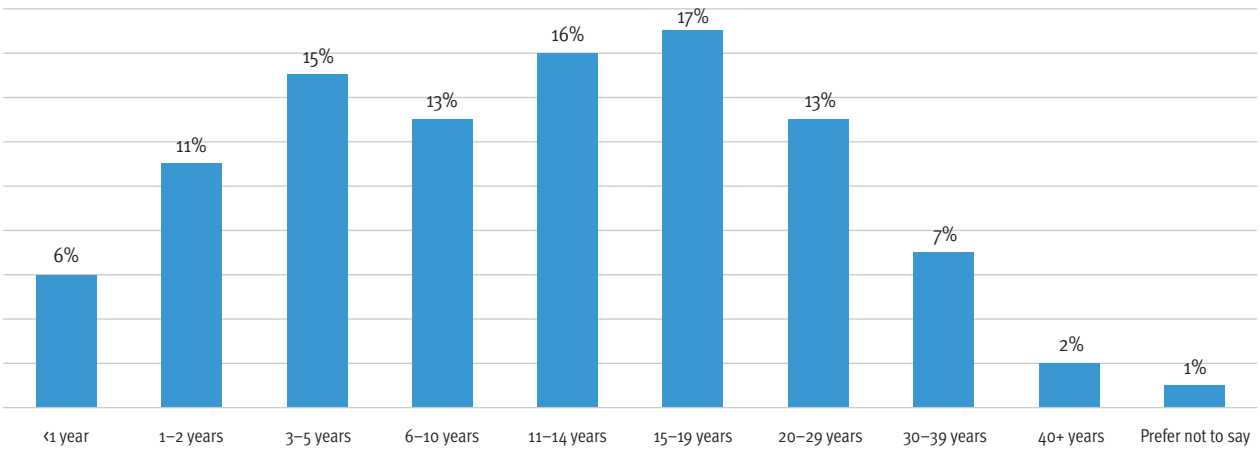
Distributions for age and intention to leave for mineral participants were similar to the overall demographic distributions. The proportion of females was slightly higher at 19%.

Figure 23: Percentage of mineral participants by education level



Comparing sub-sector education level, mineral exploration had a higher percentage of participants with a diploma or higher (55%), compared with underground (37%) and surface (32%).

Figure 24: Percentage of mineral participants by industry tenure

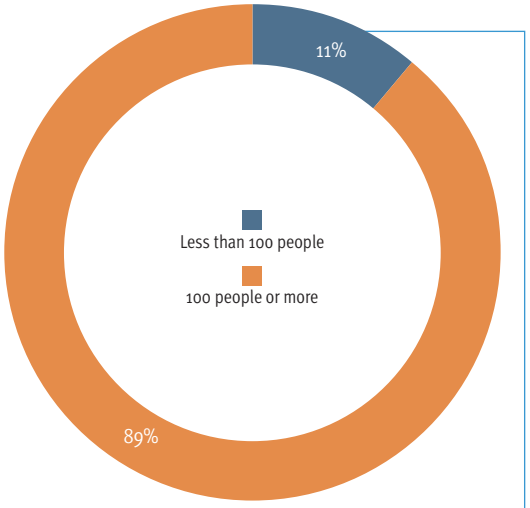


Note: percentages may not add up to 100% due to rounding or where participants may not have answered all demographic questions.

Table 13: Percentage of mineral participants by main department

Main department	
Operational support	3%
Processing	12%
Maintenance	24%
Professional and technical support	11%
Mining	21%
Services	7%
Support functions	18%
Exploration	4%

Figure 25: Percentage of mineral participants by size of mine



Mineral exploration had higher percentage of participants from sites with less than 100 people (48%) compared with underground (5%) and surface (10%)

Figure 26: Percentage of mineral participants by employment type

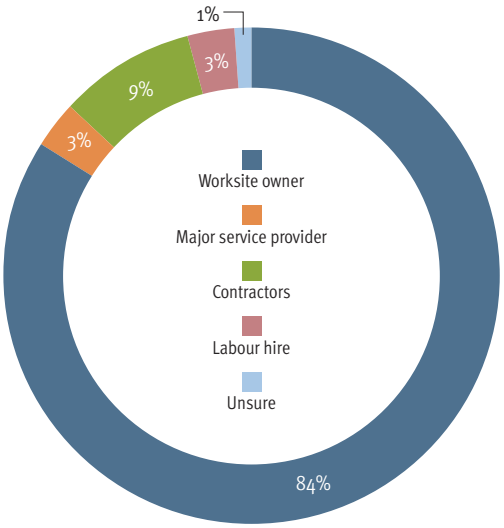


Figure 27: Percentage of mineral participants by responsibility level

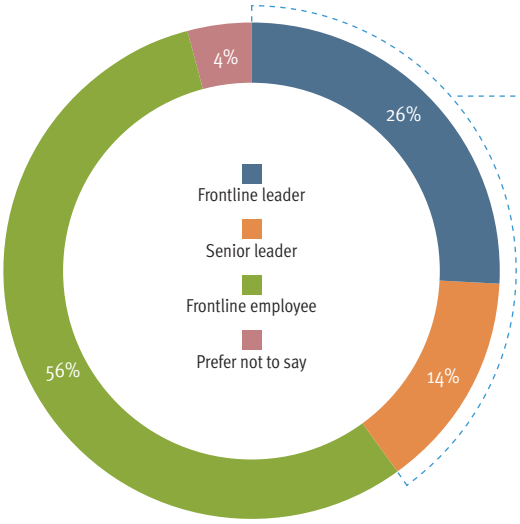
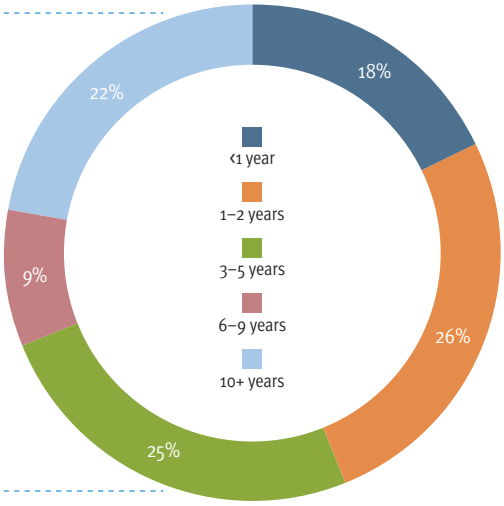
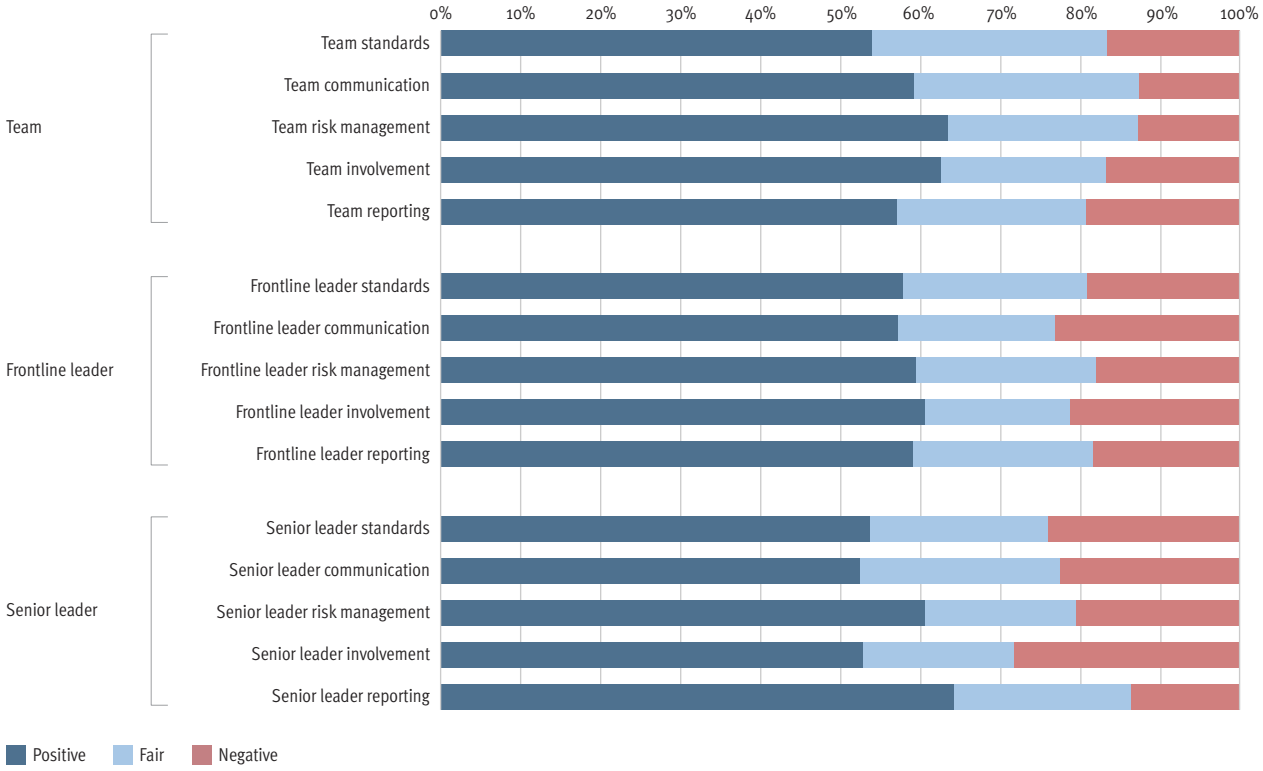


Figure 28: Percentage of frontline leaders and senior leaders in the mineral sample, split by length of time in leadership role at their site



Key findings—mineral

Figure 29: The percentage of mineral participants who rated each of the dimensions in the positive, fair, and negative range



The key findings for the mineral sector were identified by analysing participant responses for the mineral sector, as well as the consistency of results across the three mineral sub-sectors (underground, surface, and exploration).[28] Surface accounted for a large proportion of the mineral sample at 76%. Underground made up 19% of the sample and exploration made up 5%. Mineral exploration had consistently higher scores compared with surface and underground. Each mineral sub-sector had unique results and may have strength or opportunity areas that are not mentioned at the overall mineral level. Notable sub-sector differences are highlighted in this chapter, and a full breakdown of sub-sector specific results are provided in appendix A.

28 In general, survey statements that consistently had a lower mean and a higher percentage of negative ratings across demographic groups were identified as opportunity areas, and survey statements that consistently had a higher mean and higher percentage of positive ratings across demographic groups were identified as strength areas.

Strengths

The mineral sector had a similar set of key strengths as the mining industry overall and the coal sector. Many of the same survey items were rated highly, with mineral participants generally rating statements about their team higher than statements about frontline leaders and senior leaders. Consistent with the coal and overall mining industry results, survey statements about the team's safety prioritisation, co-worker support, knowledge, and risk management were rated highly:

- My team looks out for each other and supports each other to work safely.
- My team keeps safety as the first priority at all times.
- My team performs work safely, without taking shortcuts.
- My team stops the job if they believe it is unsafe.
- My team understands and follows safety standards and procedures.
- My teams knows and understands what controls are currently in place that will prevent an incident.
- My team identifies potential hazards before starting work.
- My team takes action on hazards or potential hazards.
- My team takes the time to plan the necessary steps to do the job safely.
- My team understands their obligation to report all near misses and high potential incidents.

The mineral sector had some additional strength areas in the psychosocial space. Psychosocial hazards are work factors that may cause psychological and/or physical harm that arise from the working environment, the design and management of work, the equipment and machinery, or workplace interactions and behaviours.[29] More than half of the mineral participants rated always for the statements, *My team supports a respectful working environment that does not accept bullying, discrimination and harassment* and *My team feels comfortable contributing to team safety discussions and meetings*.

The key strength areas for frontline leaders and senior leaders were also consistent with coal and the overall mining industry.

Frontline leaders:

- Frontline leaders encourage the team to take appropriate action if something feels unsafe.
- Frontline leaders encourage the team to report near misses, high potential incidents and hazards.
- Frontline leaders ensure pre-start safety briefing information is relevant.

Senior leaders:

- Senior leaders encourage workers to report near misses, high potential incidents, and hazards.
- Senior leaders ensure that all reported near misses and high potential incidents are investigated.

The mineral sector had some additional strength areas for frontline leaders and senior leaders with more than half of the participants rating always for the following statements.

Frontline leaders:

- Frontline leaders use their knowledge to help the team to recognise and manage hazards and risks.
- Frontline leaders encourage respectful workplace behaviours in the team.
- Frontline leaders are approachable for informal discussions about safety concerns.

Senior leaders:

- Senior leaders provide safe ways for a worker to report near misses, high potential incidents, and safety concerns.
- Senior leaders treat workers' health and safety as a high priority.

Fear of reporting was a frequently mentioned improvement area from mineral underground and surface participants, indicating that there is still room to improve in this area.

29 Workplace Health and Safety Queensland (2022). Managing the risk of psychosocial hazards at work Code of Practice. https://www.worksafe.qld.gov.au/laws-and-compliance/codes-of-practice/managing-the-risk-of-psychosocial-hazards-at-work-code-of-practice-2022

Reporting systems was the top improvement area within mineral underground and surface.

Opportunities

The mineral sector had a similar set of key opportunities as the coal sector and the mining industry overall. Many of the same survey statements had lower ratings.

My team:

- My team finds the reporting process simple and straightforward. *Reporting systems was the top improvement area within mineral underground and surface.*

Frontline leaders:

- Frontline leaders are approachable for discussions about mental health and wellbeing.

Senior leaders:

- Senior leaders visit the work area/s at appropriate intervals.
- Senior leaders provide feedback on concerns raised by the workforce in a timely manner. *Providing feedback on reports was a commonly mentioned improvement area within mineral surface and exploration.*
- Senior leaders ensure there are realistic timeframes and adequate resources available to get the job done safely.

Providing feedback on reports was a commonly mentioned improvement area within mineral surface and exploration.

Notable mineral sub-sector differences

There were differences observed in the results between the mineral sub-sectors—underground, surface, and exploration). Mineral exploration generally had more positive scores, followed by surface, then underground. Surface and underground had similar strength areas—team standards, team risk management, and senior leader reporting—whereas exploration had additional strength areas—frontline leader standards, frontline leader risk management, frontline leader reporting, and senior leader risk management.

Underground had an extra strength area in addition to the key strengths identified across mineral, which was *my team intervenes if they see anyone in an unsafe situation*.

Exploration had several survey statements identified as key strengths, in addition to the key strengths identified across mineral.

My team:

- My team intervenes if they see anyone in an unsafe situation.
- My team makes sure the necessary resources are available on the job site before starting work.
- My team feels comfortable to report all near misses and high potential incidents.
- My team discusses lessons learned from incidents that have occurred.

Frontline leaders:

- Frontline leaders clearly explain to the team what is expected of them to work safely when allocating tasks.
- Frontline leaders listen to the team's safety suggestions, concerns and ideas.
- Frontline leaders act on safety concerns in a timely manner, seeking management support when necessary.
- Frontline leaders work with the team to re-assess hazards and risks when changes occur.
- Frontline leaders give the team confidence that risks are being controlled effectively.
- Frontline leaders work with the team to achieve their safety goals and responsibilities.
- Frontline leaders support workers throughout the reporting process.
- Frontline leaders seek the input of the team to find solutions that will stop a near miss or high potential incident from happening again.
- Frontline leaders communicate to the team the outcomes and lessons learned from near miss or high potential incident investigations.

Senior leaders:

- Senior leaders ensure that safety procedures are accessible.
- Senior leaders give workers confidence that complaints of bullying, discrimination and harassment will be addressed appropriately.
- Senior leaders ensure workers are aware of their safety and health obligations under Queensland legislation.
- Senior leaders are approachable for informal discussions on safety and health concerns.

The mineral sub-sectors had the same broad opportunity areas in senior leader communication and senior leader involvement. Mineral underground had some survey statements that were identified as key opportunities, in addition to the key opportunities identified across the mineral sector.

Frontline leaders:

- Frontline leaders consider unwelcome news as an opportunity to learn and improve.
- Frontline leaders deal firmly and fairly with poor safety behaviours.

Senior leaders:

- Senior leaders ensure that safety procedures are easy to understand.
- Senior leaders ensure safety procedures are consistent with the way work is actually done.
- Senior leaders give workers confidence that complaints of bullying, discrimination and harassment will be addressed appropriately.
- Senior leaders ensure adequate time is provided to support safety initiatives.

Notable mineral demographic differences

Average scores across all dimensions were compared between groups based on demographic categories. Comparisons were made at the mineral sector level for department and industry tenure. Additional comparisons were made at the mineral sub-sector level for responsibility level—i.e. frontline employee, leader and employment type—for example, contractor or worksite owner. Any groups with fewer than 10 responses were not compared. Means (average scores) and mean ranges are provided for comparison, denoted with an M.

Department

Table 14 below provides the mean scores for each dimension across all departments within the mineral sample. A mean score of 3.5–4.0 meant the average was as close to *always* as possible and considered a positive result, a mean score of 3.0–3.4 meant the average was *usually* and considered a fair result, and a mean score below 3.0 meant the average was *sometimes* to *rarely* and considered a negative result.

Table 14: The mean scores for each dimension across all departments within the mineral sample

	Operational support	Processing	Maintenance	Professional and technical support	Mining	Services	Support functions	Exploration
Team standards	3.46	3.36	3.37	3.46	3.28	3.47	3.42	3.39
Team communication	3.34	3.35	3.36	3.33	3.22	3.35	3.36	3.37
Team risk management	3.34	3.37	3.39	3.37	3.27	3.44	3.36	3.46
Team involvement	3.40	3.33	3.32	3.33	3.13	3.38	3.39	3.32
Team reporting	3.38	3.27	3.23	3.28	3.21	3.41	3.31	3.33
Frontline leader standards	3.43	3.26	3.23	3.31	3.34	3.39	3.12	3.39
Frontline leader communication	3.34	3.20	3.23	3.25	3.24	3.35	3.13	3.34
Frontline leader risk management	3.44	3.30	3.34	3.31	3.33	3.41	3.13	3.44
Frontline leader involvement	3.29	3.23	3.27	3.22	3.23	3.41	3.10	3.35
Frontline leader reporting	3.42	3.25	3.34	3.29	3.34	3.41	3.16	3.50
Senior leader standards	3.25	3.08	3.09	3.18	3.20	3.32	3.16	3.36
Senior leader communication	3.20	2.99	3.00	3.12	3.16	3.34	3.06	3.17
Senior leader risk management	3.33	3.20	3.22	3.25	3.24	3.33	3.21	3.44
Senior leader involvement	3.19	2.93	3.01	3.03	3.14	3.17	3.01	3.29
Senior leader reporting	3.45	3.30	3.35	3.36	3.45	3.50	3.40	3.49

Note: the colour gradient in Table 14 is to assist with interpretation, where a darker blue indicates a more positive score.

