



Resources  
Safety & Health  
Queensland

# Biannual Health Surveillance Report

March 2024

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*Disclaimer: The data contained within this report is point in time as at 31 December 2023. Due to the flow on effect of some reporting, changes may occur between reports as further information is received.*



## INTRODUCTION

Resources Safety and Health Queensland (RSHQ) advances its vision of zero serious harm by providing effective risk-based safety and health regulation and promoting improved health outcomes. This includes analysis and sharing of health surveillance data RSHQ collects.

The objective of reporting this information is to inform on the effectiveness of controls that aim to prevent health harms and to support RSHQ's risk-based regulatory activity. The report continues RSHQ's monitoring of occupational lung diseases (in particular, mine dust lung disease) and starts to broaden reporting to other health harms.

Previous reports have focused on mine dust lung diseases (MDLDs) and have highlighted trends in disease distribution across mine sector and mine type, focussing on work experience trends and cumulative exposure.

These reports have also introduced other initiatives such as RSHQ's focus on the effective management of psychosocial hazards, in particular sexual assault, and sexual harassment in the workplace.

The previous report introduced ResHealth and how ResHealth will assist RSHQ in promoting improved health outcomes.

This report continues to expand on these topics with the addition of further review of multiple MDLDs and their impact on disease distribution.

The key findings from this report include:

- As at 31 December 2023, 42,000 health assessments for coal mine workers have been completed in ResHealth since 1 April 2023.
- Opportunities exist to improve management of psychosocial hazard risks.
- Reports of MDLDs continue to increase, driven by uptake of free lung checks offered to retired and former workers.
- Chronic obstructive pulmonary disease (COPD) remains the most common MDLD diagnosed across all sectors for both current and former workers.
- Analysis of workers diagnosed with multiple MDLDs has added to our understanding of current disease trends.

Reports or complaints of sexual harassment and assault can be made via RSHQ's dedicated phonenumber – 1300 581 077, or by emailing a completed [complaint form](#) to [complaints@rshq.qld.gov.au](mailto:complaints@rshq.qld.gov.au).

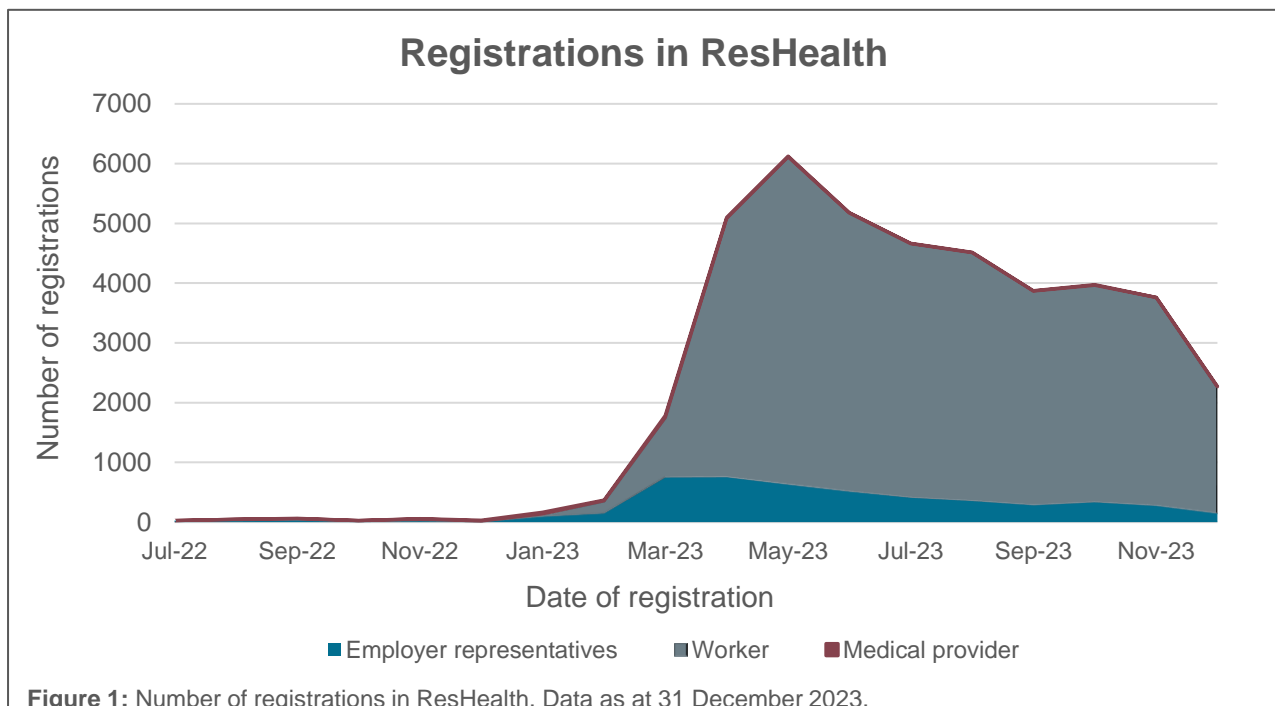


ResHealth is the new online platform for health assessments completed under the [Coal Mine Workers' Health Scheme \(CMWHS\)](#). This system allows for employers, workers, and medical providers to complete coal mine worker health assessments in a secure online environment. Since 1 April 2023, ResHealth is the approved form for all coal mine worker health assessments. As of 31 December 2023, over 42,000 health assessments are now completed in ResHealth.

42,000 individuals have registered in ResHealth, which is an increase of over 23,000 since the last report. This includes over 5,000 employer representatives (across more than 3,000 employing companies), over 260 medical providers and over 37,000 coal mine workers (see **Figure 1**). ResHealth registrations from workers continue at over 3,600 registrations each month. As expected, new registrations did reduce in the Christmas and New Year holiday period.

RSHQ has developed a range of resources to provide ongoing support to stakeholders during the transition to ResHealth. Communications to stakeholders continue with topics of interest for employers and FAQs updated quarterly, covering areas such as: managing appointments; change of employer; and registering an employer's workforce. The latest can be copy found at the following [link](#).