There were more similarities than differences when looking across each dimension—for example, most departments rated dimensions in senior leadership slightly lower, except for senior leader reporting. While some departments were consistently lower or higher than others—for example, mining—these differences were slight, with most scores falling just above an average score of 3.0, or slightly above an average response of usually. Overall, there were a number of comparisons that had notable differences in perceptions:

- Operational support (M=3.43) rated frontline leader standards higher than support functions (M=3.12).
- Operational support (M=3.44) and exploration department (M=3.44) rated frontline leader risk management higher than support functions (M=3.13).
- Services (M=3.41) rated frontline leader involvement higher than support functions (M=3.10).
- Exploration department (M=3.50) rated frontline leader reporting higher than support functions (M=3.16).
- Services (M=3.34) rated senior leader communication higher than processing department (M=2.99) and maintenance department (M=3.0).
- Exploration department (M=3.29) rated senior leader involvement higher than processing department (M=2.93).

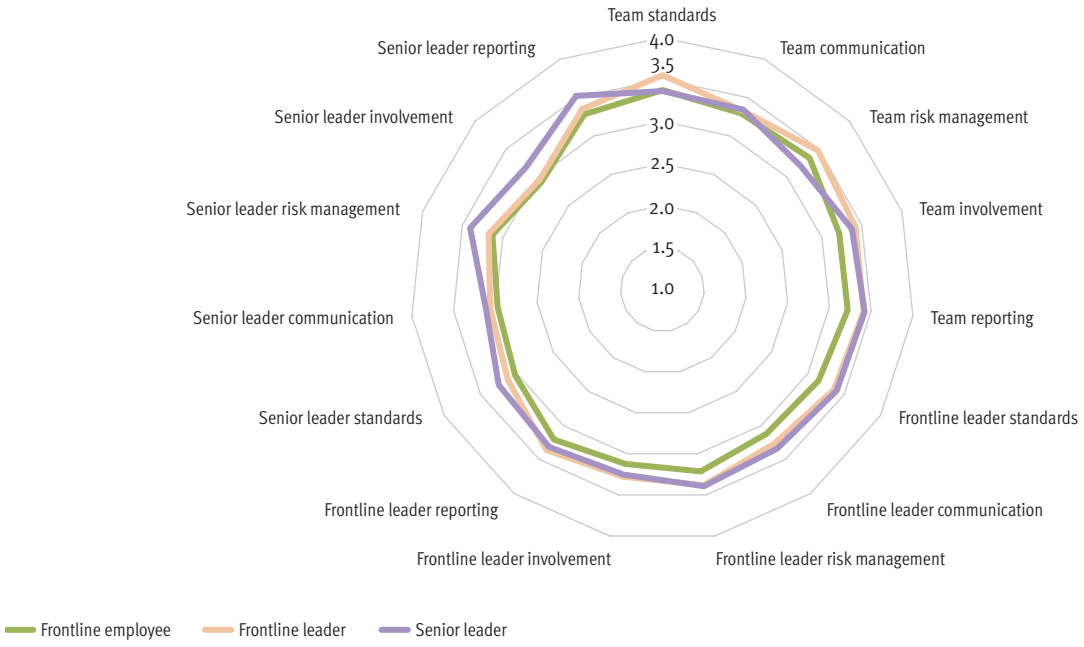
Industry tenure

- Ratings across all dimensions were highest among those employed in the mining industry for less than one year. Ratings slightly declined and then remained fairly consistent across employees employed for between 3 and 39 years, and then slightly increased again among those with more than 40 years of experience.

Responsibility level—mineral underground

- While there was some variability in responses, there were no substantive differences in ratings based on responsibility level.

Figure 30: The mean scores for each dimension across the three responsibility levels within mineral underground



Employment type

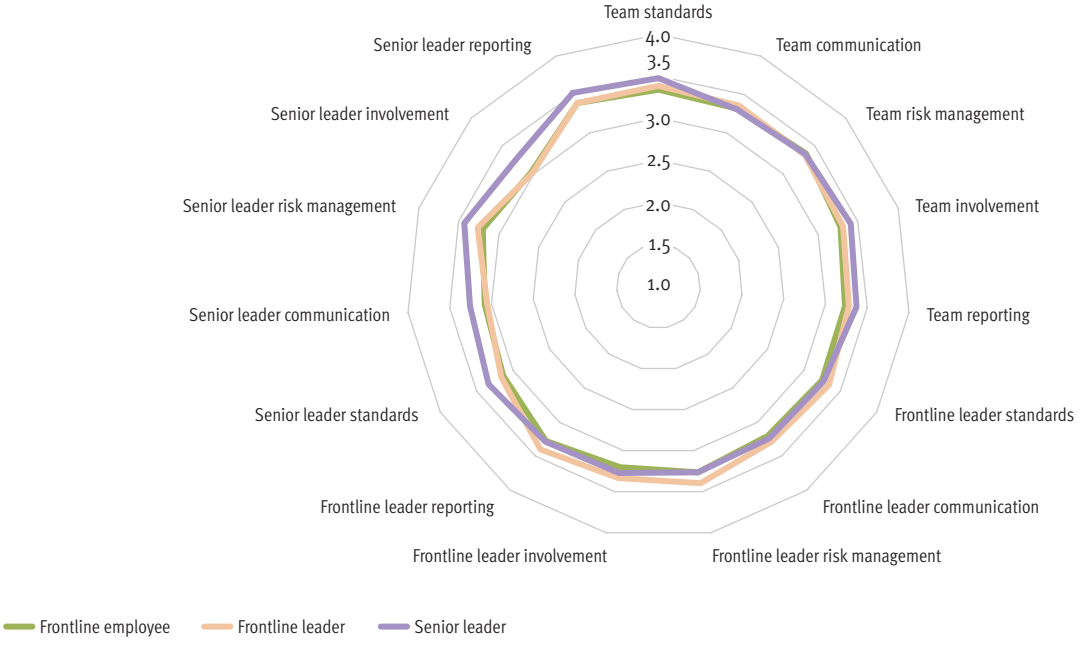
- There were no notable differences in ratings based on employment type.[30]

30 Some smaller group sizes (<10) limited the ability to compare some groups.

Responsibility level—mineral surface

- There were no notable differences in ratings based on responsibility level.

Figure 31: The mean scores for each dimension across the three responsibility levels within mineral surface



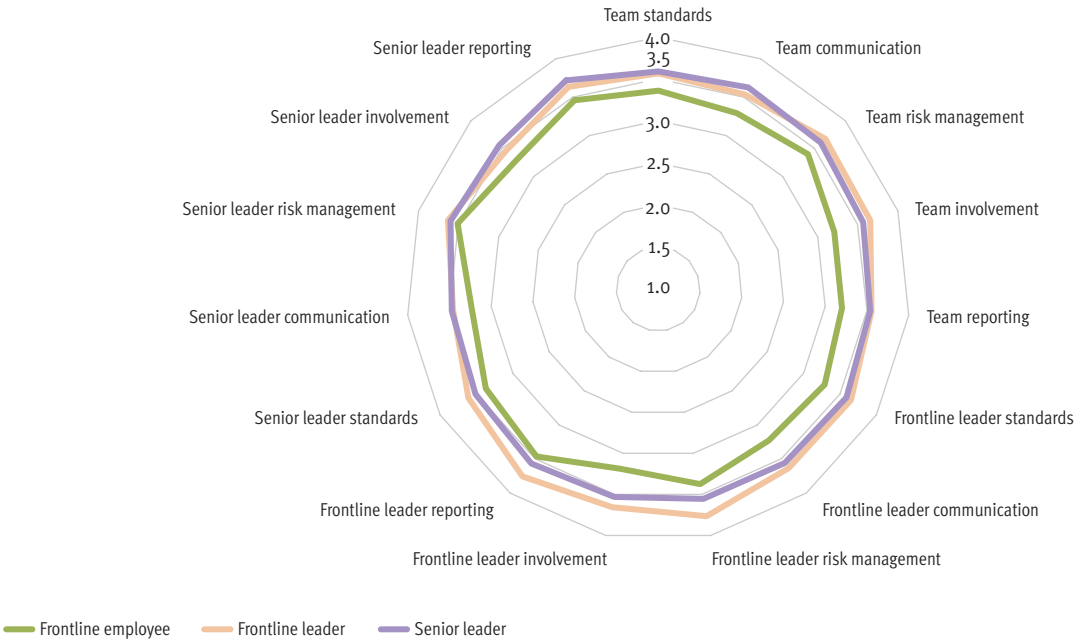
Employment type

- There were no notable differences in ratings based on employment level.

Responsibility level—mineral exploration

- Senior leaders and frontline leaders were more positive in their perceptions of all dimensions when compared to frontline employees, with notable differences for team involvement, reporting, frontline leader standards, communication and involvement. Average score range from 3.39–3.56 for frontline leaders and 3.55–3.66 for senior leaders compared to 3.19–3.28 for frontline employees.

Figure 32: The mean scores for each dimension across the three responsibility levels within mineral exploration



Employment type

- There were no notable differences in ratings based on employment type.[31]

31 Some smaller group sizes (<10) limited the ability to compare some groups.

Participant suggestions for improvement—mineral

Note: As the question explicitly asked participants to suggest an area of improvement, analysis of this question will largely discuss areas of opportunity. As a smaller sector generating a smaller volume of responses to the open text question, analysis for the mineral sector does not go into as much detail on subthemes but instead focuses on the overall suggestion mentioned. Though the number of mentions for themes identified is small, they are proportionate to the response from the sector. Themes identified in the mineral sector were not unique compared to themes identified in the coal sector, but have different levels of frequency.

Table 15: The top improvement suggestions for mineral surface

Improvement suggestions	# of mentions
Reporting systems	101
General communication (excl. reporting)	53
Providing feedback on reports	51
Fear of reporting	47
Reporting training and support	46

Table 16: The top improvement suggestions for mineral underground

Improvement suggestions	# of mentions
Reporting systems	19
Fear of reporting	17
General communication (excl. reporting)	11
Reporting outcomes	10
Production planning and resourcing	10

Table 17: The top improvement suggestions for mineral exploration

Improvement suggestions	# of mentions
Providing feedback on reports	11
All other themes	<=5

Mentions on reporting systems, providing feedback on reports, and fear of reporting were consistent with overall industry response and are discussed in the industry overview chapter of this report.

No themes were consistently high frequency across all sub-sectors. However, underground and surface were consistent in three themes—reporting systems, general communication, and fear of reporting—and surface and exploration were consistent in one theme—providing feedback on reports.

Mentions on reporting systems, providing feedback on reports, and fear of reporting were consistent with overall industry response and are discussed in the industry overview chapter of this report.

Participants from underground and surface mines mentioned communication in general as an area for improvement. Frontline workers suggested more opportunities to discuss safety—for example, "Encourage open and honest dialogue from all members of the team during pre-start meetings," and "More safety topics in pre-starts."

Mineral underground participants suggested reporting outcomes as an area of improvement. Participants suggested ensuring everyone is accountable for their actions—for example, "No consequence/accountability means no change in human behaviours," and "A fair culture where if you are negligent you are held to account, but all factors are considered." This was also suggested by mineral surface participants but was not a high-frequency suggestion in the sub-sector.

Mineral surface participants suggested providing training in reporting systems and a greater focus on educating the workforce on the importance and benefits of reporting—for example, "There is no training on how to use [reporting application]," and "Education of the workforce on incidents and what constitutes an incident of a specific level i.e., HPI vs non-HPI."

Chapter 4

Quarrying

Quarrying sample

232 participants

- There were fewer participants in the age category 20-29, and more in the 60+ age groups for quarrying compared with the overall sample.
- There were slightly fewer females in quarrying sample (13%) compared with the overall sample.
- Quarrying participants had few people reporting an intention to leave in more than three years (8%) and more with no intention to leave (52%) compared to the overall sample.

Figure 33: Percentage of quarrying participants by education level

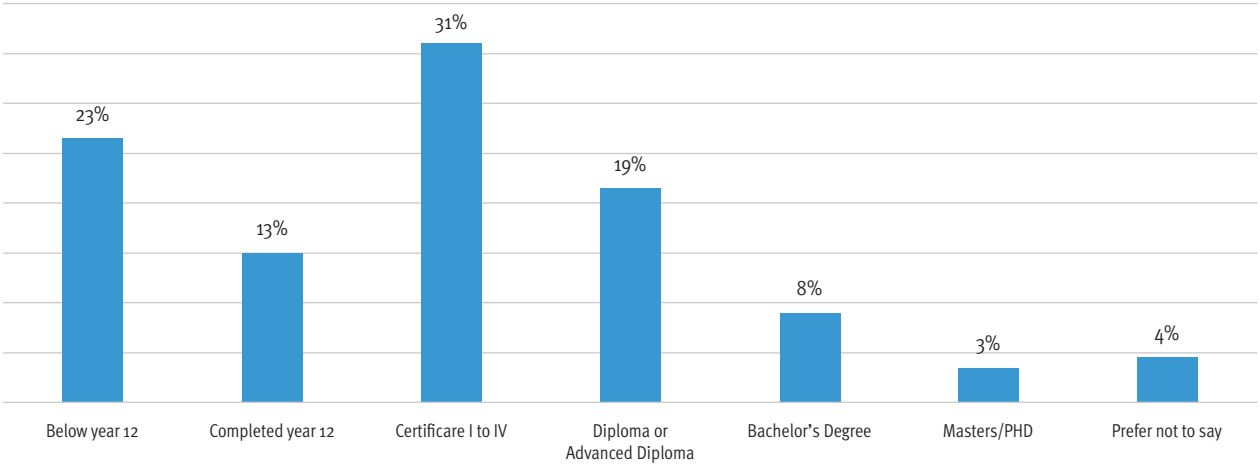
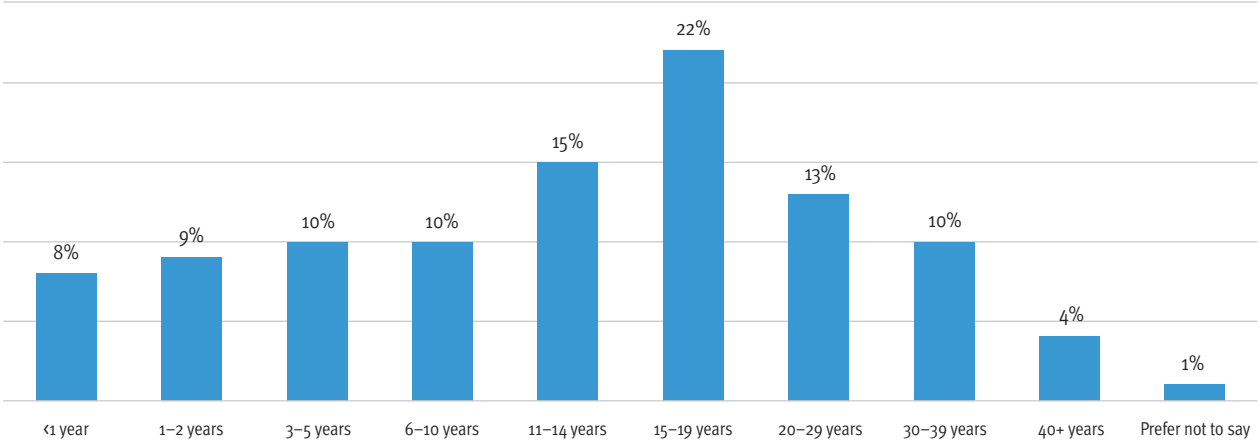


Figure 34: Percentage of quarrying participants by industry tenure



Note: percentages may not add up to 100% due to rounding or where participants may not have answered all demographic questions.

Figure 35: Percentage of quarrying participants by employment type

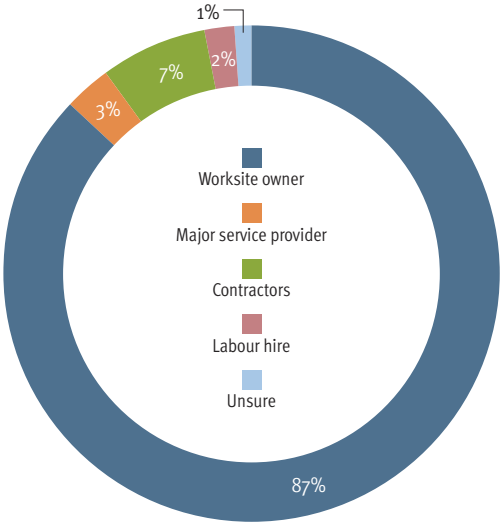


Figure 36: Percentage of quarrying participants by responsibility level

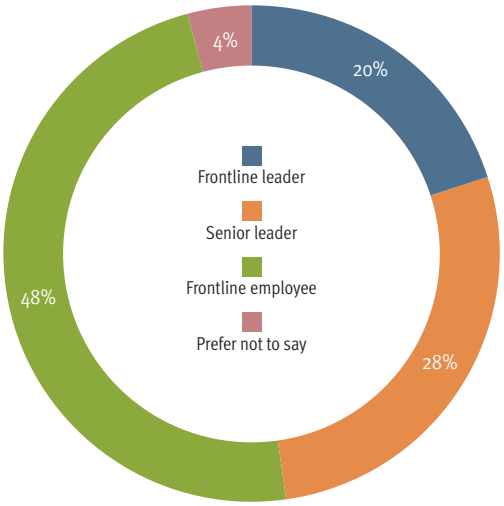
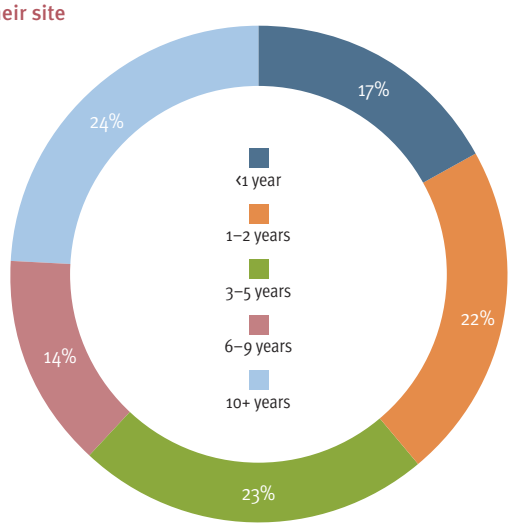
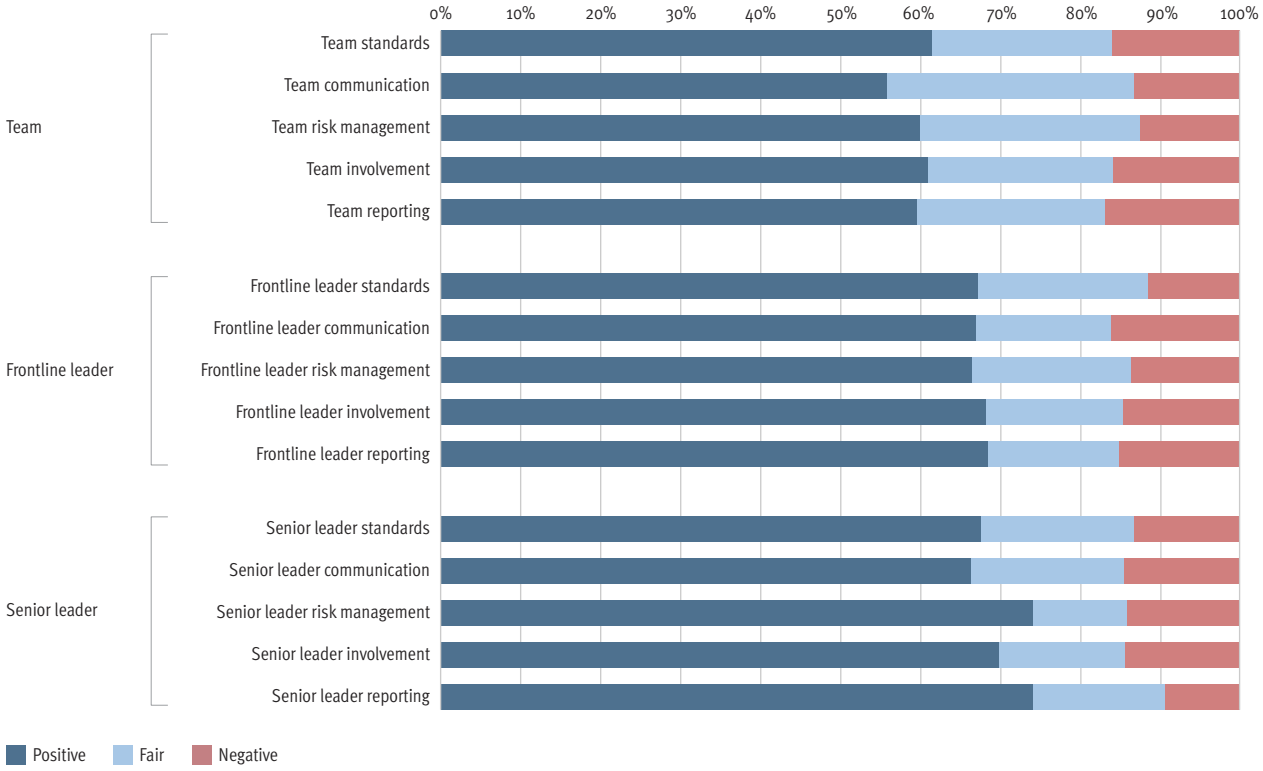


Figure 37: Percentage of frontline leaders and senior leaders in the quarrying sample, split by length of time in leadership role at their site



Key findings—quarrying

Figure 38: The percentage of quarrying participants who rated each of the dimensions in the positive, fair, and negative ranges



The key findings for the quarrying sector were identified by analysing responses from quarrying participants. In general, survey statements that consistently had a lower mean and a higher percentage of negative ratings across demographic groups were identified as opportunity areas, and survey statements that consistently had a higher mean and higher percentage of positive ratings across demographic groups were identified as strength areas. The full set of quarrying results is provided in appendix A.

Strengths

The key strength areas for coal and mineral were also key strength areas for quarrying.

My team:

- My team looks out for each other and supports each other to work safely.
- My team keeps safety as the first priority at all times.
- My team performs work safely, without taking shortcuts.
- My team stops the job if they believe it is unsafe.
- My team understands and follows safety standards and procedures.
- My teams knows and understands what controls are currently in place that will prevent an incident.
- My team identifies potential hazards before starting work.
- My team takes action on hazards or potential hazards.
- My team takes the time to plan the necessary steps to do the job safely.
- My team understands their obligation to report all near misses and high potential incidents.

Frontline leaders:

- Frontline leaders encourage the team to take appropriate action if something feels unsafe.
- Frontline leaders encourage the team to report near misses, high potential incidents, and hazards.
- Frontline leaders ensure pre-start safety briefing information is relevant.

Senior leaders:

- Senior leaders encourage workers to report near misses, high potential incidents, and hazards.
- Senior leaders ensure that all reported near misses and high potential incidents are investigated.

The results for the quarrying sector were more positive compared to coal and mineral, therefore quarrying had a number of additional key strength areas, particularly for frontline leaders and senior leaders. The following statements were rated highly within quarrying, where only a small percentage of participants (approximately 10% or less) responded in the negative range—*sometimes* or *rarely*—and/or more than 50% of participants responded in the positive range—*always*.

Frontline leaders:

- Frontline leaders help the team to resolve production/safety conflicts.
- Frontline leaders listen to the team's safety suggestions, concerns, and ideas.
- Frontline leaders act on safety concerns in a timely manner, seeking management support when necessary.
- Frontline leaders use their knowledge to help the team to recognise and manage hazards and risks.
- Frontline leaders are approachable for informal discussions about safety concerns.
- Frontline leaders support workers throughout the reporting process.
- Frontline leaders communicate to the team the outcomes and lessons learned from near miss or high potential incident investigations.
- Frontline leaders seek the input of the team to find solutions that will stop a near miss or high potential incident from happening again.

Senior leaders:

- Senior leaders ensure that safety procedures are accessible.
- Senior leaders reinforce that safety standards are not to be compromised to meet production targets.

In line with the many strength areas identified for quarrying, the most mentions received from quarrying participants in the open question said they were satisfied with reporting at their site.

- Senior leaders regularly share safety communications that reach all personnel.
- Senior leaders make sure safety messages are visible, impactful, and useful to workers.
- Senior leaders treat workers' health and safety as a high priority.
- Senior leaders provide safe ways for a worker to make a complaint on bullying or harassment, including anonymous options where needed.
- Senior leaders ensure workers are aware of their safety and health obligations under Queensland legislation.
- Senior leaders are approachable for informal discussions on safety and health concerns.
- Senior leaders provide safe ways for a worker to report near misses, high potential incidents, and safety concerns.
- Senior leaders ensure the findings and safety outcomes of a near miss or high potential incident investigation are communicated.

Opportunities

The quarrying sector had fewer key opportunity areas compared to coal and mineral. The statement, *My team finds the reporting process simple and straightforward,* continued to be a key opportunity, with 19% of participants rating it *sometimes* or *rarely*. The other key opportunity areas for quarrying were about the team, with the following statements being rated as *sometimes* or *rarely* by 16–19% of participants:

- My team voluntarily participates in safety initiatives to improve safety performance.
- My team considers differing viewpoints from team members.
- My team listens to others' views or concerns and considers others' feedback.

Notable quarrying demographic differences

Average scores across all dimensions were compared between groups based on demographic categories. Comparisons were made at the quarrying sector level for industry tenure, responsibility level—i.e. frontline employee, leader—and employment type—for example, contractor or worksite owner. Department data was not collected from quarry participants due to the workforce size of quarries.[32] Any groups with fewer than 10 responses were not compared. Means and mean ranges are provided for comparison, denoted with an M.

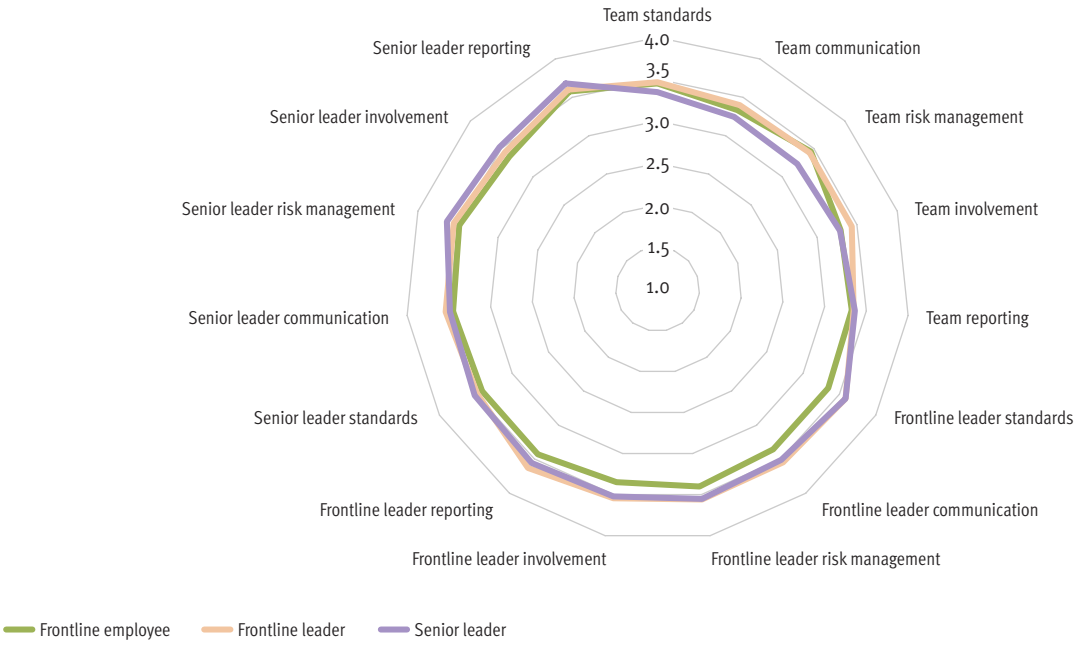
Industry tenure

- Tenure comparisons identified more positive ratings across most dimensions for those working in the sector for less than one year, and those employed for from one to three years when compared to those employed from three to 14 years.

Responsibility level

- There were no notable differences in ratings based on responsibility level.

Figure 39: The mean scores for each dimension across the three responsibility levels within quarrying



Employment type

- There were no notable differences in ratings based on employment type.[33]

32 The average quarry may employ fewer than 10 people.
33 The presence of group sizes with fewer than 10 participants limited the ability to compare some groups.

Participant suggestions for improvement—quarrying

Note: As the question explicitly asked participants to suggest an area of improvement, analysis of this question will largely discuss areas of opportunity. As the smallest sector, response from quarry workers contributed only 3% to the open text question. Qualitative analysis for this sector was therefore limited and discussed here as a general overview.

Table 18: The top improvement suggestions for quarrying

Improvement suggestions	# of mentions
Satisfied with reporting at their site	20
Reporting systems	16
Positive reinforcement	13
Providing feedback on reports	10
General communication (excl. reporting)	10

Satisfaction with reporting received the most mentions from quarry participants. Quarries was the only sector to have 'satisfaction with reporting' not only make it into the high-frequency mentions for the overall sector but receive the most mentions as well.

This was in line with the many strength areas identified for quarrying in the survey results.

Improvements to reporting systems also received high mentions for the sector, in line with the overall response from industry. Participants suggested simplifying systems and improving access as the main focus areas, though the majority of suggestions to improve access were to move to digital or app-based methods of reporting—for example, "App-based method to report—'kiosks' that operators can access to report into frontline leaders," and "Ease of inputting data e.g. electronically."

Participants who suggested increasing positive reinforcement of reporting wanted focus on encouraging workers to report and providing reassurance that reporting will not negatively affect workers—for example, "Reassure employees and contractors that reporting doesn't have to mean disciplinary action—we accept that humans can make errors," and "Continue to encourage employees to raise concerns and issues."

Participants suggested communication in general as an area of improvement, as well as providing feedback on reports. Quarry participants suggested improving communication around reporting, though more to improve current standards rather than addressing a lack of communication—for example, "Currently have good system, just need to give more feedback to staff," and "Better communication and learnings from any hazards that have been identified."

Conclusion

Conclusion

The primary purpose of the *Queensland mining industry safety reporting survey* was to understand the state of the reporting culture across the whole of the Queensland mining industry and to identify the reasons why people do, or do not, report high potential incidents, near misses and early warning signs.

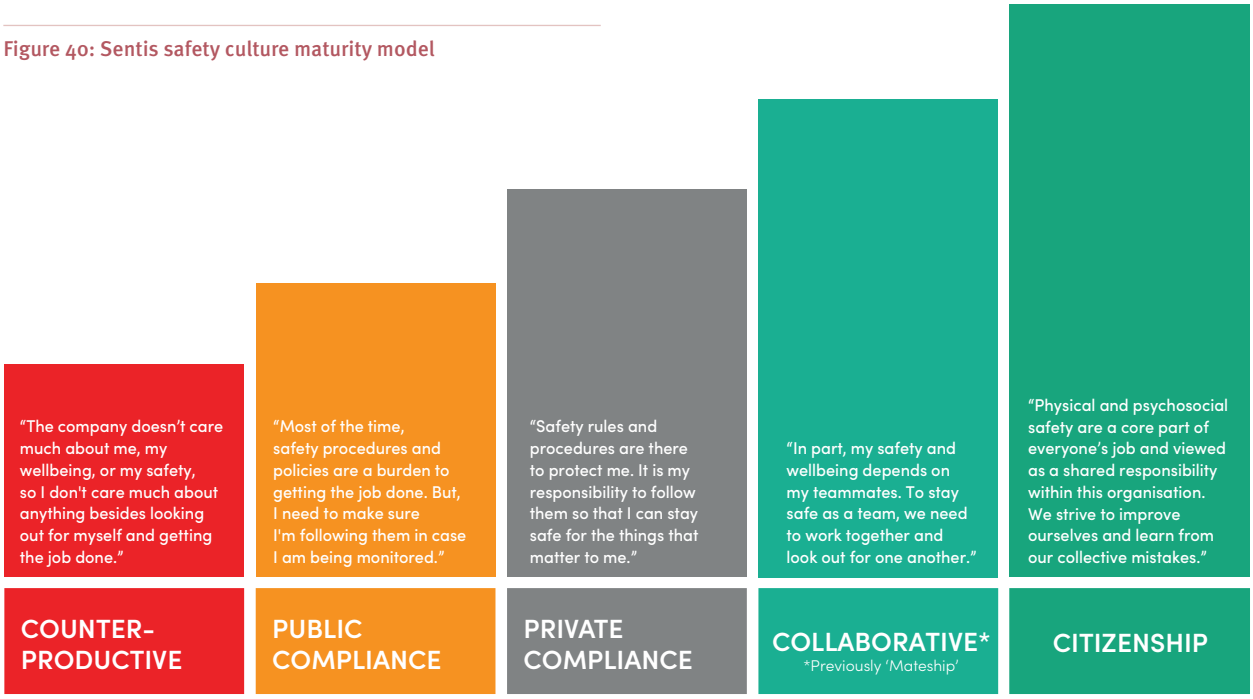
The survey aimed to identify the key opportunities to achieving a responsive and effective reporting culture in the coal mining, mineral mining and quarrying industries and enable benchmarking of industry reporting culture by providing focus areas for industry, CMSHAC, and MSHAC to target for further research and continuous improvement.

Overall state of reporting culture in the Queensland mining industry

The results of this survey were assessed against the *Sentis Safety Culture Maturity Model* to establish an indicator of the state of reporting culture in Queensland's mining industry.

The *Sentis Safety Culture Maturity Model* presents five levels of safety maturity that can be used to assess organisations' safety culture (see Figure 40). This approach to diagnosing safety culture has been widely used across high-risk industries. The Sentis model is comprised of 24 components, grounded in contemporary research in safety science and has been shown to impact on factors important to safety—such as discretionary effort in relation to safety and wellbeing, helpful safety attitudes and behaviours, and reduced risk of physical and/or psychological injury.

Figure 40: Sentis safety culture maturity model



Sentis Safety Culture Maturity Model

Maturity levels can be assessed for all 24 components of safety culture. For the purposes of this report, survey data and open text data were examined against five of the 24 safety culture components, selected for their relevance to reporting culture.

Key findings

- Strength areas:
  - Teams typically look out for each other and support each other to work safely, with this statement receiving 93% in *always* and *usually*.
  - Safety prioritisation, safety knowledge, and risk management are key strengths for teams, with these statements receiving 90% or above in *always* and *usually*.
  - Frontline leaders encourage teams to take appropriate action if something feels unsafe, with this statement receiving 90% in *always* and *usually*.
  - Frontline and senior leaders encourage the reporting of near misses and high potential incidents, with these statements receiving above 89% in *always* and *usually*.
  - Senior leaders are focused on investigating near misses and high potential incidents, with this statement receiving 89% in *always* and *usually*.
  - There is high awareness of internal reporting escalation pathways, with 83% of participants knowing how to escalate a safety concern internally.
- Opportunity areas:
  - Simplifying reporting processes can make it easier and clearer for workers to report high potential incidents and hazards, as 28% of participants found the reporting process complex, unclear, and/or time-consuming.
  - Senior leaders who provide regular feedback to workers on safety concerns improve worker confidence in reporting, as 32% of participants found that senior leaders do not provide enough feedback.
  - Senior leaders who increase their interaction and visibility with frontline workers can inspire and influence a positive safety culture, as 32% of participants found that senior leaders do not visit work areas often.
  - Improving job planning around timeframes and resources can allow workers to focus on performing work safely, as 29% of participants found that timeframes and resources are not adequate to perform work safely.
  - Addressing complaints can improve workers' confidence to report bullying, discrimination, and harassment, as 25% of participants had low confidence that complaints of bullying, discrimination, and harassment would be addressed appropriately by leadership.
  - Frontline leaders can provide recognition to workers to reinforce good safety behaviours, as 26% of participants found that not enough recognition was provided by frontline leaders.

Participants also responded to the open text question, *If there was one thing to focus on that would improve reporting at your site, what would it be?* In line with the opportunities outlined above, the most frequently mentioned improvement areas were:

- improvements to reporting systems—586 mentions
- fear of reporting—465 mentions
- providing feedback on reported incidents and hazards—431 mentions.