You can find out more about ResHealth on the [RSHQ website](#).





## PSYCHOSOCIAL HAZARDS

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RSHQ has continued its focus on regulating exposure to psychosocial hazards in Queensland's resources industry, with capabilities and activities being expanded in this priority area. This has included opportunities to increase industry awareness, gaining greater insight through reporting mechanisms and collaboration with industry experts and other government agencies to facilitate more effective management of psychosocial hazard risks.

### Understanding psychosocial hazards in the resources industry

RSHQ has increased its understanding of exposures to psychosocial hazards through industry insights, reports of exposures to psychosocial hazards and, where appropriate, investigative mechanisms (in accordance with the wishes of affected persons). As a result, some learnings relating to potential psychosocial hazard exposures have emerged, including:

- Exposures may include multiple psychosocial hazards, which can contribute to increased risk of harm to workers.
- Psychosocial hazard exposures have related to organisational justice, workplace relationships, support, supervision, environmental conditions, and harassment, including sexual harassment.
- Use of power dynamics may be used to intimidate and/or offend workers.
- The extent of internal safety and health investigations and implementation of appropriate controls following worker reports and complaints relating to psychosocial hazards is not always adequate.
- There is fear of raising a safety and health issue involving psychosocial hazards.

To ensure exposure to psychosocial hazards are effectively managed to an acceptable level, robust systems for managing the risks are required. Further information about managing psychosocial hazards in Queensland's resources industry can be found on [RSHQ's website](#).

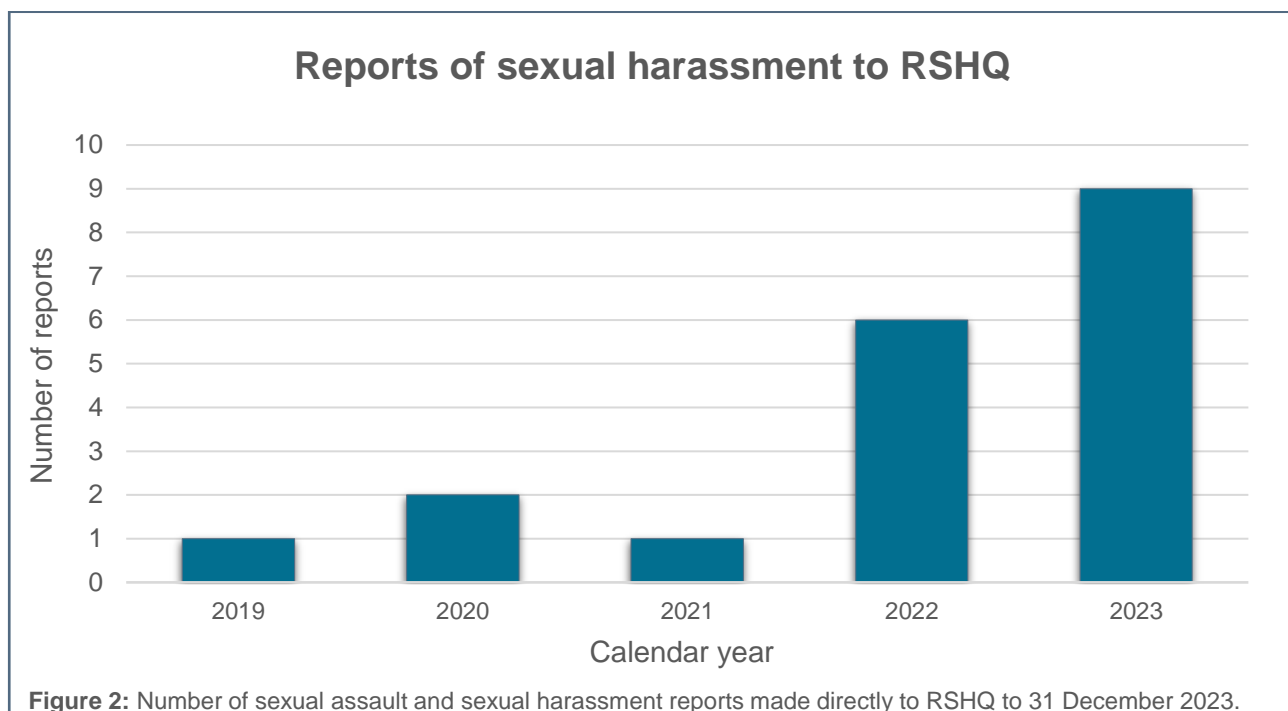
### Sexual assault and sexual harassment

RSHQ continues to recognise and work towards the elimination of sexual assault and sexual harassment in Queensland's resources industry. Reporting of sexual assault and sexual harassment to RSHQ is encouraged and since 2019 there have been 19 reports of sexual harassment. These reports have increased from one in 2021 to nine in 2023 (see **Figure 2**). This increase corresponds with greater awareness within industry and RSHQ's

establishment of a dedicated reporting framework for reports and complaints of sexual harassment.

While this increase is noted, RSHQ acknowledges this level of reporting is not representative of the full extent of sexual harassment incidents. For clarity, transparency and to ensure currency of information, data in **Figure 2** has been updated to only represent incident reports or complaints of sexual harassment made directly to RSHQ from sites or workers. Data from the Queensland Police Service (QPS) that was previously included will be considered for future reports as it becomes available.

A breakdown of types of sexual assault and sexual harassment reported to RSHQ is also provided in **Figure 3**, with a wide variety of types being represented.