Based on the key results outlined in this report, the Queensland mining industry has been placed in the lower end of the *private compliance* range for reporting culture. This indicates that the majority of people in the industry tend to report hazards and incidents through appropriate channels with a reasonable understanding of how to do so, that leaders often encourage reporting, and efforts are made to improve confidence and trust with reporting. Team support for safety is also high, and people tend to look out for each other, stop the job if it's unsafe, and avoid taking shortcuts. Safety and wellbeing are discussed as needed. However, there still exist barriers that can decrease the likelihood of a person to report, such as the complexity of reporting systems and access to them, fear or concern associated with reporting, and intermittent or absent feedback to workers on the outcomes of incidents and hazards.

This maturity rating is an average across all mines and quarries in Queensland that contributed to this study. It is important to note that individual mine and quarry sites will have their own unique reporting culture, and some may be higher or lower in maturity.

Sentis research (based on an international sample of 42 mine sites across 19 different organisations) has demonstrated that 90% of mine sites that have completed an onsite safety evaluation sit at *public compliance* or below when evaluated against all 24 components of safety culture. Therefore, achieving a rating of *private compliance* when evaluating the five components that are relevant to reporting culture can be viewed favourably for the state of reporting culture in the Queensland mining industry. When incidents are not reported, this can have ongoing impacts on the safety of people at work. Reporting should be consistently encouraged as a way to share, learn, and improve for the benefit of current and future workers.

Considerations for leaders

Leaders are encouraged to consider what the findings of this report mean for their own sites and organisations. The following open questions are presented to encourage leader reflection.

- How can a positive team culture be leveraged to make other safety improvements?
- What are other mine sites doing well that can be implemented here?
- How can you continue to support your teams to stop the job if they notice a safety concern and not take shortcuts?
- How can pre-starts, toolbox talks, and other safety meetings be used to improve reporting culture?
- Do the existing reporting processes and systems support workers to easily report hazards, incidents, and near misses? Are they simple, clear, and accessible to all workers?
- How well does the organisation understand what should be classed as a high-potential incident?
- What usually happens after an incident investigation occurs? Are the outcomes communicated to the workforce? Is there a focus on lessons learned?
- How often do senior leaders spend time out of their office talking to workers about safety and wellbeing? What do these interactions look like?
- How often do leaders recognise workers for positive safety behaviours?
- What do leaders do when a worker raises a safety concern with them?
- Is the workforce provided with opportunities to get involved in safety initiatives, activities, and committees?
- Are workload, timeframes, and/or resourcing issues for your site?
- How are reports of bullying, discrimination, and harassment addressed?
- Do leaders have the capability and capacity to demonstrate effective safety leadership and drive positive change in the safety culture? How are leaders supported by the organisation and where could this be improved?

Future research suggestions

CMSHAC and MSHAC could explore some of the following key opportunity areas for future research. The survey results have demonstrated several areas of strength and opportunity, and the following suggested research areas may help to develop a deeper understanding of the opportunity areas through detailed qualitative data. The insights gained through this data could be shared widely with industry and used to inform improvements. Volunteer mine sites could participate in focus groups or studies to further understand topics such as:

- **Reporting process**—Understanding what makes reporting complicated and how information on reported incidents and hazards is returned to the workforce to collect key learnings that can be shared broadly with industry.
- **Psychological safety and psychosocial hazards**—Gaining a deeper understanding of psychosocial hazards that exist in the workplace, assessing their effect on reporting, and verifying actions that can be taken to address these hazards.
- **Resourcing or workload concerns**—Understanding the factors driving resourcing pressures or perceived pressures, and ways they can be addressed.
- **Intent to leave the mining industry**—Exploring the factors that contribute to industry turnover and ways to improve worker retention and attraction to the industry.

Additional related research projects:

- **Site/organisation safety culture assessment**—Individual mine sites are encouraged to undertake their own safety culture assessments to understand their unique strengths and opportunities.
- **High potential incident analysis**—An improvement in reporting culture should enhance organisational learning and risk reduction. This report highlighted that there is a potential for misunderstanding of how high potential incidents are defined and categorised—there is a possibility that high potential incidents are misreported, resulting in missed opportunities for organisational learning. An independent assessment could be conducted on how well classification of incidents, injuries and high potential incidents are understood and reported in industry. This would identify the highest risk areas of work, from a high potential perspective, that would benefit from critical control improvement initiatives.
- **Weak signal analysis**—A research project focused on better understanding the relationships between hazards, incidents, injuries, control breaches, and high potential incidents could enhance organisational learning and control strategies.
- **Impact study**—Develop a program to improve reporting culture, targeting areas such as leader training, frontline safety attitudes, improved systems, education, and communication. Conduct an intervention program with a small group of sites and track incident reports and safety reporting culture over 12 months. Ideally, track a matched group of sites not receiving the program as a comparison group. Evaluate impact, improve the program, and roll out evidence-based interventions to other sites, continuing to track progress.

Glossary

Cognitive testing	A field research method used to test how comprehensible survey questions are to participants.
Contractor	Any person not employed by the owner of the mine that provides a service, performs work or provides labour at a mine.
Dimension	A group of questions within a survey that together measure a target area. There were five dimensions in the survey – standards, communication, risk management, involvement, and reporting. These survey dimensions provide an indication of the safety values, behaviours, and reporting culture within a worksite.
Early warning signs	Indicators associated with a hazard progressing toward an incident.
High potential incident (HPI)	Defined in the Coal Mining Safety and Health Act 1999 as an event, or a series of events, that causes or has the potential to cause a significant adverse effect on the safety or health of a person.
Major service provider	A contracting company that runs the operation or part of the operation on behalf of the owner.
Near miss	A term commonly used in the Queensland mining industry. A near miss is not defined in Queensland legislation but means the same as a high potential incident.
Pilot phase	A small-scale test of survey fieldwork.
Psychosocial hazards	Defined in Workplace Health and Safety Queensland's Managing the risk of psychosocial hazards at work Code of Practice as work factors that may cause psychological and/or physical harm that arise from the working environment, the design and management of work, the equipment and machinery, or workplace interactions and behaviours.

Appendices


QUEENSLAND SUNSHINE STATE

Appendix A—Survey results

Mining industry snapshot

Table A1: The percentage of participants across coal, mineral, and quarrying who rated survey statements in each of the dimensions in the positive (always), fair (usually), and negative (sometimes or rarely) ranges

	Coal			Mineral			Quarrying		
Team standards	**Positive**	**Fair**	**Negative**	**Positive**	**Fair**	**Negative**	**Positive**	**Fair**	**Negative**
Team standards	48%	31%	21%	54%	29%	17%	61%	23%	16%
Team communication	56%	27%	17%	59%	28%	13%	56%	31%	13%
Team risk management	60%	25%	15%	63%	24%	13%	60%	28%	12%
Team involvement	58%	23%	18%	63%	21%	17%	61%	23%	16%
Team reporting	53%	24%	23%	57%	24%	19%	60%	24%	17%
Frontline leader standards	57%	24%	19%	58%	23%	19%	67%	21%	11%
Frontline leader communication	54%	22%	24%	57%	19%	23%	67%	17%	16%
Frontline leader risk management	58%	24%	19%	59%	23%	18%	67%	20%	14%
Frontline leader involvement	57%	22%	21%	61%	18%	21%	68%	17%	15%
Frontline leader reporting	56%	24%	20%	59%	23%	18%	69%	16%	15%
Senior leader standards	50%	24%	26%	54%	22%	24%	68%	19%	13%
Senior leader communication	49%	25%	26%	52%	25%	22%	66%	19%	14%
Senior leader risk management	57%	21%	22%	61%	19%	20%	74%	12%	14%
Senior leader involvement	49%	22%	29%	53%	19%	28%	70%	16%	14%
Senior leader reporting	59%	24%	18%	64%	22%	14%	74%	16%	9%

Note—due to rounding, percentages for negative, fair, and positive (for each dimension) may not always add up to 100%.

The remaining tables provide the detailed results for coal, mineral, and quarrying. For coal and mineral, the results are split by underground, surface, and exploration. For each survey statement, the percentage of participants who selected *always* and *usually* is shown. A higher percentage of *always* and *usually* indicates a more positive score. Participant ratings were also assigned a value from 1 (*rarely*) to 4 (*always*) to calculate the mean. A mean score of 3.5–4.0 meant the average was as close to *always* as possible and considered a positive result, a mean score of 3.0–3.4 meant the average was *usually* and considered a fair result, and a mean score below 3.0 meant the average was *sometimes* to *rarely* and considered a negative result.

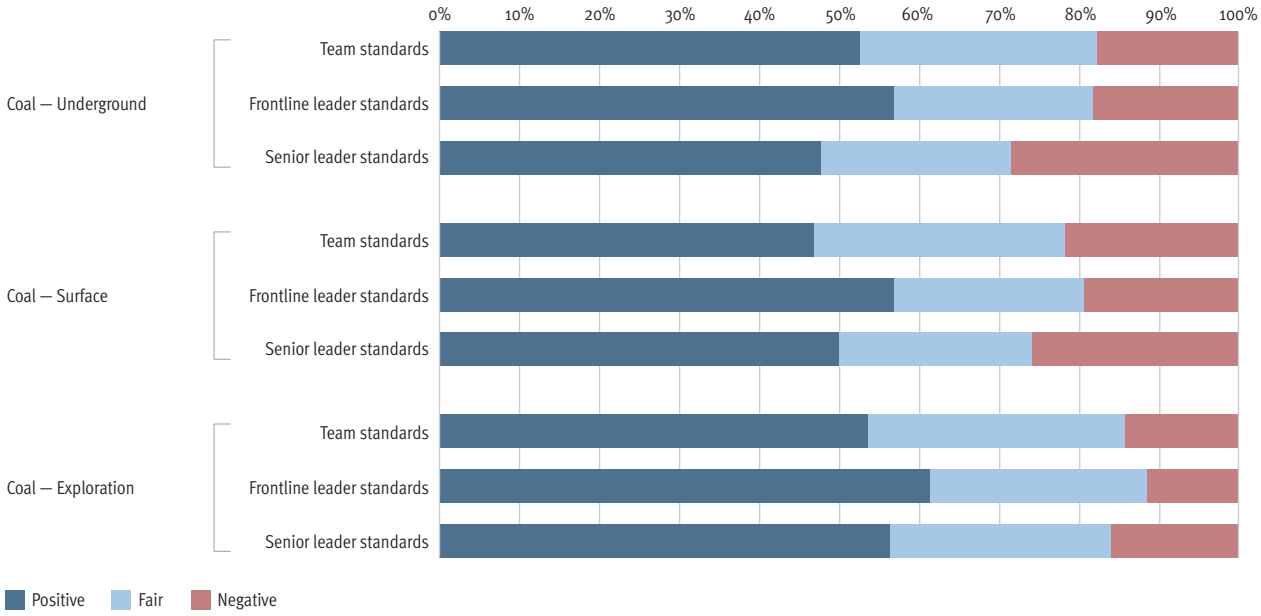
Note: Analysis did not consider only the mean, but also the percentage of participants across the scale (rarely to always) and the consistency of results across sectors to identify strengths and opportunities in the report.

Coal

Standards

Standards refers to whether the team adheres to safety standards, frontline leaders ensure safety compliance, and senior leaders set high safety standards.

Figure A1: The percentage of coal underground, surface, and exploration participants who rated each of the standards dimensions in the positive, fair, and negative ranges



Key strengths—standards

Coal overall:

- My team keeps safety as the first priority at all times.
- My team understands and follows safety standards and procedures.
- My team performs work safely, without taking shortcuts.

Sub-sectors:

- *Underground*—My team questions if something could be done in a better/safer way and communicates these improvements to the appointed supervisor.
- *Exploration*—Frontline leaders clearly explain to the team what is expected of them to work safely when allocating tasks.
- *Exploration*—Frontline leaders encourage respectful workplace behaviours in the team.
- *Exploration*—Senior leaders ensure that safety procedures are accessible.

Key opportunities—standards

Coal overall:

- Senior leaders ensure there are realistic timeframes and adequate resources available to get the job done safely—*exploration* had fewer opportunity areas, where this statement was their main opportunity.
- Senior leaders give workers confidence that complaints of bullying, discrimination, and harassment will be addressed appropriately.

Sub-sectors:

- *Underground*—My team has received enough training to help them work safely.
- *Underground*—Senior leaders reinforce that safety standards are not to be compromised to meet production targets.

Table A2 shows the percentage of coal participants who selected always and usually for each survey statement within the standards dimension. A higher percentage of always and usually indicates a more positive score. The mean is also provided from 1 (*rarely*) to 4 (*always*).

Table A2: The percentage of coal participants who selected always and usually for each survey statement within the standards dimension

Target group	Survey item	Underground[34]	Surface[35]	Exploration[36]
My team	My team keeps safety as the first priority at all times	96% 3.55	92% 3.42	96% 3.44
	My team performs work safely, without taking shortcuts	95% 3.43	91% 3.29	97% 3.30
	My team understands and follows safety standards and procedures	95% 3.49	92% 3.35	96% 3.42
	My team questions if something could be done in a better/safer way and communicates these improvements to the appointed supervisor	91% 3.47	87% 3.30	89% 3.33
	My team supports a respectful working environment that does not accept bullying, discrimination, and harassment	87% 3.35	86% 3.31	90% 3.41
	My team has received enough training to help them work safely	71% 2.93	81% 3.14	89% 3.30
	Team standards	**89%** 3.37	**88%** 3.30	**93%** 3.37
Frontline leaders	Frontline leaders clearly explain to the team what is expected of them to work safely when allocating tasks	88% 3.26	88% 3.30	96% 3.44
	Frontline leaders inspect and monitor the worksite at appropriate intervals	84% 3.27	84% 3.22	90% 3.24
	Frontline leaders help the team to resolve production/safety conflicts	85% 3.28	84% 3.23	89% 3.41
	Frontline leaders encourage respectful workplace behaviours in the team	85% 3.29	86% 3.29	91% 3.43
	Frontline leaders treat all team members with respect	82% 3.22	81% 3.17	87% 3.32
	Frontline leader standards	**85%** 3.27	**84%** 3.24	**91%** 3.37

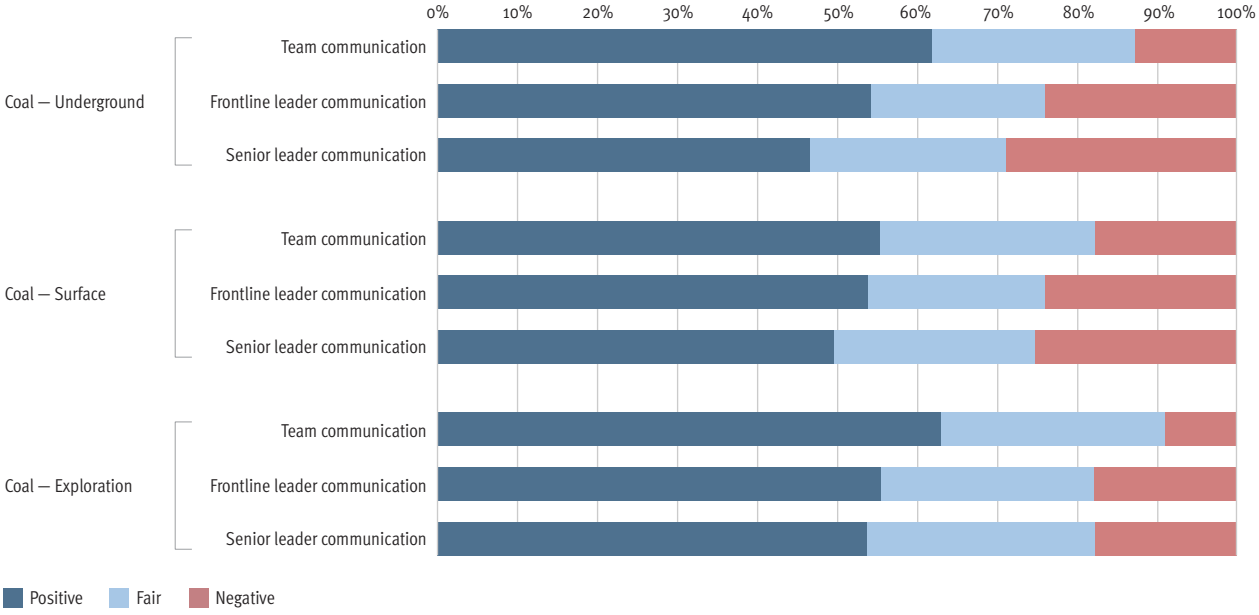
34 Coal underground sample size ranged from 1087 to 1182
35 Coal surface sample size ranged from 4829 to 5212
36 Coal exploration sample size ranged from 66 to 72

Senior leaders	Senior leaders ensure that safety procedures are easy to understand	78% 3.05	79% 3.06	89% 3.24
	Senior leaders ensure that safety procedures are accessible	84% 3.23	83% 3.23	92% 3.48
	Senior leaders ensure there are realistic timeframes and adequate resources available to get the job done safely	62% 2.78	71% 2.91	77% 3.14
	Senior leaders reinforce that safety standards are not to be compromised to meet production targets	77% 3.13	78% 3.12	88% 3.27
	Senior leaders give workers confidence that complaints of bullying, discrimination, and harassment will be addressed appropriately	73% 3.03	74% 3.04	88% 3.26
	Senior leader standards	75% 3.04	77% 3.07	87% 3.28

Communication

Communication refers to the extent to which the team speaks up about safety concerns, frontline leaders encourage the team to speak up, and senior leaders communicate openly about safety.

Figure A2: The percentage of coal underground, surface, and exploration participants who rated each of the communication dimensions in the positive, fair, and negative ranges



Key strengths—communication

Coal overall:

- My team stops the job if they believe it is unsafe.
- Frontline leaders ensure pre-start safety briefing information is relevant.
- My team intervenes if they see anyone in an unsafe situation (particularly for *underground* and *exploration*).
- My team asks questions to gain a better understanding of anything that is unclear (particularly for *underground*).

Sub-sectors:

- *Exploration*—Frontline leaders listen to the team's safety suggestions, concerns, and ideas.

Key opportunities—communication

Coal overall:

- Senior leaders provide feedback on concerns raised by the workforce in a timely manner.
- My team feels safe to speak up if they make a mistake.

Sub-sectors:

- *Underground and surface*—Frontline leaders give recognition to good safety behaviours.
- *Underground*—Senior leaders regularly share safety communications that reach all personnel.
- *Underground*—Senior leaders make sure safety messages are visible, impactful, and useful to workers.

Table A3 shows the percentage of coal participants who selected always and usually for each survey statement within the communication dimension. A higher percentage of always and usually indicates a more positive score. The mean is also provided from 1 (*rarely*) to 4 (*always*).

Table A3: The percentage of coal participants who selected always and usually for each survey statement within the communication dimension

Target group	Survey item	Underground[37]	Surface[38]	Exploration[39]
My team	My team stops the job if they believe it is unsafe	95% 3.61	89% 3.41	92% 3.58
	My team intervenes if they see anyone in an unsafe situation	93% 3.53	89% 3.35	90% 3.51
	My team asks questions to gain a better understanding of anything that is unclear	93% 3.43	89% 3.30	93% 3.35
	My team listens to others' views or concerns and considers others' feedback	88% 3.26	82% 3.13	86% 3.22
	My team feels safe to speak up if they make a mistake	78% 3.12	74% 3.02	76% 3.10
	Team communication	**89%** **3.39**	**85%** **3.24**	**87%** **3.35**
Frontline leaders	Frontline leaders listen to the team's safety suggestions, concerns, and ideas	85% 3.26	82% 3.19	93% 3.43
	Frontline leaders provide feedback on the team's safety suggestions, concerns, and ideas	77% 3.08	76% 3.03	87% 3.26
	Frontline leaders ensure pre-start safety briefing information is relevant	89% 3.37	89% 3.38	91% 3.46
	Frontline leaders act on safety concerns in a timely manner, seeking management support when necessary	83% 3.24	82% 3.19	88% 3.31
	Frontline leaders give recognition to good safety behaviours	75% 3.04	73% 3.00	87% 3.23
	Frontline leaders deal firmly and fairly with poor safety behaviours	76% 3.05	77% 3.07	85% 3.19
	Frontline leader communication	**81%** **3.17**	**80%** **3.14**	**89%** **3.31**

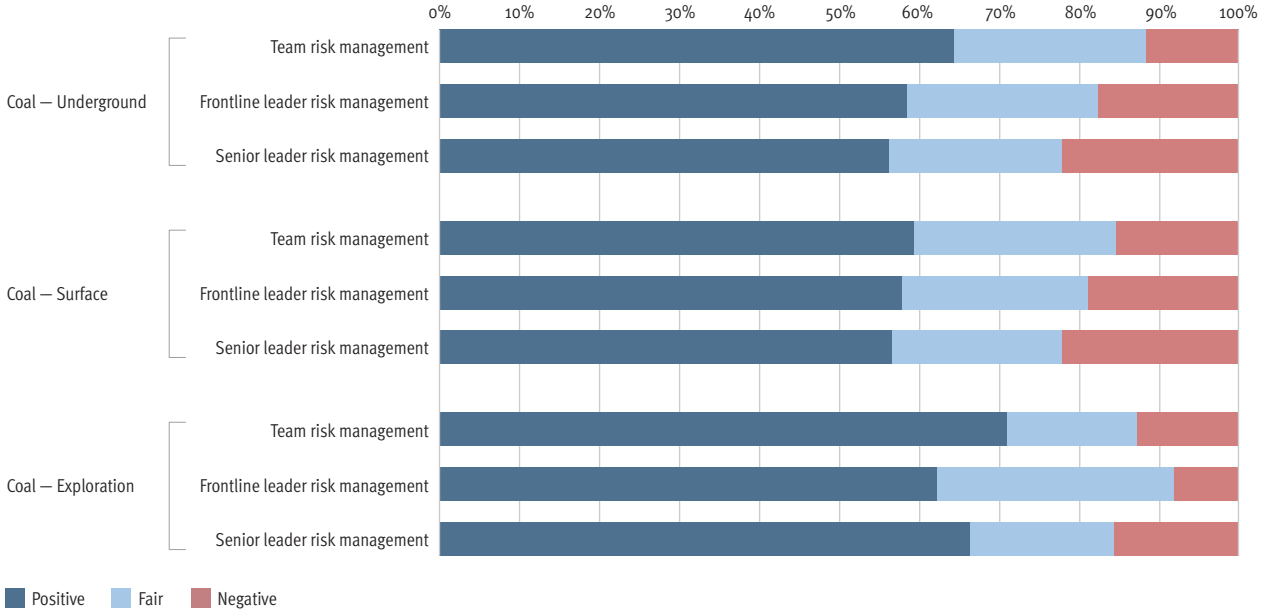
37 Coal underground sample size ranged from 1087 to 1182
38 Coal surface sample size ranged from 4815 to 5209
39 Coal exploration sample size ranged from 66 to 72

Senior leaders	Senior leaders provide feedback on concerns raised by the workforce in a timely manner	63% 2.76	67% 2.82	80% 3.08
	Senior leaders regularly share safety communications that reach all personnel	71% 2.96	77% 3.07	91% 3.26
	Senior leaders make sure safety messages are visible, impactful, and useful to workers	74% 3.00	78% 3.10	94% 3.32
	Senior leader communication	69% 2.91	74% 3.00	88% 3.22

Risk management

Risk management dimensions assess whether the team plans for safety, frontline leaders promote risk awareness, and senior leaders control for risk.

Figure A3: The percentage of coal underground, surface, and exploration participants who rated each of the risk management dimensions in the positive, fair, and negative ranges



Key strengths—risk management

Coal overall:

- My teams knows and understands what controls are currently in place that will prevent an incident.
- My team identifies potential hazards before starting work.
- My team takes action on hazards or potential hazards.
- My team takes the time to plan the necessary steps to do the job safely.
- Frontline leaders encourage the team to take appropriate action if something feels unsafe.

Sub-sectors:

- *Exploration*—Senior leaders ensure workers are aware of their safety and health obligations under Queensland legislation.
- *Exploration*—Frontline leaders use their knowledge to help the team to recognise and manage hazards and risks.

Key opportunities—risk management

Sub-sectors:

- *Underground and surface*—Senior leaders ensure safety procedures are consistent with the way work is actually done.
- *Underground and surface*—Frontline leaders consider other health hazards such as bullying, discrimination, fatigue, and mental health.

Table A4 shows the percentage of coal participants who selected always and usually for each survey statement within the risk management dimension. A higher percentage of always and usually indicates a more positive score. The means is also provided from 1 (*rarely*) to 4 (*always*).

Table A4: The percentage of coal participants who selected always and usually for each survey statement within the risk management dimension

Target group	Survey item	Underground[40]	Surface[41]	Exploration[42]
My team	My team takes the time to plan the necessary steps to do the job safely	91% 3.38	91% 3.33	92% 3.48
	My team makes sure the necessary resources are available on the job site before starting work	85% 3.14	83% 3.13	89% 3.28
	My team identifies potential hazards before starting work	94% 3.50	92% 3.36	96% 3.41
	My team takes action on hazards or potential hazards	94% 3.51	91% 3.40	96% 3.62
	My team thinks about what could go wrong when changes occur	90% 3.36	86% 3.22	89% 3.29
	My teams knows and understands what controls are currently in place that will prevent an incident	94% 3.45	92% 3.35	96% 3.42
	Team risk management	**91%** **3.39**	**89%** **3.29**	**93%** **3.40**
Frontline leaders	Frontline leaders encourage the team to take appropriate action if something feels unsafe	91% 3.47	89% 3.43	99% 3.61
	Frontline leaders use their knowledge to help the team to recognise and manage hazards and risks	89% 3.39	88% 3.33	97% 3.51
	Frontline leaders consider other health hazards such as bullying, discrimination, fatigue, and mental health	77% 3.10	77% 3.10	90% 3.24
	Frontline leaders work with the team to re-assess hazards and risks when changes occur	87% 3.31	85% 3.26	94% 3.43
	Frontline leaders give the team confidence that risks are being controlled effectively	86% 3.23	83% 3.18	94% 3.40
	Frontline leader risk management	**86%** **3.30**	**84%** **3.26**	**95%** **3.44**

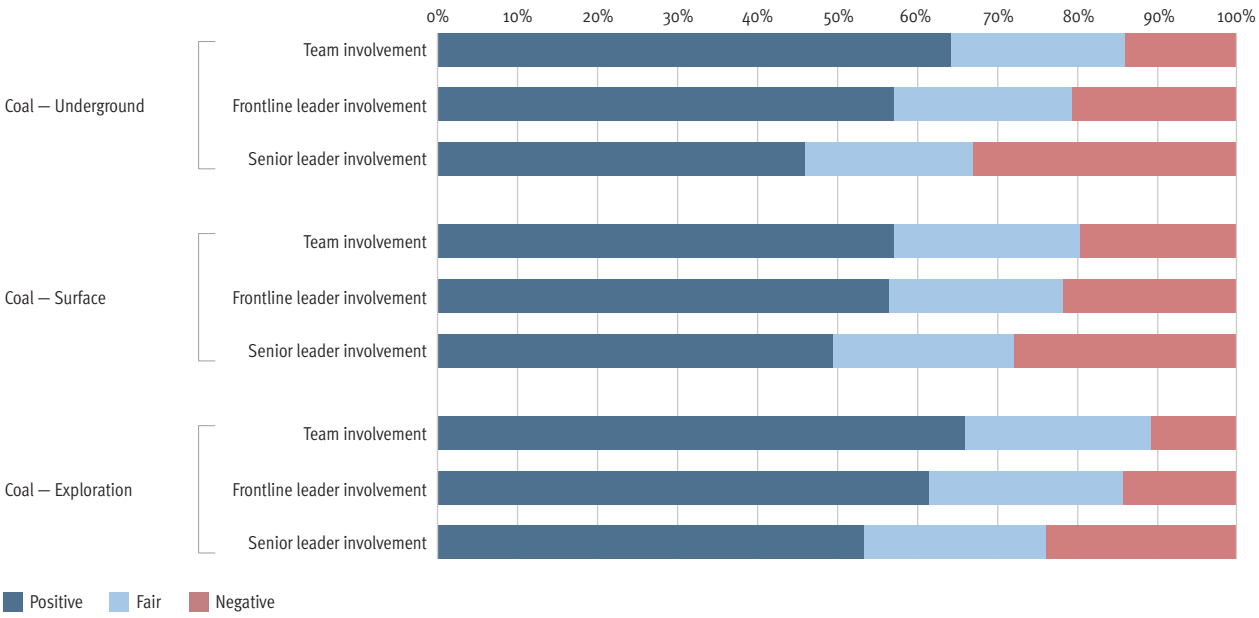
40 Coal underground sample size ranged from 1084 to 1182
41 Coal surface sample size ranged from 4807 to 5212
42 Coal exploration sample size ranged from 66 to 72

Senior leaders	Senior leaders treat workers' health and safety as a high priority	82% 3.21	82% 3.22	88% 3.41
	Senior leaders provide safe ways for a worker to make a complaint on bullying or harassment, including anonymous options where needed	78% 3.13	78% 3.11	91% 3.38
	Senior leaders ensure safety procedures are consistent with the way work is actually done	74% 2.98	77% 3.06	86% 3.27
	Senior leaders ensure workers are aware of their safety and health obligations under Queensland legislation	87% 3.34	86% 3.29	91% 3.53
	Senior leader risk management	**80%** 3.17	**80%** 3.17	**89%** 3.40

Involvement

Involvement refers to the extent to which the team gets involved in safety and whether frontline and senior leaders actively involve the workforce.

Figure A4: The percentage of coal underground, surface, and exploration participants who rated each of the involvement dimensions in the positive, fair, and negative ranges



Key strengths—involvement

Coal overall:

- My team looks out for each other and supports each other to work safely.

Sub-sectors:

- *Underground and exploration*—My team feels comfortable contributing to team safety discussions and meetings.
- *Exploration*—Frontline leaders are approachable for informal discussions about safety concerns.
- *Exploration*—Frontline leaders regularly initiate team discussions about safety performance.

Key opportunities—involvement

Coal overall:

- Senior leaders visit the work area/s at appropriate intervals.

Sub-sectors:

- *Underground and surface*—Senior leaders provide opportunities for the workforce to participate in safety initiatives.
- *Underground*—Senior leaders ensure adequate time is provided to support safety initiatives.

Table A5 shows the percentage of coal participants who selected always and usually for each survey statement within the involvement dimension. A higher percentage of always and usually indicates a more positive score. The mean is also provided from 1 (*rarely*) to 4 (*always*).

Table A5: The percentage of coal participants who selected always and usually for each survey statement within the involvement dimension

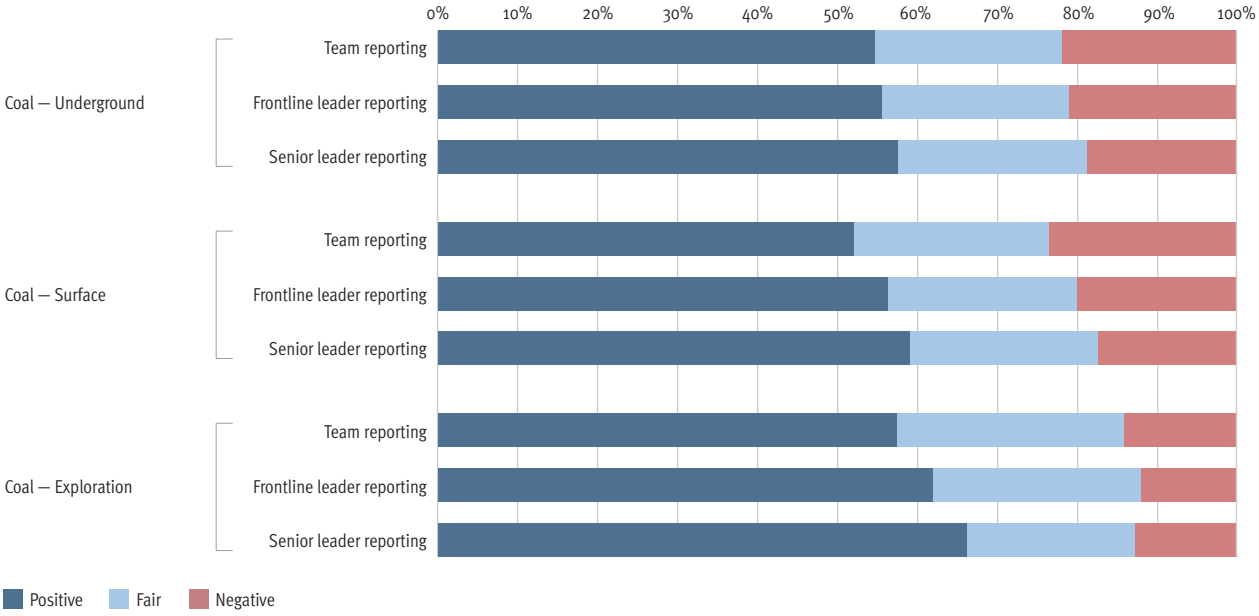
Target group	Survey item	Underground[43]	Surface[44]	Exploration[45]
My team	My team looks out for each other and supports each other to work safely	97% 3.65	92% 3.47	94% 3.62
	My team feels comfortable contributing to team safety discussions and meetings	89% 3.40	83% 3.23	93% 3.53
	My team voluntarily participates in safety initiatives to improve safety performance	80% 3.16	76% 3.01	86% 3.24
	My team considers differing viewpoints from team members	86% 3.25	80% 3.09	92% 3.32
	Team involvement	**88%** 3.37	**83%** 3.20	**91%** 3.43
Frontline leaders	Frontline leaders work with the team to achieve their safety goals and responsibilities	85% 3.27	85% 3.23	94% 3.39
	Frontline leaders regularly initiate team discussions about safety performance	78% 3.10	78% 3.10	91% 3.41
	Frontline leaders are approachable for informal discussions about safety concerns	85% 3.30	83% 3.24	91% 3.42
	Frontline leaders are approachable for discussions about mental health and wellbeing	76% 3.08	76% 3.08	78% 3.10
	Frontline leader involvement	**81%** 3.19	**80%** 3.16	**89%** 3.33
Senior leaders	Senior leaders ensure adequate time is provided to support safety initiatives	72% 2.94	76% 3.01	91% 3.33
	Senior leaders provide opportunities for the workforce to participate in safety initiatives	70% 2.92	74% 3.00	88% 3.30
	Senior leaders are approachable for informal discussions on safety and health concerns	75% 3.04	75% 3.03	88% 3.33
	Senior leaders visit the work area/s at appropriate intervals	60% 2.69	70% 2.89	74% 2.98
	Senior leader involvement	**69%** 2.90	**74%** 2.98	**85%** 3.24

43 Coal underground sample size ranged from 1087 to 1183
44 Coal surface sample size ranged from 4797 to 5211
45 Coal exploration sample size ranged from 66 to 72

Reporting

Reporting is about whether the team reports safety concerns and the extent to which frontline and senior leaders encourage reporting, support the team to promote, and take action off the back of reporting.

Figure A5: The percentage of coal underground, surface, and exploration participants who rated each of the reporting dimensions in the positive, fair, and negative ranges



Key strengths—reporting

Coal overall:

- My team understands their obligation to report all near misses and high potential incidents.
- Frontline leaders encourage the team to report near misses, high potential incidents, and hazards.
- Senior leaders encourage workers to report near misses, high potential incidents, and hazards.
- Senior leaders ensure that all reported near misses and high potential incidents are investigated.

Sub-sectors:

- *Exploration*—Senior leaders provide safe ways for a worker to report near misses, high potential incidents, and safety concerns.
- *Exploration*—My team seeks advice if they are unsure if something needs to be reported.

Key opportunities—reporting

Coal overall:

- My team finds the reporting process simple and straightforward.
- My team feels comfortable to report any instances of bullying, discrimination, or harassment.
- Senior leaders make sure the reporting process is simple and straightforward.

Sub-sectors:

- *Underground and surface*—Frontline leaders consider unwelcome news as an opportunity to learn and improve.

Reporting perspectives

- 82% of coal participants indicated that they knew who to escalate safety concerns to within their workplace.
- 69% of coal participants indicated they knew who to escalate safety concerns to outside of their workplace.
- 38% of coal participants indicated that the reporting culture had stayed the same at their sites, 34% indicated that it had improved, and 11% indicated that it had declined.

A similar pattern was observed across coal sub-sectors.

Table A6 shows the percentage of coal participants who selected always and usually for each survey statement within the reporting dimension. A higher percentage of always and usually indicates a more positive score. The mean is also provided from 1 (*rarely*) to 4 (*always*).