### Types of sexual harassment reported to RSHQ

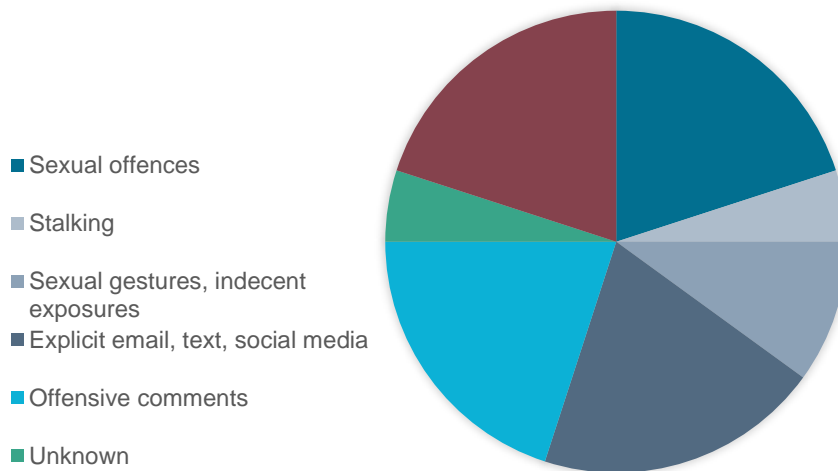


Figure 3: Types of sexual assault and sexual harassment reported to RSHQ through to 31 December 2023.

### Reports to RSHQ

RSHQ reminds industry and affected individuals that incident reports and complaints relating to psychosocial hazards can be made via RSHQ's dedicated reporting mechanism, either via phone on 1300 581 077 or via email to [complaints@rshq.qld.gov.au](mailto:complaints@rshq.qld.gov.au).

Affected persons can make reports and complaints confidentially and will be informed of procedures for protecting their anonymity. Processes for responding to reports and complaints are designed to be victim-survivor centric and person-centred, prioritising safety and choice for affected persons.

Singular or repeated exposure to psychosocial hazards can cause, or have the potential to cause, significant adverse effects on a worker's physical and/or psychological health and safety. These exposures, if determined to meet the definition of a reportable incident, must be reported to RSHQ. Site Senior Executives (SSEs) are advised to exercise their judgment in relation to relevant legislative requirements. If in doubt, report the incident. Clarification about reporting incidents involving psychosocial hazards can be sought on 1300 581 077.

### Regulatory activities

#### Increasing awareness and sharing learnings

The Coal Occupational Health and Hygiene Network Forum held in Emerald on Tuesday 14 November 2023 focused on psychosocial hazards. The forum included presentations

from industry representatives, experts in this field and RSHQ, providing an opportunity to share learnings and best practice in effectively managing the risks of psychosocial hazards.

### **Guideline on managing the risks of sexual harassment.**

RSHQ is continuing to work with external experts to develop a guideline for managing the risks of workplace sexual harassment in Queensland's resources industry. Initial stakeholder consultation has commenced, with further opportunities for consultation to be communicated in coming months. In anticipation of the guideline's release later in 2024, RSHQ expects that Queensland resource operators continue to take proactive action to effectively manage the risks of exposure to workplace sexual harassment.

### **Sexual harassment interagency working group**

Collaboration with other government agencies continues, allowing insights and learnings related to workplace sexual assault and sexual harassment to be shared. The working group consists of representatives from the Office of Industrial Relations, Queensland Police Service, Queensland Health, Department of Justice and Attorney-General, the Queensland Human Rights Commission and SafeWork NSW's Respect at Work Taskforce.

The working group has developed a [Queensland sexual harassment regulator map](#). This map outlines information about each agency's:

- legislative responsibilities
- resources for employers and workers
- reports and complaints process
- role in regulating and/or responding to reports of sexual assault and sexual harassment.
- possible enforcement outcomes.

There can often be confusion about who to contact regarding issues relating to sexual harassment. As such, this regulator map is an important resource for increasing broader understanding about the roles of the varying government agencies, helping to ensure a more streamlined process for industry representatives and individuals with queries and reports relating to sexual assault and sexual harassment in the workplace.

### **Consultation on clarifying obligations to manage psychosocial hazards.**

RSHQ would like to thank stakeholders for their feedback regarding RSHQ's [discussion paper](#) on clarifying obligations to manage psychosocial hazards in the Queensland resources industry, released in June 2023. RSHQ has published stakeholder feedback from the discussion paper on our [consultation](#) webpage and carefully considered the views



shared in the feedback received. Further information on next steps will be communicated in the coming months.

### **Compliance activity**

RSHQ will be undertaking proactive compliance activities throughout 2024 to assess how sites are managing the risks of exposure to psychosocial hazards. RSHQ expects that sites will have documented systems in place to manage the risks of psychosocial hazards to an acceptable level. The findings from the audit may lead to a variety of outcomes, including:

- developing stronger engagement with industry about these matters
- providing advice and education to promote improved management of risks.
- potential compliance or enforcement action
- enhancing the understanding of psychosocial hazards in Queensland resources industry.



## MDLD CASE SUMMARY

MDLD cases are reported to RSHQ from a variety of sources that include health assessments, the workers' compensation scheme, site senior executives (SSE) and Queensland Health's Notifiable Dust Lung Disease (NDLD) Register.

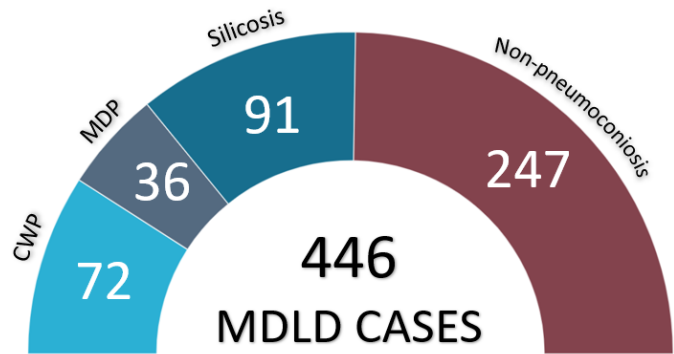
In 2023, changes to the Mining and Quarrying Safety and Health Regulation 2017 introduced an approved form for

mineral mine and quarry (MMQ) SSEs to use when reporting cases of prescribed diseases to RSHQ. The approved form now captures additional mandatory information including the workers' position and previous work experience. Over time, these changes will allow RSHQ to provide greater insights into MDLD trends among workers in the MMQ sector.