Table A6: The percentage of coal participants who selected always and usually for each survey statement within the reporting dimension

Target group	Survey item	Underground[46]	Surface[47]	Exploration[48]
My team	My team understands their obligation to report all near misses and high potential incidents	92% 3.51	89% 3.42	94% 3.64
	My team feels comfortable to report all near misses and high potential incidents	82% 3.27	80% 3.17	86% 3.34
	My team feels comfortable to report any instances of bullying, discrimination, or harassment	77% 3.10	75% 3.03	80% 3.18
	My team reports even when they have already fixed the problem that could cause a high potential incident	83% 3.22	80% 3.13	89% 3.44
	My team seeks advice if they are unsure if something needs to be reported	88% 3.34	84% 3.22	94% 3.43
	My team finds the reporting process simple and straightforward	70% 2.91	72% 2.92	71% 2.86
	My team discusses lessons learned from incidents that have occurred	82% 3.20	81% 3.17	89% 3.37
	Team reporting	**82%** **3.22**	**80%** **3.15**	**86%** **3.32**
Frontline leaders	Frontline leaders encourage the team to report near misses, high potential incidents, and hazards	89% 3.40	90% 3.45	91% 3.53
	Frontline leaders consider unwelcome news as an opportunity to learn and improve	77% 3.08	76% 3.05	86% 3.21
	Frontline leaders support workers throughout the reporting process	82% 3.20	81% 3.17	92% 3.30
	Frontline leaders seek the input of the team to find solutions that will stop a near miss or high potential incident from happening again	84% 3.26	82% 3.21	88% 3.34
	Frontline leaders communicate to the team the outcomes and lessons learned from near miss or high potential incident investigations	80% 3.18	82% 3.21	92% 3.40
	Frontline leader reporting	**82%** **3.22**	**82%** **3.22**	**90%** **3.36**

46 Coal underground sample size ranged from 1083 to 1176
47 Coal surface sample size ranged from 4796 to 5188
48 Coal exploration sample size ranged from 65 to 71

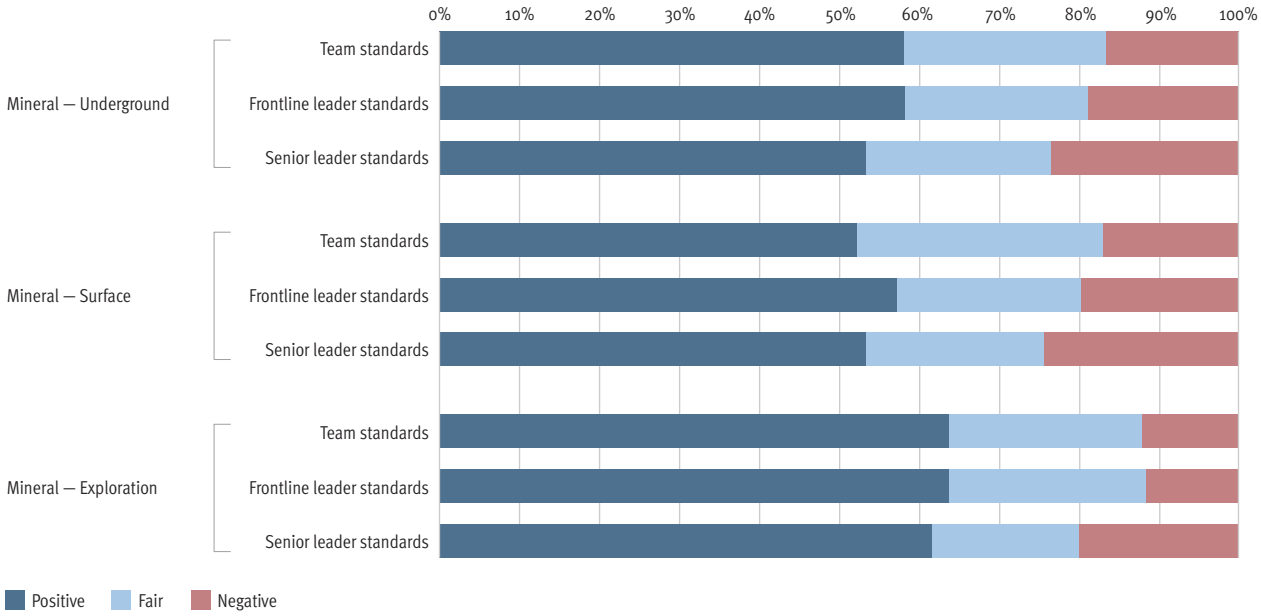
Senior leaders	Senior leaders encourage workers to report near misses, high potential incidents, and hazards	87% (3.37)	89% (3.43)	94% (3.58)
	Senior leaders ensure that all reported near misses and high potential incidents are investigated	89% (3.40)	88% (3.39)	92% (3.60)
	Senior leaders provide safe ways for a worker to report near misses, high potential incidents, and safety concerns	86% (3.30)	86% (3.30)	91% (3.47)
	Senior leaders ensure the findings and safety outcomes of a near miss or high potential incident investigation are communicated	77% (3.12)	80% (3.17)	85% (3.27)
	Senior leaders make sure the reporting process is simple and straightforward	77% (3.07)	79% (3.09)	82% (3.09)
	Senior leader reporting	**83% (3.25)**	**84% (3.28)**	**89% (3.40)**

Mineral

Standards

Standards refers to whether the team adheres to safety standards, frontline leaders ensure safety compliance, and senior leaders set high safety standards.

Figure A6: The percentage of mineral underground, surface, and exploration participants who rated each of the standards dimensions in the positive, fair, and negative ranges



Key strengths—standards

Mineral overall:

- My team keeps safety as the first priority at all times.
- My team understands and follows safety standards and procedures.
- My team performs work safely, without taking shortcuts.

Sub-sectors:

- *Exploration*—Frontline leaders encourage respectful workplace behaviours in the team.
- *Exploration*—Senior leaders ensure that safety procedures are accessible.
- *Exploration*—Frontline leaders clearly explain to the team what is expected of them to work safely when allocating tasks.

Key opportunities—standards

Mineral overall:

- Senior leaders ensure there are realistic timeframes and adequate resources available to get the job done safely.

Sub-sectors:

- *Underground and surface*—Frontline leaders inspect and monitor the worksite at appropriate intervals.
- *Underground and surface*—Senior leaders give workers confidence that complaints of bullying, discrimination, and harassment will be addressed appropriately.
- *Underground*—Senior leaders ensure that safety procedures are easy to understand.

Table A7 shows the percentage of mineral participants who selected always and usually for each survey statement within the standards dimension. A higher percentage of always and usually indicates a more positive score. The mean is also provided from 1 (*rarely*) to 4 (*always*).

Table A7: The percentage of mineral participants who selected always and usually for each survey statement within the standards dimension

Target group	Survey item	Underground[49]	Surface[50]	Exploration[51]
My team	My team keeps safety as the first priority at all times	91% 3.50	95% 3.48	97% 3.59
	My team performs work safely, without taking shortcuts	93% 3.43	94% 3.33	97% 3.40
	My team understands and follows safety standards and procedures	93% 3.47	95% 3.37	97% 3.48
	My team questions if something could be done in a better/safer way and communicates these improvements to the appointed supervisor	89% 3.38	89% 3.36	90% 3.45
	My team supports a respectful working environment that does not accept bullying, discrimination, and harassment	88% 3.44	88% 3.42	90% 3.47
	My team has received enough training to help them work safely	84% 3.25	84% 3.24	93% 3.48
	Team standards	**90%** **3.41**	**91%** **3.37**	**94%** **3.48**

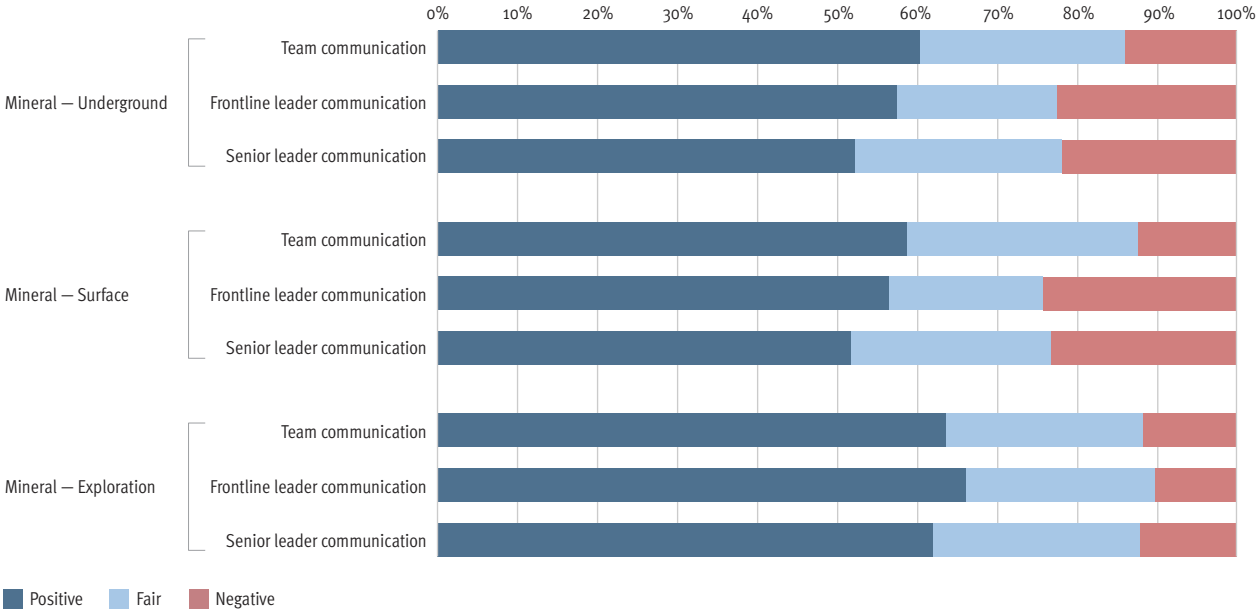
49 Mineral underground sample size ranged from 190 to 198
50 Mineral surface sample size ranged from 762 to 814
51 Mineral exploration sample size ranged from 52 to 58

Frontline leaders	Frontline leaders clearly explain to the team what is expected of them to work safely when allocating tasks	85% 3.30	87% 3.32	94% 3.59
	Frontline leaders inspect and monitor the worksite at appropriate intervals	76% 3.07	77% 3.07	89% 3.37
	Frontline leaders help the team to resolve production/safety conflicts	81% 3.20	85% 3.26	91% 3.50
	Frontline leaders encourage respectful workplace behaviours in the team	85% 3.33	86% 3.35	96% 3.59
	Frontline leaders treat all team members with respect	83% 3.24	84% 3.31	91% 3.50
	Frontline leader standards	**82%** 3.23	**84%** 3.26	**92%** 3.51
Senior leaders	Senior leaders ensure that safety procedures are easy to understand	71% 2.91	81% 3.14	92% 3.44
	Senior leaders ensure that safety procedures are accessible	81% 3.19	85% 3.29	94% 3.69
	Senior leaders ensure there are realistic timeframes and adequate resources available to get the job done safely	69% 2.91	74% 3.00	79% 3.33
	Senior leaders reinforce that safety standards are not to be compromised to meet production targets	82% 3.28	82% 3.27	85% 3.44
	Senior leaders give workers confidence that complaints of bullying, discrimination, and harassment will be addressed appropriately	72% 3.06	79% 3.15	87% 3.52
	Senior leader standards	**75%** 3.07	**80%** 3.17	**87%** 3.48

Communication

Communication refers to the extent to which the team speaks up about safety concerns, frontline leaders encourage the team to speak up, and senior leaders communicate openly about safety.

Figure A7: The percentage of mineral underground, surface, and exploration participants who rated each of the communication dimensions in the positive, fair, and negative ranges



Key strengths—communication

Mineral overall:

- My team stops the job if they believe it is unsafe.
- My team asks questions to gain a better understanding of anything that is unclear.

Sub-sectors:

- *Exploration*—Frontline leaders ensure pre-start safety briefing information is relevant.
- *Exploration*—Frontline leaders act on safety concerns in a timely manner, seeking management support when necessary.
- *Exploration*—My team intervenes if they see anyone in an unsafe situation.
- *Exploration*—Frontline leaders listen to the team's safety suggestions, concerns, and ideas.

Key opportunities—communication

Mineral overall:

- Senior leaders provide feedback on concerns raised by the workforce in a timely manner.

Sub-sectors:

- *Underground and surface*—Frontline leaders deal firmly and fairly with poor safety behaviours.
- *Underground and surface*—Frontline leaders give recognition to good safety behaviours.
- *Underground and surface*—Frontline leaders provide feedback on the team's safety suggestions, concerns, and ideas.
- *Underground*—Senior leaders make sure safety messages are visible, impactful, and useful to workers.

Table A8 shows the percentage of mineral participants who selected always and usually for each survey statement within the communication dimension. A higher percentage of always and usually indicates a more positive score. The mean is also provided from 1 (*rarely*) to 4 (*always*).

Table A8: The percentage of mineral participants who selected always and usually for each survey statement within the communication dimension

Target group	Survey item	Underground[52]	Surface[53]	Exploration[54]
My team	My team stops the job if they believe it is unsafe	93% 3.54	93% 3.50	95% 3.57
	My team intervenes if they see anyone in an unsafe situation	88% 3.38	89% 3.33	97% 3.57
	My team asks questions to gain a better understanding of anything that is unclear	90% 3.38	92% 3.34	95% 3.47
	My team listens to others' views or concerns and considers others' feedback	83% 3.20	87% 3.23	93% 3.34
	My team feels safe to speak up if they make a mistake	79% 3.09	82% 3.18	90% 3.31
	Team communication	**87%** **3.32**	**89%** **3.32**	**94%** **3.45**

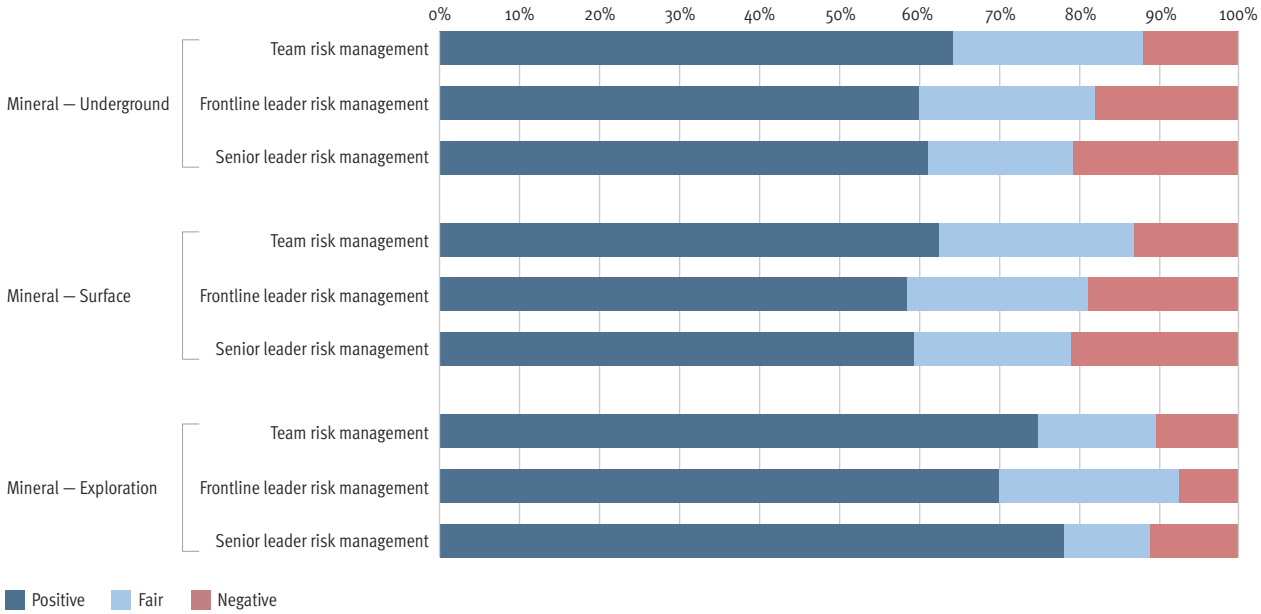
52 Mineral underground sample size ranged from 190 to 198
53 Mineral surface sample size ranged from 760 to 814
54 Mineral exploration sample size ranged from 52 to 58

Frontline leaders	Frontline leaders listen to the team's safety suggestions, concerns, and ideas	85% 3.27	86% 3.34	91% 3.54
	Frontline leaders provide feedback on the team's safety suggestions, concerns, and ideas	76% 3.06	79% 3.15	85% 3.37
	Frontline leaders ensure pre-start safety briefing information is relevant	85% 3.30	88% 3.40	98% 3.67
	Frontline leaders act on safety concerns in a timely manner, seeking management support when necessary	82% 3.20	84% 3.24	98% 3.57
	Frontline leaders give recognition to good safety behaviours	77% 3.07	78% 3.12	89% 3.35
	Frontline leaders deal firmly and fairly with poor safety behaviours	75% 3.10	78% 3.09	89% 3.41
	Frontline leader communication	**80%** **3.17**	**82%** **3.22**	**92%** **3.48**
Senior leaders	Senior leaders provide feedback on concerns raised by the workforce in a timely manner	68% 2.83	72% 2.92	81% 3.29
	Senior leaders regularly share safety communications that reach all personnel	79% 3.09	81% 3.21	87% 3.44
	Senior leaders make sure safety messages are visible, impactful, and useful to workers	77% 3.09	81% 3.16	87% 3.37
	Senior leader communication	**75%** **3.01**	**78%** **3.10**	**85%** **3.37**

Risk Management

Risk management dimensions assess whether the team plans for safety, frontline leaders promote risk awareness, and senior leaders control for risk.

Figure A8: The percentage of mineral underground, surface, and exploration participants who rated each of the risk management dimensions in the positive, fair, and negative ranges



Key strengths—risk management

Mineral overall:

- My teams knows and understands what controls are currently in place that will prevent an incident.
- My team takes action on hazards or potential hazards.
- My team identifies potential hazards before starting work.
- My team takes the time to plan the necessary steps to do the job safely.
- Frontline leaders encourage the team to take appropriate action if something feels unsafe.

Sub-sectors:

- *Exploration*: Senior leaders ensure workers are aware of their safety and health obligations under Queensland legislation.
- *Exploration*: Frontline leaders use their knowledge to help the team to recognise and manage hazards and risks.
- *Exploration*: My team makes sure the necessary resources are available on the job site before starting work.
- *Exploration*: Senior leaders treat workers' health and safety as a high priority.
- *Exploration*: Frontline leaders give the team confidence that risks are being controlled effectively.
- *Exploration*: Frontline leaders work with the team to re-assess hazards and risks when changes occur.

Key opportunities—risk management

Sub-sectors:

- *Underground and surface*: Frontline leaders consider other health hazards such as bullying, discrimination, fatigue, and mental health.
- *Underground and surface*: Senior leaders ensure safety procedures are consistent with the way work is actually done.

Table A9 shows the percentage of mineral participants who selected always and usually for each survey statement within the risk management dimension. A higher percentage of always and usually indicates a more positive score. The mean is also provided from 1 (*rarely*) to 4 (*always*).

Table A9: The percentage of mineral participants who selected always and usually for each survey statement within the risk management dimension

Target group	Survey item	Underground[55]	Surface[56]	Exploration[57]
My team	My team takes the time to plan the necessary steps to do the job safely	92% 3.39	92% 3.36	95% 3.55
	My team makes sure the necessary resources are available on the job site before starting work	84% 3.19	88% 3.20	95% 3.53
	My team identifies potential hazards before starting work	93% 3.42	93% 3.42	95% 3.50
	My team takes action on hazards or potential hazards	91% 3.47	93% 3.48	95% 3.60
	My team thinks about what could go wrong when changes occur	89% 3.26	88% 3.22	93% 3.38
	My teams knows and understands what controls are currently in place that will prevent an incident	92% 3.38	94% 3.41	97% 3.64
	Team risk management	**90%** 3.34	**91%** 3.35	**95%** 3.53

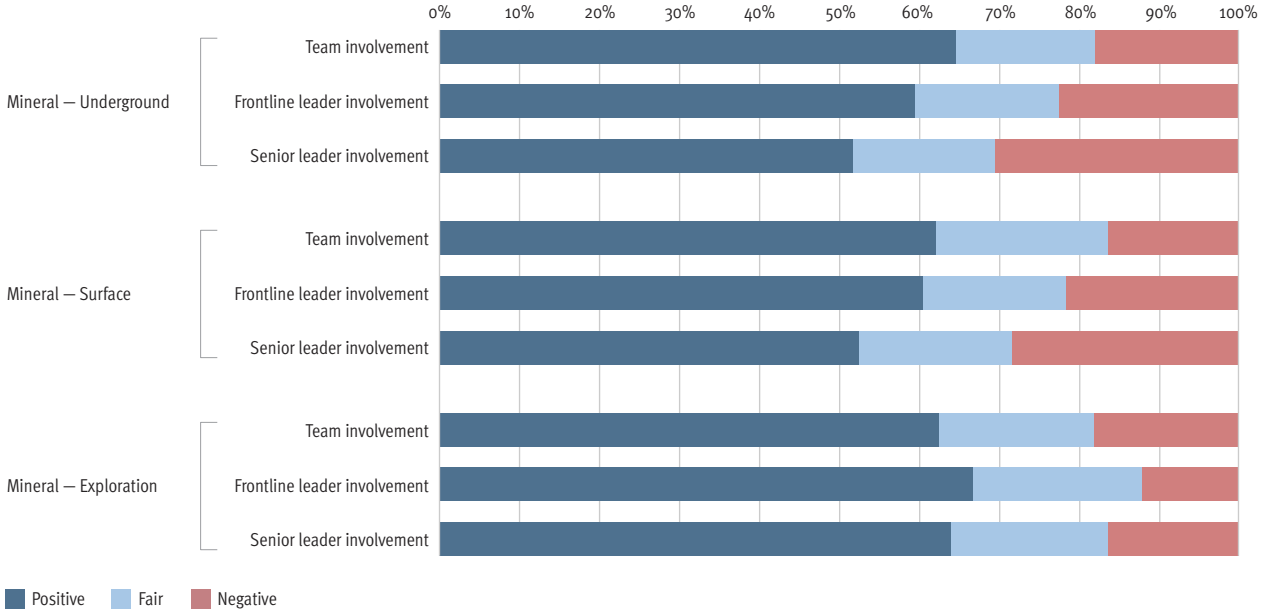
55 Mineral underground sample size ranged from 190 to 198
56 Mineral surface sample size ranged from 757 to 814
57 Mineral exploration sample size ranged from 52 to 58

Frontline leaders	Frontline leaders encourage the team to take appropriate action if something feels unsafe	88% 3.49	92% 3.54	98% 3.78
	Frontline leaders use their knowledge to help the team to recognise and manage hazards and risks	85% 3.39	88% 3.39	96% 3.59
	Frontline leaders consider other health hazards such as bullying, discrimination, fatigue, and mental health	77% 3.08	75% 3.07	94% 3.48
	Frontline leaders work with the team to re-assess hazards and risks when changes occur	80% 3.20	84% 3.23	91% 3.52
	Frontline leaders give the team confidence that risks are being controlled effectively	80% 3.17	83% 3.21	94% 3.52
	Frontline leader risk management	**82%** 3.27	**84%** 3.29	**95%** 3.58
Senior leaders	Senior leaders treat workers' health and safety as a high priority	84% 3.33	87% 3.39	94% 3.71
	Senior leaders provide safe ways for a worker to make a complaint on bullying or harassment, including anonymous options where needed	81% 3.22	79% 3.17	88% 3.48
	Senior leaders ensure safety procedures are consistent with the way work is actually done	72% 2.93	78% 3.10	88% 3.44
	Senior leaders ensure workers are aware of their safety and health obligations under Queensland legislation	79% 3.22	85% 3.30	96% 3.65
	Senior leader risk management	**79%** 3.17	**82%** 3.24	**92%** 3.57

Involvement

Involvement refers to the extent to which the team gets involved in safety, and whether frontline and senior leaders actively involve the workforce.

Figure A9: The percentage of mineral underground, surface, and exploration participants who rated each of the involvement dimensions in the positive, fair, and negative ranges



Key strengths—involvement

Mineral overall:

- My team looks out for each other and supports each other to work safely.
- My team feels comfortable contributing to team safety discussions and meetings.
- Frontline leaders are approachable for informal discussions about safety concerns.

Sub-sectors:

- *Exploration*—Frontline leaders work with the team to achieve their safety goals and responsibilities.
- *Exploration*—Senior leaders are approachable for informal discussions on safety and health concerns.

Key opportunities—involvement

Mineral overall:

- Senior leaders visit the work area/s at appropriate intervals.

Sub-sectors:

- *Underground and surface*—Frontline leaders are approachable for discussions about mental health and wellbeing.
- *Underground and surface*—My team voluntarily participates in safety initiatives to improve safety performance.
- *Underground*—Senior leaders ensure adequate time is provided to support safety initiatives.
- *Underground*—Senior leaders provide opportunities for the workforce to participate in safety initiatives.
- *Underground*—Senior leaders are approachable for informal discussions on safety and health concerns.

Table A10 shows the percentage of mineral participants who selected always and usually for each survey statement within the involvement dimension. A higher percentage of always and usually indicates a more positive score. The mean is also provided from 1 (*rarely*) to 4 (*always*).

Table A10: The percentage of mineral participants who selected always and usually for each survey statement within the involvement dimension

Target group	Survey item	Underground[58]	Surface[59]	Exploration[60]
My team	My team looks out for each other and supports each other to work safely	92% 3.60	94% 3.56	97% 3.66
	My team feels comfortable contributing to team safety discussions and meetings	83% 3.36	87% 3.36	93% 3.62
	My team voluntarily participates in safety initiatives to improve safety performance	76% 3.04	77% 3.07	84% 3.19
	My team considers differing viewpoints from team members	81% 3.14	85% 3.19	91% 3.31
	Team involvement	**83%** **3.29**	**86%** **3.30**	**91%** **3.44**

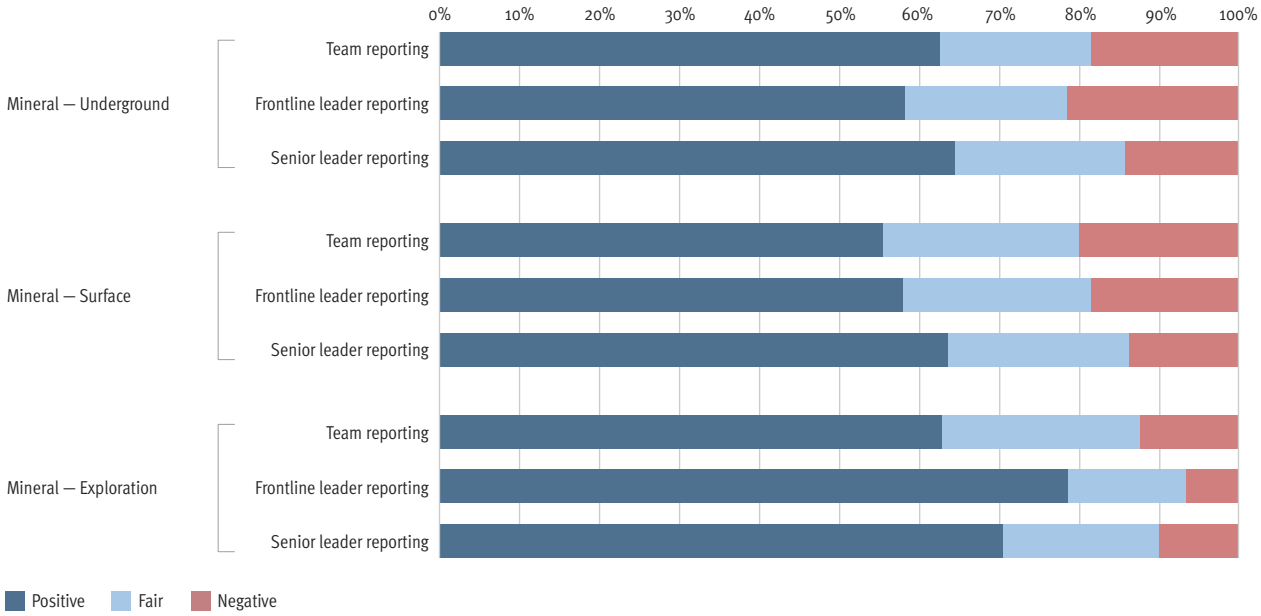
58 Mineral underground sample size ranged from 189 to 198
59 Mineral surface sample size ranged from 757 to 814
60 Mineral exploration sample size ranged from 52 to 58

Frontline leaders	Frontline leaders work with the team to achieve their safety goals and responsibilities	80% 3.16	84% 3.25	96% 3.59
	Frontline leaders regularly initiate team discussions about safety performance	79% 3.12	81% 3.19	87% 3.41
	Frontline leaders are approachable for informal discussions about safety concerns	85% 3.29	86% 3.39	94% 3.56
	Frontline leaders are approachable for discussions about mental health and wellbeing	70% 2.99	76% 3.15	85% 3.28
	Frontline leader involvement	**78%** 3.14	**82%** 3.24	**91%** 3.46
Senior leaders	Senior leaders ensure adequate time is provided to support safety initiatives	75% 3.02	80% 3.12	88% 3.42
	Senior leaders provide opportunities for the workforce to participate in safety initiatives	76% 3.09	80% 3.13	87% 3.48
	Senior leaders are approachable for informal discussions on safety and health concerns	77% 3.09	80% 3.19	90% 3.58
	Senior leaders visit the work area/s at appropriate intervals	60% 2.70	64% 2.78	75% 3.10
	Senior leader involvement	**72%** 2.98	**76%** 3.06	**85%** 3.39

Reporting

Reporting is about whether the team reports safety concerns and the extent to which frontline and senior leaders encourage reporting, support the team to promote, and take action off the back of reporting.

Figure A10: The percentage of mineral underground, surface, and exploration participants who rated each of the reporting dimensions in the positive, fair, and negative ranges



Key strengths—reporting

Mineral overall:

- My team understands their obligation to report all near misses and high potential incidents.
- Frontline leaders encourage the team to report near misses, high potential incidents, and hazards.
- Senior leaders encourage workers to report near misses, high potential incidents, and hazards.
- Senior leaders ensure that all reported near misses and high potential incidents are investigated.
- Senior leaders provide safe ways for a worker to report near misses, high potential incidents, and safety concerns.

Sub-sectors:

- *Exploration*—Frontline leaders communicate to the team the outcomes and lessons learned from near miss or high potential incident investigations.
- *Exploration*—My team feels comfortable to report all near misses and high potential incidents.
- *Exploration*—Frontline leaders support workers throughout the reporting process.
- *Exploration*—Frontline leaders seek the input of the team to find solutions that will stop a near miss or high potential incident from happening again.
- Exploration—My team discusses lessons learned from incidents that have occurred.

Key opportunities—reporting

Mineral overall:

- My team finds the reporting process simple and straightforward.

Sub-sectors:

- *Underground and surface*—Frontline leaders consider unwelcome news as an opportunity to learn and improve.
- *Underground*—Frontline leaders seek the input of the team to find solutions that will stop a near miss or high potential incident from happening again.
- *Underground*—Frontline leaders communicate to the team the outcomes and lessons learned from near miss or high potential incident investigations.

Reporting perspectives

- 84% of mineral participants indicated they knew who to escalate safety concerns to within their workplace.
- 63% of mineral participants indicated they knew who to escalate safety concerns to outside of their workplace.
- 41% of mineral participants indicated that the reporting culture had improved at their sites, 36% indicated that it had stayed the same, and 8% indicated that the reporting culture had declined at their sites.

A similar pattern was observed across mineral sub-sectors.

Table A11 shows the percentage of mineral participants who selected always and usually for each survey statement within the reporting dimension. A higher percentage of always and usually indicates a more positive score. The mean is also provided from 1 (*rarely*) to 4 (*always*).

Table A11: The percentage of mineral participants who selected always and usually for each survey statement within the reporting dimension

Target group	Survey item	Underground[61]	Surface[62]	Exploration[63]
My team	My team understands their obligation to report all near misses and high potential incidents	92% 3.61	92% 3.54	95% 3.75
	My team feels comfortable to report all near misses and high potential incidents	84% 3.33	85% 3.31	93% 3.56
	My team feels comfortable to report any instances of bullying, discrimination, or harassment	80% 3.21	80% 3.15	84% 3.28
	My team reports even when they have already fixed the problem that could cause a high potential incident	85% 3.30	84% 3.25	88% 3.33
	My team seeks advice if they are unsure if something needs to be reported	87% 3.41	88% 3.30	95% 3.40
	My team finds the reporting process simple and straightforward	70% 2.96	74% 2.94	81% 3.00
	My team discusses lessons learned from incidents that have occurred	83% 3.29	84% 3.28	88% 3.54
	Team reporting	**83%** 3.30	**84%** 3.25	**89%** 3.41
Frontline leaders	Frontline leaders encourage the team to report near misses, high potential incidents, and hazards	**88%** 3.54	**93%** 3.60	**96%** 3.78
	Frontline leaders consider unwelcome news as an opportunity to learn and improve	**70%** 2.97	**78%** 3.10	**91%** 3.43
	Frontline leaders support workers throughout the reporting process	**81%** 3.21	**83%** 3.24	**91%** 3.61
	Frontline leaders seek the input of the team to find solutions that will stop a near miss or high potential incident from happening again	**77%** 3.23	**83%** 3.28	**91%** 3.54
	Frontline leaders communicate to the team the outcomes and lessons learned from near miss or high potential incident investigations	**78%** 3.21	**84%** 3.28	**93%** 3.59
	Frontline leader reporting	**79%** 3.23	**84%** 3.30	**92%** 3.59
Senior leaders	Senior leaders encourage workers to report near misses, high potential incidents, and hazards	**88%** 3.52	**92%** 3.59	**94%** 3.67
	Senior leaders ensure that all reported near misses and high potential incidents are investigated	**89%** 3.48	**91%** 3.54	96% 3.67
	Senior leaders provide safe ways for a worker to report near misses, high potential incidents, and safety concerns	**87%** 3.35	**90%** 3.43	**96%** 3.67
	Senior leaders ensure the findings and safety outcomes of a near miss or high potential incident investigation are communicated	**83%** 3.23	**84%** 3.27	**88%** 3.48
	Senior leaders make sure the reporting process is simple and straightforward	**79%** 3.11	**81%** 3.14	**90%** 3.42
	Senior leader reporting	**85%** 3.34	**88%** 3.39	**93%** 3.58

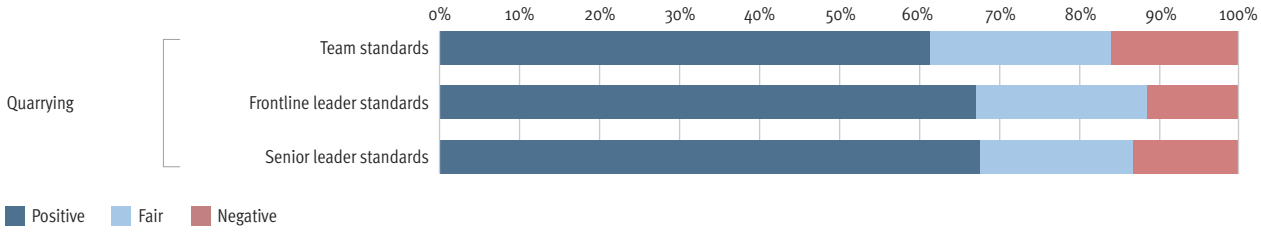
61 Mineral underground sample size ranged from 189 to 198
62 Mineral surface sample size ranged from 756 to 805
63 Mineral exploration sample size ranged from 52 to 57

Quarrying

Standards

Standards refers to whether the team adheres to safety standards, frontline leaders ensure safety compliance, and senior leaders set high safety standards.

Figure A11: The percentage of quarrying participants who rated each of the standards dimensions in the positive, fair, and negative ranges



Key strengths—standards

- My team keeps safety as the first priority at all times.
- Senior leaders ensure that safety procedures are accessible.
- Frontline leaders help the team to resolve production/safety conflicts.
- Senior leaders reinforce that safety standards are not to be compromised to meet production targets.

Key opportunities—standards

No opportunity areas identified.

Table A12 shows the percentage of quarrying participants who selected always and usually for each survey statement within the standards dimension. A higher percentage of always and usually indicates a more positive score. The mean is also provided from 1 (*rarely*) to 4 (*always*).