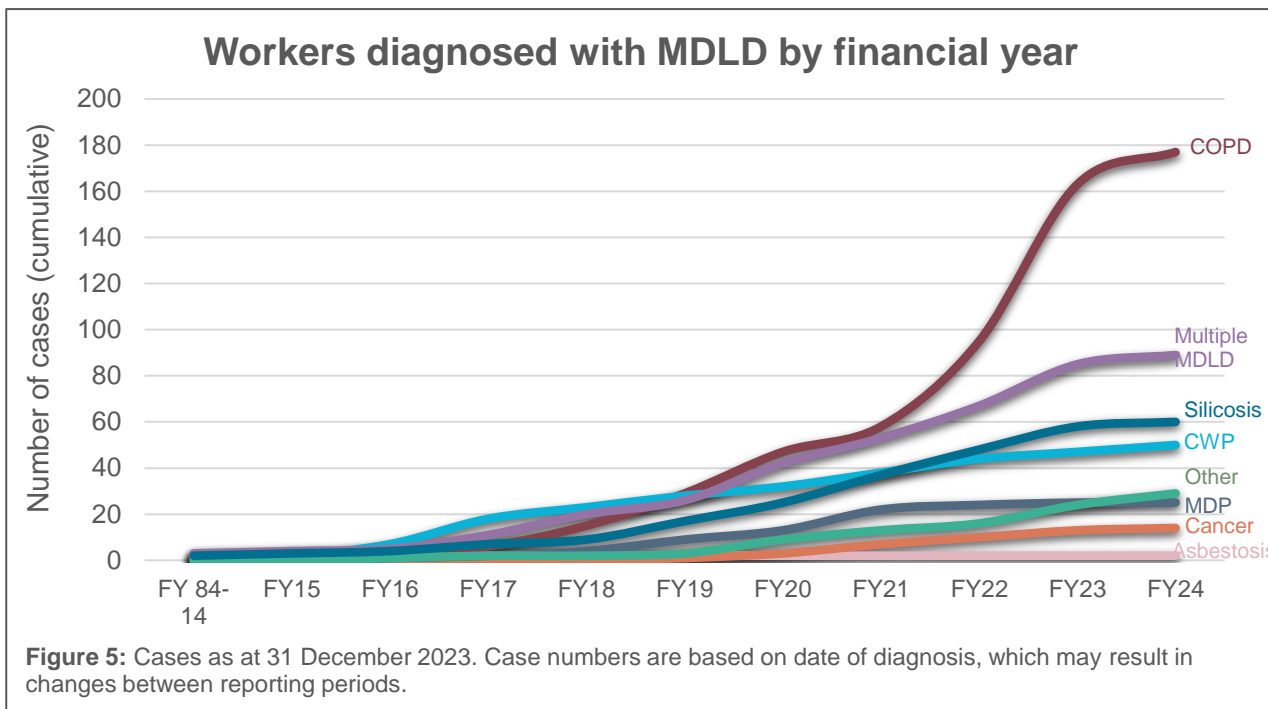
As of 31 December 2023, 446 workers with MDLD have been reported to RSHQ since 1984 for both current and former workers across the coal, mineral mine, and quarry sectors (see **Figure 4**). This is an increase of 46 workers with disease since the last report. MDLD among those screened through the former worker program accounted for 39 per cent of workers reported in the last six months.

COPD remains the most common disease type reported among diagnosed workers across all sectors for both current and former workers (see **Figure 5**). Mine or quarry-related COPD increased by 31 cases in the last six months. Some of these incidences of COPD were diagnosed in 2022-23 and later reported to RSHQ. These workers are not all smokers (see [Case Study 1](#)). Some may work in positions that have additional atmospheric contaminant exposures. In addition to this, most workers within the 'multiple MDLD' category have also been reported with COPD (see **Figure 5**).

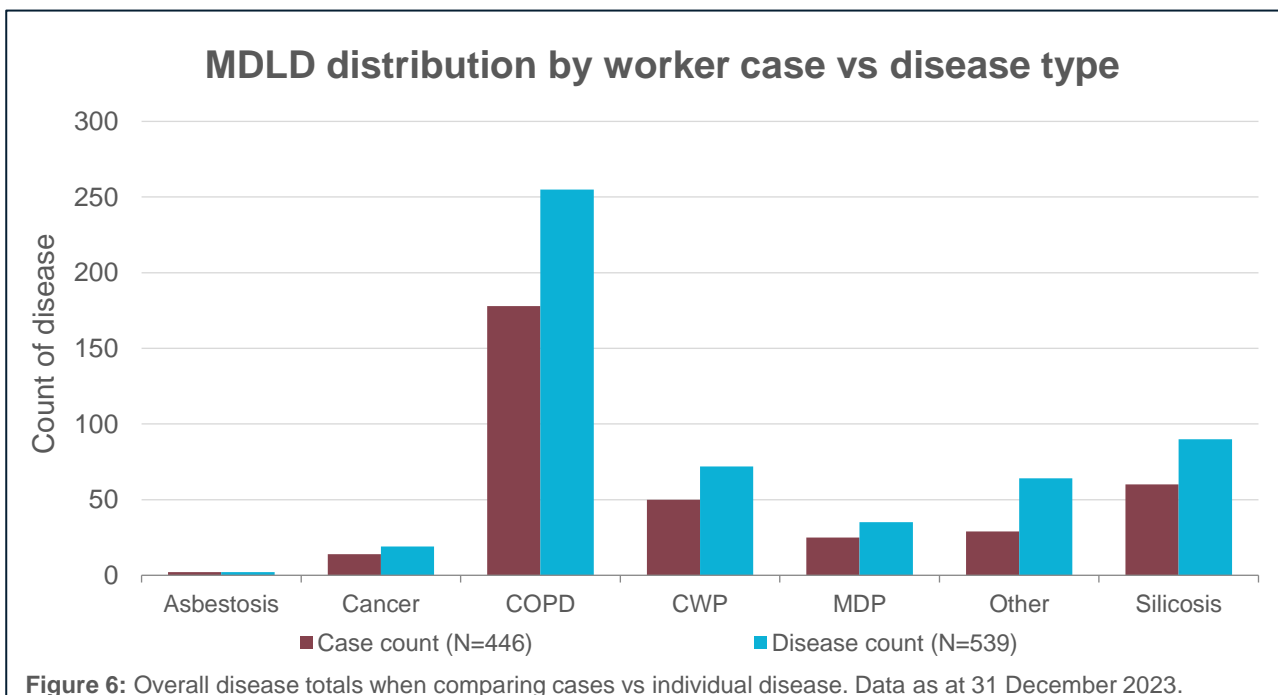
As noted in the last report, workers diagnosed with multiple MDLDs have been a steady contributor to case numbers over recent years. The most common disease combination is COPD and a pneumoconiosis, such as silicosis or coal workers' pneumoconiosis (CWP). Among the 88 workers who have been diagnosed with multiple MDLD, 179 individual disease incidences were diagnosed. To understand this pattern further and the impacts on disease distribution, workers' cases were reviewed by individual incidences of disease. This allows for the diseases contained within multiple MDLD to be distributed within their relevant categories and enables further investigation when tracking and understanding disease trends.