Table A12: The percentage of quarrying participants who selected always and usually for each survey statement within the standards dimension

Target group	Survey item	Quarrying[64]
My team	My team keeps safety as the first priority at all times	94% 3.54
	My team performs work safely, without taking shortcuts	96% 3.43
	My team understands and follows safety standards and procedures	94% 3.48
	My team questions if something could be done in a better/safer way and communicates these improvements to the appointed supervisor	87% 3.32
	My team supports a respectful working environment that does not accept bullying, discrimination, and harassment	89% 3.43
	My team has received enough training to help them work safely	90% 3.41
	Team standards	91% 3.43

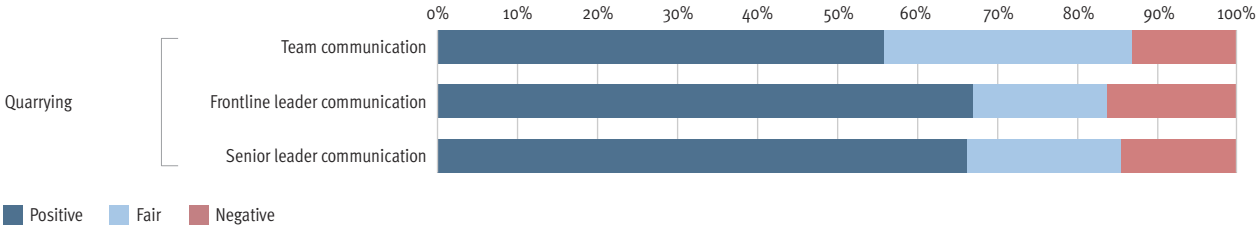
64 Quarrying sample size ranged from 210 to 231

Frontline leaders	Frontline leaders clearly explain to the team what is expected of them to work safely when allocating tasks	92% 3.46
	Frontline leaders inspect and monitor the worksite at appropriate intervals	90% 3.45
	Frontline leaders help the team to resolve production/safety conflicts	91% 3.51
	Frontline leaders encourage respectful workplace behaviours in the team	90% 3.49
	Frontline leaders treat all team members with respect	88% 3.46
	Frontline leader standards	**90%** 3.47
Senior leaders	Senior leaders ensure that safety procedures are easy to understand	**89%** 3.39
	Senior leaders ensure that safety procedures are accessible	**93%** 3.61
	Senior leaders ensure there are realistic timeframes and adequate resources available to get the job done safely	**87%** 3.32
	Senior leaders reinforce that safety standards are not to be compromised to meet production targets	**89%** 3.56
	Senior leaders give workers confidence that complaints of bullying, discrimination, and harassment will be addressed appropriately	**84%** 3.44
	Senior leader standards	**88%** 3.46

Communication

Communication refers to the extent to which the team speaks up about safety concerns, frontline leaders encourage the team to speak up, and senior leaders communicate openly about safety.

Figure A12: The percentage of quarrying participants who rated each of the communication dimensions in the positive, fair, and negative ranges



Key strengths—communication

- Senior leaders regularly share safety communications that reach all personnel.
- My team stops the job if they believe it is unsafe.
- Frontline leaders ensure pre-start safety briefing information is relevant.
- Frontline leaders listen to the team's safety suggestions, concerns, and ideas.
- Frontline leaders act on safety concerns in a timely manner, seeking management support when necessary.
- Senior leaders make sure safety messages are visible, impactful, and useful to workers.

Key opportunities—communication

- My team listens to others' views or concerns and considers others' feedback.

Table A13 shows the percentage of quarrying participants who selected always and usually for each survey statement within the communication dimension. A higher percentage of always and usually indicates a more positive score. The mean is also provided from 1 (*rarely*) to 4 (*always*).

Table A13: The percentage of quarrying participants who selected always and usually for each survey statement within the communication dimension

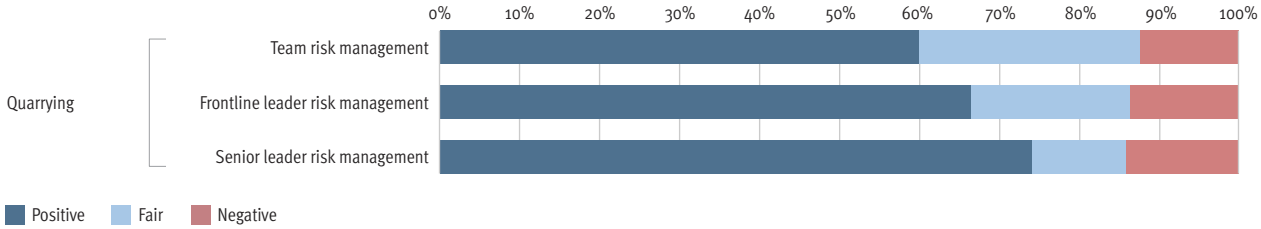
Target group	Survey item	Quarrying[65]
My team	My team stops the job if they believe it is unsafe	92% 3.54
	My team intervenes if they see anyone in an unsafe situation	91% 3.43
	My team asks questions to gain a better understanding of anything that is unclear	89% 3.27
	My team listens to others' views or concerns and considers others' feedback	84% 3.17
	My team feels safe to speak up if they make a mistake	85% 3.23
	Team communication	**88%** 3.33
Frontline leaders	Frontline leaders listen to the team's safety suggestions, concerns, and ideas	91% 3.51
	Frontline leaders provide feedback on the team's safety suggestions, concerns, and ideas	85% 3.34
	Frontline leaders ensure pre-start safety briefing information is relevant	92% 3.58
	Frontline leaders act on safety concerns in a timely manner, seeking management support when necessary	90% 3.54
	Frontline leaders give recognition to good safety behaviours	85% 3.32
	Frontline leaders deal firmly and fairly with poor safety behaviours	87% 3.41
	Frontline leader communication	**88%** 3.45
Senior leaders	Senior leaders provide feedback on concerns raised by the workforce in a timely manner	**86%** 3.34
	Senior leaders regularly share safety communications that reach all personnel	**92%** 3.56
	Senior leaders make sure safety messages are visible, impactful, and useful to workers	**89%** 3.55
	Senior leader communication	**89%** 3.48

65 Quarrying sample size ranged from 211 to 231

Risk management

Risk management dimensions assess whether the team plans for safety, frontline leaders promote risk awareness, and senior leaders control for risk.

Figure A13: The percentage of quarrying participants who rated each of the risk management dimensions in the positive, fair, and negative ranges



Key strengths—risk management

- Frontline leaders encourage the team to take appropriate action if something feels unsafe.
- Frontline leaders use their knowledge to help the team to recognise and manage hazards and risks.
- Senior leaders treat workers' health and safety as a high priority.
- Senior leaders ensure workers are aware of their safety and health obligations under Queensland legislation.
- Senior leaders provide safe ways for a worker to make a complaint on bullying or harassment, including anonymous options where needed.

Key opportunities—risk management

No opportunity areas identified.

Table A14 shows the percentage of quarrying participants who selected always and usually for each survey statement within the risk management dimension. A higher percentage of always and usually indicates a more positive score. The mean is also provided from 1 (*rarely*) to 4 (*always*).

Table A14: The percentage of quarrying participants who selected always and usually for each survey statement within the risk management dimension

Target group	Survey item	Quarrying[66]
My team	My team takes the time to plan the necessary steps to do the job safely	93% 3.41
	My team makes sure the necessary resources are available on the job site before starting work	89% 3.31
	My team identifies potential hazards before starting work	94% 3.45
	My team takes action on hazards or potential hazards	94% 3.47
	My team thinks about what could go wrong when changes occur	89% 3.27
	My teams knows and understands what controls are currently in place that will prevent an incident	93% 3.46
	Team risk management	**92%** **3.39**

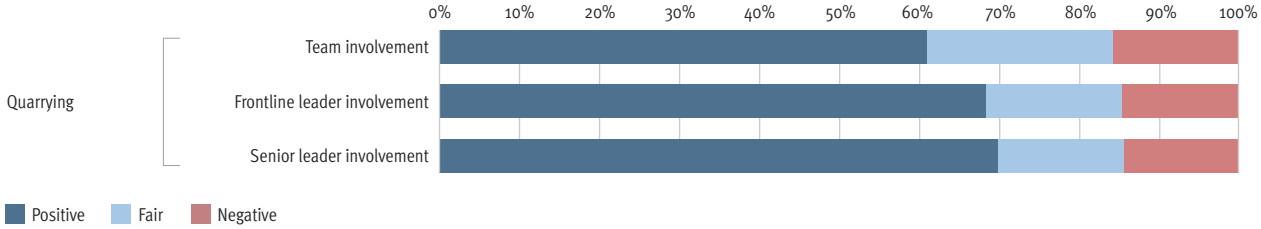
66 Quarrying sample size ranged from 208 to 231

Frontline leaders	Frontline leaders encourage the team to take appropriate action if something feels unsafe	94% 3.63
	Frontline leaders use their knowledge to help the team to recognise and manage hazards and risks	93% 3.62
	Frontline leaders consider other health hazards such as bullying, discrimination, fatigue, and mental health	84% 3.32
	Frontline leaders work with the team to re-assess hazards and risks when changes occur	89% 3.45
	Frontline leaders give the team confidence that risks are being controlled effectively	88% 3.39
	Frontline leader risk management	**90%** 3.48
Senior leaders	Senior leaders treat workers' health and safety as a high priority	92% 3.66
	Senior leaders provide safe ways for a worker to make a complaint on bullying or harassment, including anonymous options where needed	89% 3.51
	Senior leaders ensure safety procedures are consistent with the way work is actually done	87% 3.44
	Senior leaders ensure workers are aware of their safety and health obligations under Queensland legislation	92% 3.62
	Senior leader risk management	**90%** 3.55

Involvement

Involvement refers to the extent to which the team gets involved in safety, and whether frontline and senior leaders actively involve the workforce.

Figure A14: The percentage of quarrying participants who rated each of the involvement dimensions in the positive, fair, and negative ranges



Key strengths—involvement

- My team looks out for each other and supports each other to work safely.
- Frontline leaders are approachable for informal discussions about safety concerns.
- Senior leaders are approachable for informal discussions on safety and health concerns.

Key opportunities—involvement

- My team voluntarily participates in safety initiatives to improve safety performance.
- My team considers differing viewpoints from team members.

Table A15 shows the percentage of quarrying participants who selected always and usually for each survey statement within the involvement dimension. A higher percentage of always and usually indicates a more positive score. The mean is also provided from 1 (*rarely*) to 4 (*always*).

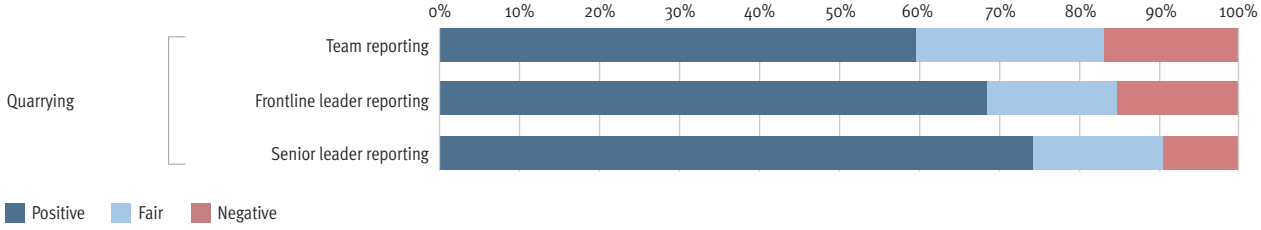
Table A15: The percentage of quarrying participants who selected always and usually for each survey statement within the involvement dimension

Target group	Survey item	Quarrying[67]
My team	My team looks out for each other and supports each other to work safely	95% 3.54
	My team feels comfortable contributing to team safety discussions and meetings	89% 3.45
	My team voluntarily participates in safety initiatives to improve safety performance	81% 3.16
	My team considers differing viewpoints from team members	81% 3.17
	Team involvement	**87%** 3.33
Frontline leaders	Frontline leaders work with the team to achieve their safety goals and responsibilities	91% 3.48
	Frontline leaders regularly initiate team discussions about safety performance	88% 3.36
	Frontline leaders are approachable for informal discussions about safety concerns	92% 3.56
	Frontline leaders are approachable for discussions about mental health and wellbeing	84% 3.38
	Frontline leader involvement	**89%** 3.45
Senior leaders	Senior leaders ensure adequate time is provided to support safety initiatives	90% 3.46
	Senior leaders provide opportunities for the workforce to participate in safety initiatives	87% 3.43
	Senior leaders are approachable for informal discussions on safety and health concerns	88% 3.51
	Senior leaders visit the work area/s at appropriate intervals	84% 3.37
	Senior leader involvement	**87%** 3.44

Reporting

Reporting is about whether the team reports safety concerns and the extent to which frontline and senior leaders encourage reporting, support the team to promote, and take action off the back of reporting.

Figure A15: The percentage of quarrying participants who rated each of the reporting dimensions in the positive, fair, and negative ranges



67 Quarrying sample size ranged from 208 to 231

Key strengths—reporting

- Senior leaders encourage workers to report near misses, high potential incidents, and hazards.
- Senior leaders ensure that all reported near misses and high potential incidents are investigated.
- My team understands their obligation to report all near misses and high potential incidents.
- Senior leaders provide safe ways for a worker to report near misses, high potential incidents, and safety concerns.
- Frontline leaders encourage the team to report near misses, high potential incidents, and hazards.
- Senior leaders ensure the findings and safety outcomes of a near miss or high potential incident investigation are communicated.

Key opportunities—reporting

- My team finds the reporting process simple and straightforward.

Reporting perspectives

- 88% of quarrying participants indicated they knew who to escalate safety concerns to within their workplace.
- 77% of quarrying participants indicated they knew who to escalate safety concerns to outside of their workplace.
- More than half of quarrying participants (56%) indicated that the reporting culture had improved at their sites, 29% indicated that the reporting culture had stayed the same, and 4% indicated that reporting culture had declined at their sites.

Table A16 shows the percentage of quarrying participants who selected always and usually for each survey statement within the reporting dimension. A higher percentage of always and usually indicates a more positive score. The mean is also provided from 1 (*rarely*) to 4 (*always*).

Table A16: The percentage of quarrying participants who selected always and usually for each survey statement within the reporting dimension

Target group	Survey item	Quarrying[68]
My team	My team understands their obligation to report all near misses and high potential incidents	93% 3.61
	My team feels comfortable to report all near misses and high potential incidents	92% 3.49
	My team feels comfortable to report any instances of bullying, discrimination, or harassment	83% 3.30
	My team reports even when they have already fixed the problem that could cause a high potential incident	86% 3.30
	My team seeks advice if they are unsure if something needs to be reported	88% 3.31
	My team finds the reporting process simple and straightforward	81% 3.07
	My team discusses lessons learned from incidents that have occurred	85% 3.34
	Team reporting	**87%** **3.35**

68 Quarrying sample size ranged from 209 to 229

Frontline leaders	Frontline leaders encourage the team to report near misses, high potential incidents, and hazards	93% 3.65
	Frontline leaders consider unwelcome news as an opportunity to learn and improve	87% 3.33
	Frontline leaders support workers throughout the reporting process	90% 3.53
	Frontline leaders seek the input of the team to find solutions that will stop a near miss or high potential incident from happening again	89% 3.51
	Frontline leaders communicate to the team the outcomes and lessons learned from near miss or high potential incident investigations	89% 3.52
	Frontline leader reporting	90% 3.51
Senior leaders	Senior leaders encourage workers to report near misses, high potential incidents, and hazards	95% 3.70
	Senior leaders ensure that all reported near misses and high potential incidents are investigated	94% 3.69
	Senior leaders provide safe ways for a worker to report near misses, high potential incidents, and safety concerns	93% 3.67
	Senior leaders ensure the findings and safety outcomes of a near miss or high potential incident investigation are communicated	92% 3.58
	Senior leaders make sure the reporting process is simple and straightforward	89% 3.48
	Senior leader reporting	92% 3.62

Appendix B—Suggested areas of opportunity from participants

Participants were given the opportunity to write their own response to the question, *If there was one thing to focus on that would improve reporting at your site, what would it be?* In total, 4064 participants answered the question, providing 5062 mentions of focus areas. There were 3757 participants who did not answer the question.

Analysis was performed, with responses categorised and sorted into related topic areas. The themes identified in the responses were used to provide further context to the survey results. Open text data provides a more in-depth view of the perspectives of participants, allowing freedom to respond on what matters to them most without conforming to a rigid response structure such as a survey scale question.

The relevance of a theme to a sector was assessed by the frequency of mentions. The analysis also considered if any demographic group formed a large majority in the response. Where a finding was identified as specific to a demographic group, the finding recognises the group in the description—for example, frontline workers. If there was no specific demographic group contributing the majority of responses within a theme, the finding refers to participants broadly.

There was a broad range of suggestions from all sectors. Due to the size of the coal sector, more findings were identified that are applicable to that area.

As the question explicitly asked participants to suggest an area of improvement, suggestions from participants were largely on areas of opportunity. Although 39% of mentions did not focus on improvements to reporting specifically, but rather on improvements that could be made within the workplace or within the industry as a whole, these responses provided insight on broader safety culture and were included in the analysis. Quotes provided in this report are samples that reflected the overall sentiment of participants on the theme discussed.

Though the question was looking for areas of improvement, there were 203 responses that suggested participants were satisfied with reporting at their sites, with 63% of these positive mentions coming from frontline workers—for example, "[mine site] is a great, safe place to work; at this time I have no improvement ideas," and "I feel comfortable to speak out when I feel unsafe." Another 114 participants responded to the question but specified they were unable to think of a suggestion.

Due to the broad range of response to the question, the report focused only on frequently mentioned themes and consistent themes across sectors. Listed in Table B1 are other themes that were identified.

Table B1 outlines the frequently mentioned improvement suggestions, with the number of mentions across mining industry overall and each of the sectors.

Table B1: Frequently mentioned improvement suggestions

Suggested area of improvement[69]	Overall[70]	Coal	Mineral	Quarry
Reporting systems	586	441	125	16
Fear of reporting	465	388	65	9
Providing feedback on reports	431	352	69	10
Production planning and resourcing	275	229	42	3
Reporting training and support	246	181	56	9
General communication (excl. reporting)	231	153	68	10
Workplace culture	216	190	24	1
Addressing incidents and hazards	213	173	34	6
Satisfied with reporting on their site	203	141	38	20
Positive reinforcement	202	137	52	13
Reporting outcomes	184	150	32	2
Leadership involvement in safety	169	117	49	3
Listening to workforce	133	96	30	6
Workplace training (excl. reporting)	126	114	8	3
Psychosocial hazards	119	89	24	4
Leadership behaviours	107	83	22	2
Investigations	105	74	28	3
Reward schemes	101	82	16	3
Anonymity and confidentiality	100	76	21	2
Equipment and facilities	100	82	14	4
Leadership training and experience	92	67	23	1
Systems and information	81	60	17	4
Health and wellbeing	72	62	8	2
Workforce involvement in safety	52	41	9	2
Other[71]	50	40	8	2

69 Table excludes counts for no suggestions and themes with less than 50 mentions
70 Overall counts include those who could not be identified to specific sector so the sum of each sector will not always be equal to the overall count
71 The *other* category contained a wide range of responses that did not contribute to any theme

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