**Figure 4:** Assigned pneumoconiosis category (includes Multiple MDLD)



The difference between worker case count and disease count is displayed in **Figure 6**. This more clearly highlights the proportion of workers diagnosed with COPD, singularly or in combination with other diseases. Approximately 30 per cent of COPD instances are diagnosed in conjunction with other disease types. Similarly, one third of workers diagnosed with CWP and silicosis cases are also diagnosed with other conditions (see **Figure 6**). As these adjustments in disease count are at similar proportions, this has not resulted in a change in relative distribution of these disease categories (see **Figure 7**).

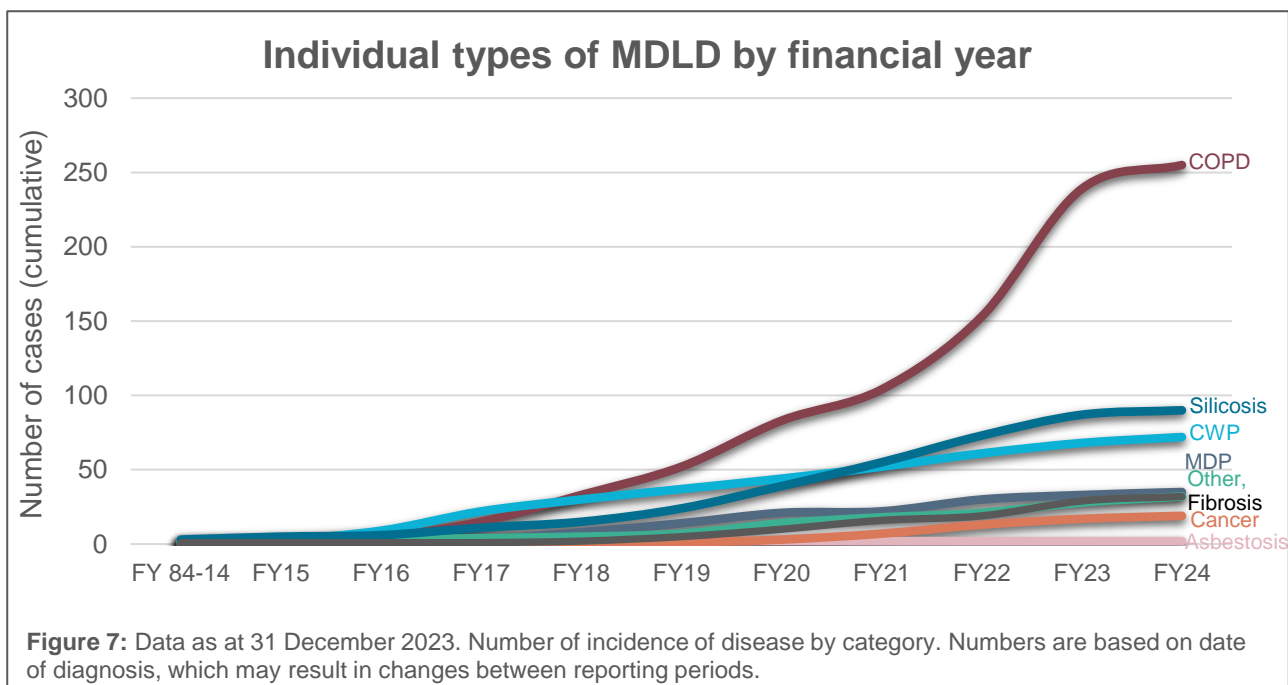


Proportionally, diseases diagnosed in the other MDLD category are most likely to be diagnosed in conjunction with another disease (55 per cent of other MDLD cases).

Considering the incidences of these diseases separately to workers highlights the growing number of these miscellaneous diseases in recent years (see **Figure 7**). The most common diseases in the other MDLD category are fibroses such as diffuse dust-related fibrosis (DDF) or pulmonary fibrosis. These work-related diseases cause scarring and thickening of the lung air sacks (alveoli) in a different way or apply where the contaminant type may be uncertain and therefore cannot be attributed to the associated name e.g. coal workers' pneumoconiosis for coal dust. Half of all incidences of other MDLDs are for these conditions. There are sufficient numbers of fibroses for these to be presented separately from the remaining other MDLDs (see **Figure 7**). The remaining diseases in the other MDLD category include conditions such as occupational asthma, scleroderma, and sarcoidosis, as well as instances of interstitial lung disease where a specific condition is not recorded.

The most common combination for other MDLDs is a fibrosis such as DDF, and COPD. These can be found in a variety of positions within production and maintenance areas across all mine types (see [Case Study 2](#)). More than one category of other MDLD may also appear in a multiple diagnosis, which adds to the incidence of other MDLD.

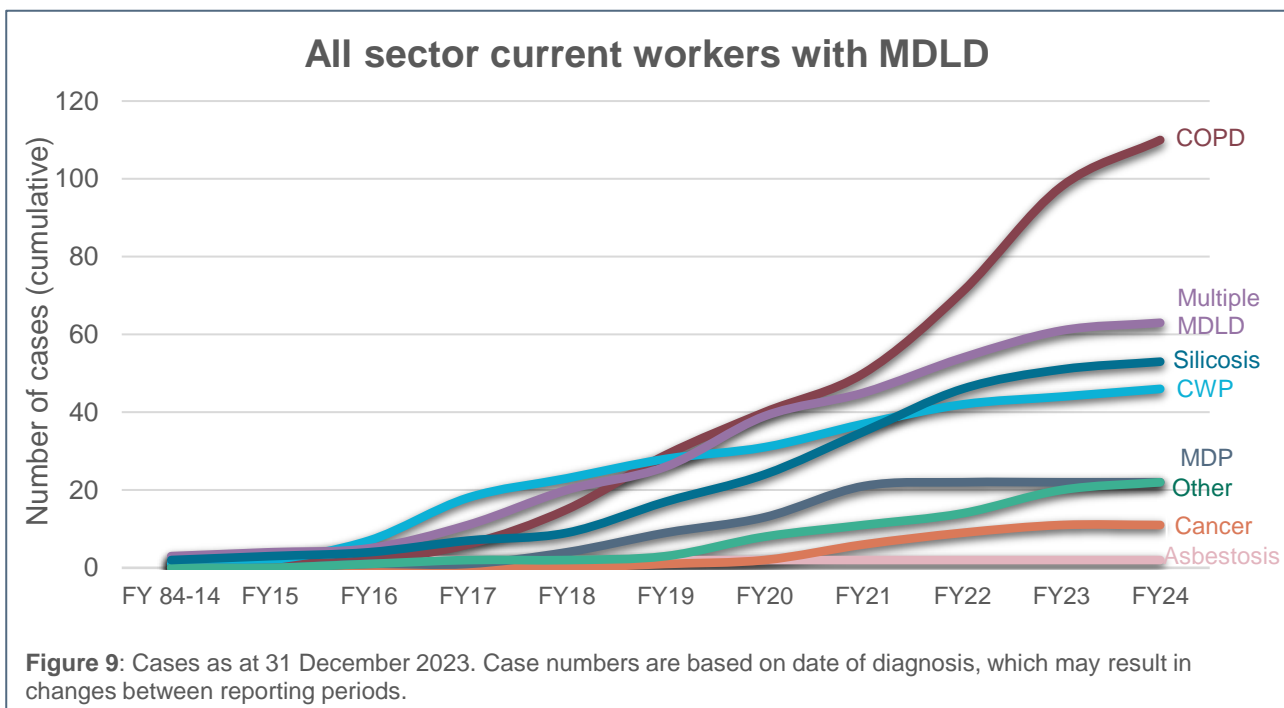
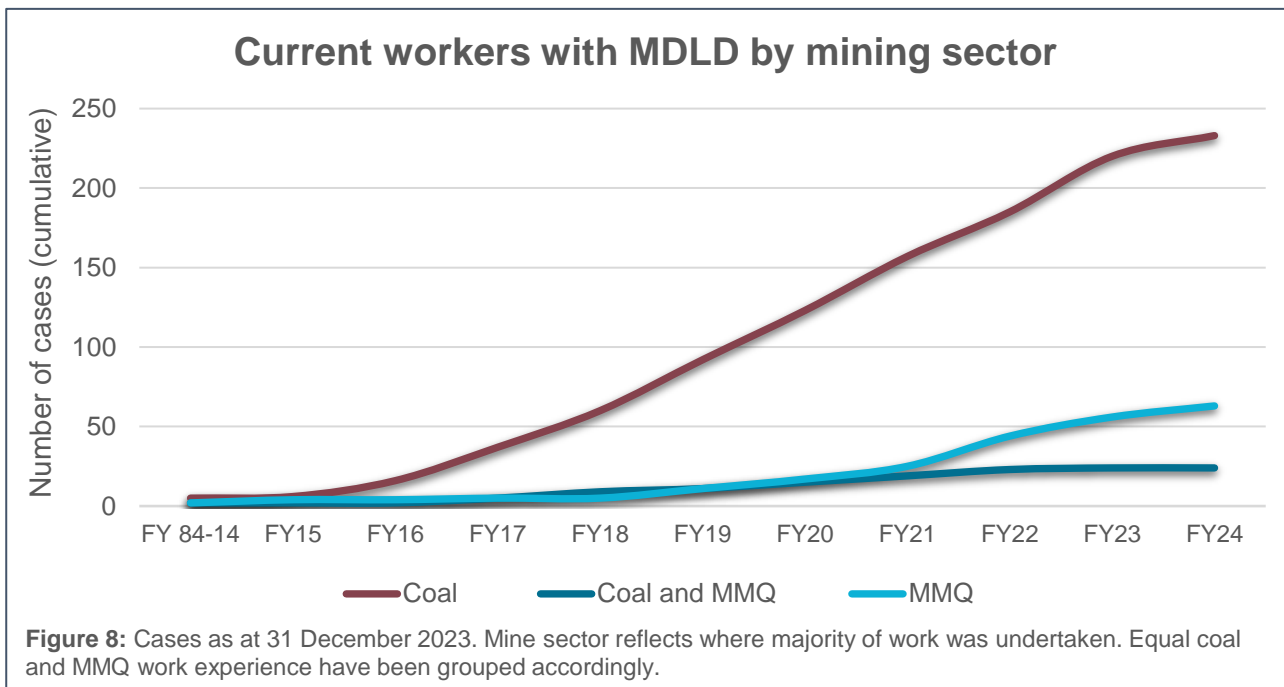
## MDLD case summary for current workers



Coal mine workers continue to represent the majority of reported MDLD cases among current workers. Since the last report, 19 of the 26 current workers diagnosed with MDLD have coal mining work histories (see **Figure 8**). This reflects the established mandatory

respiratory screening program in place for the coal mining sector. The number of MDLD cases among current MMQ workers also continues to increase after the implementation of mandatory respiratory health surveillance for this sector in 2022.

Among current workers, reports of COPD continue as seen in previous years (see **Figure 9**). Since the last report, 18 of the 26 cases of reported disease in current workers were diagnosed with COPD, including those identified as multiple MDLDs (see **Figure 9**). This makes up 69 per cent of the diagnoses so far, this financial year. Other disease types such as CWP and silicosis were also diagnosed during this period (see **Figure 9**).



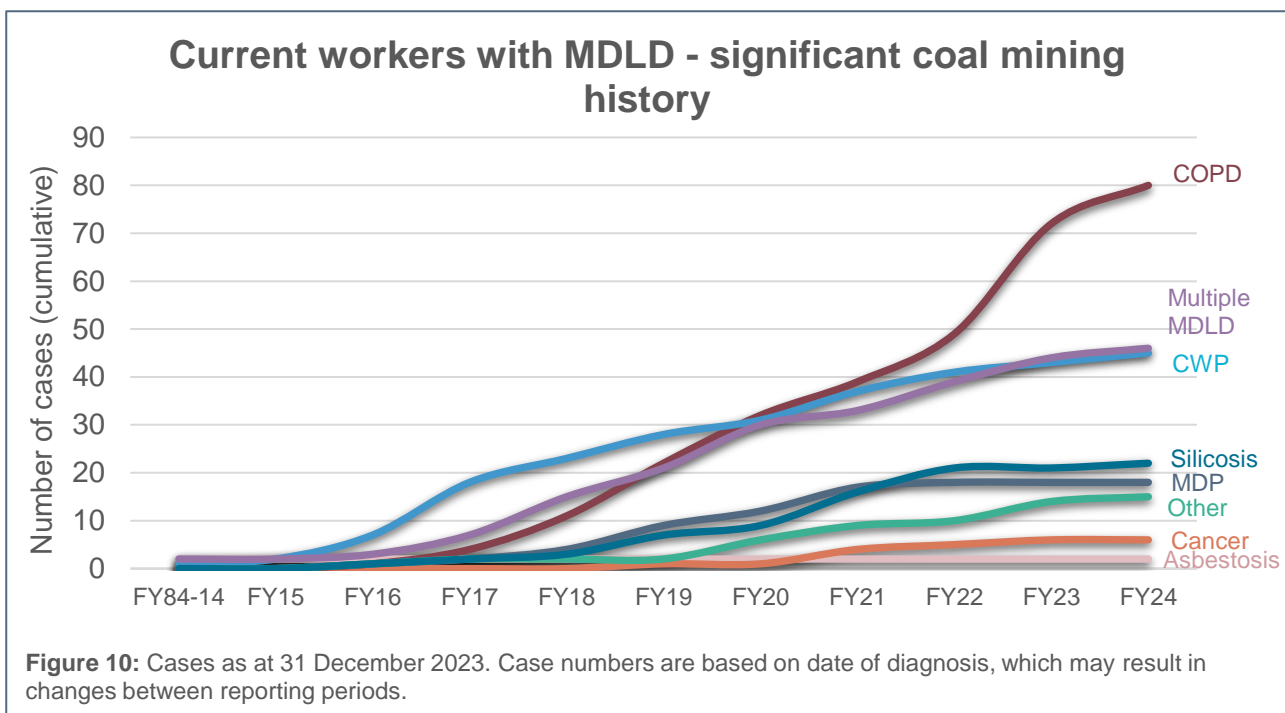


# COAL SECTOR

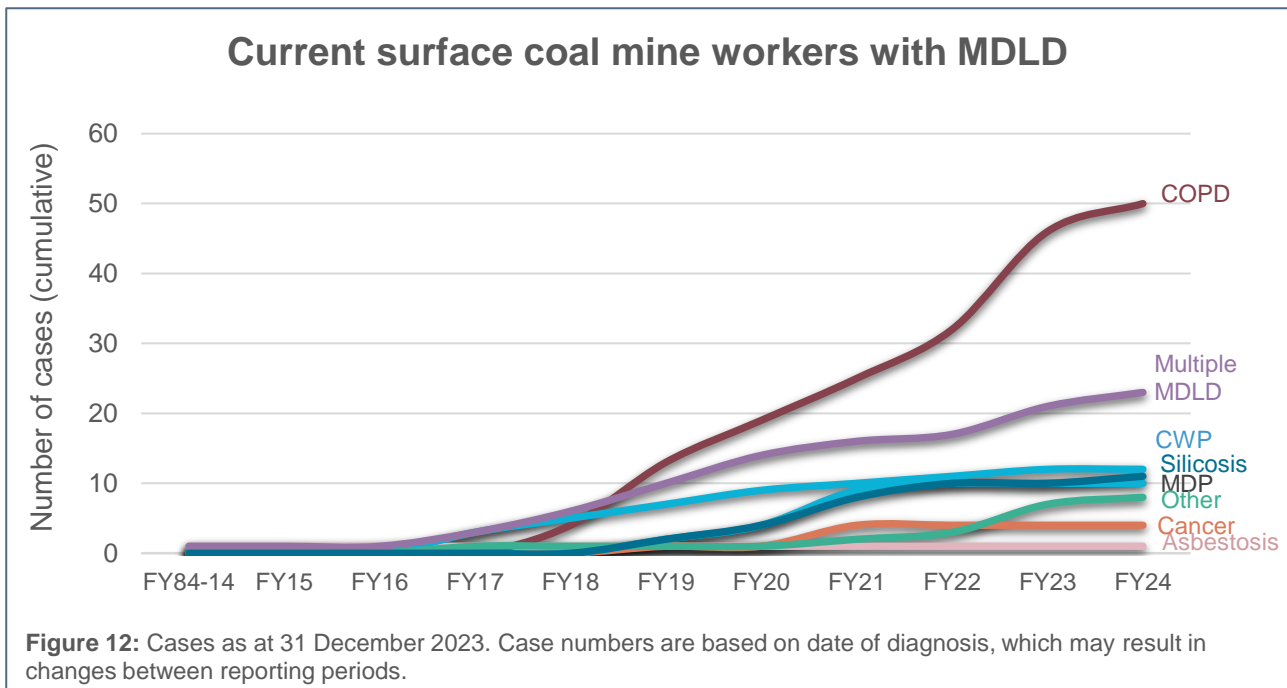
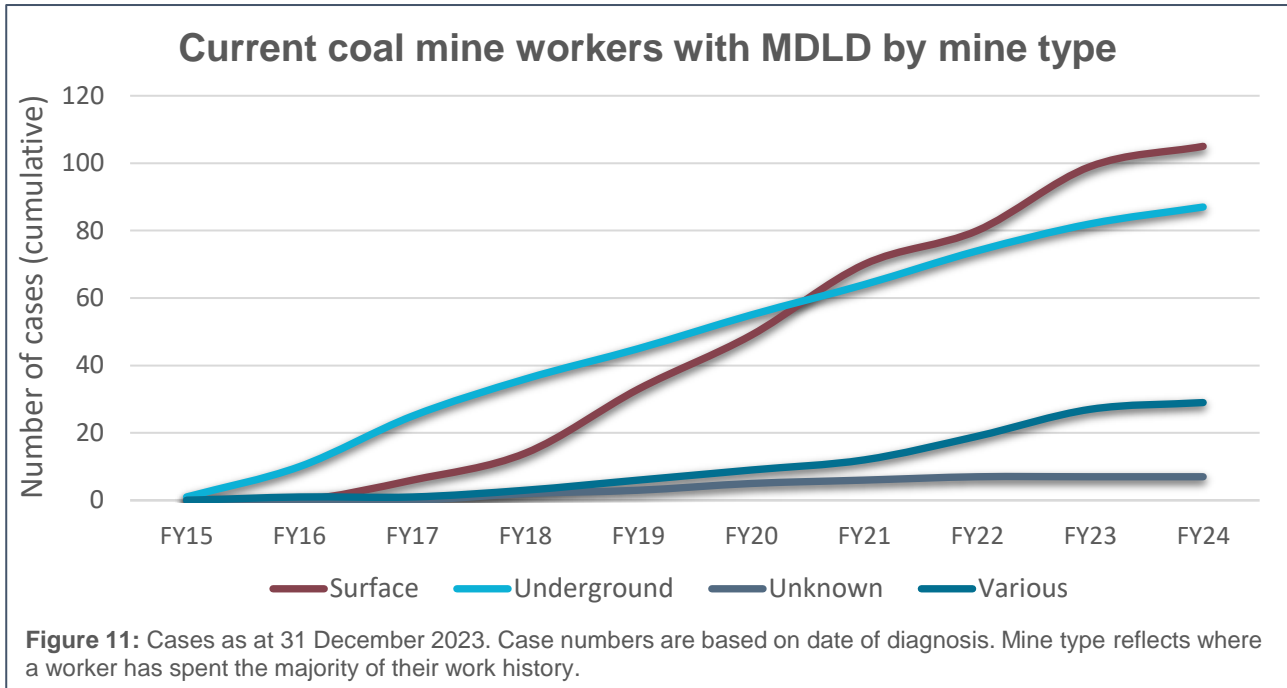
## Current workers with significant coal mining history

### Disease distribution for current workers

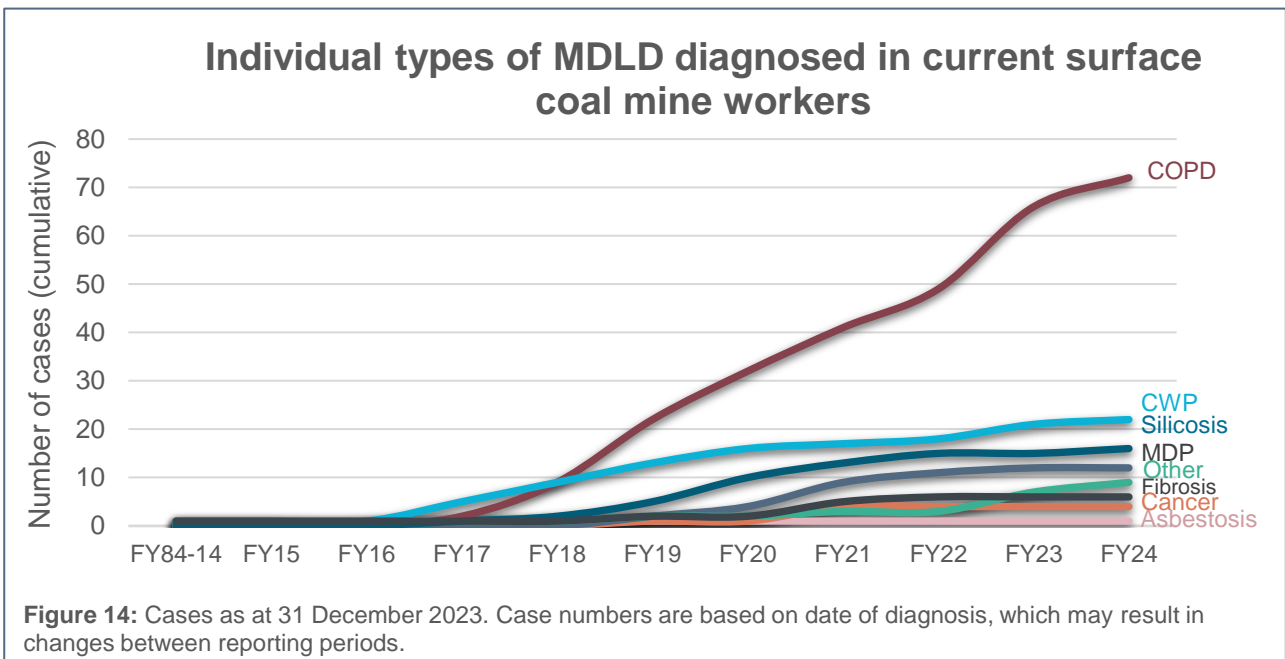
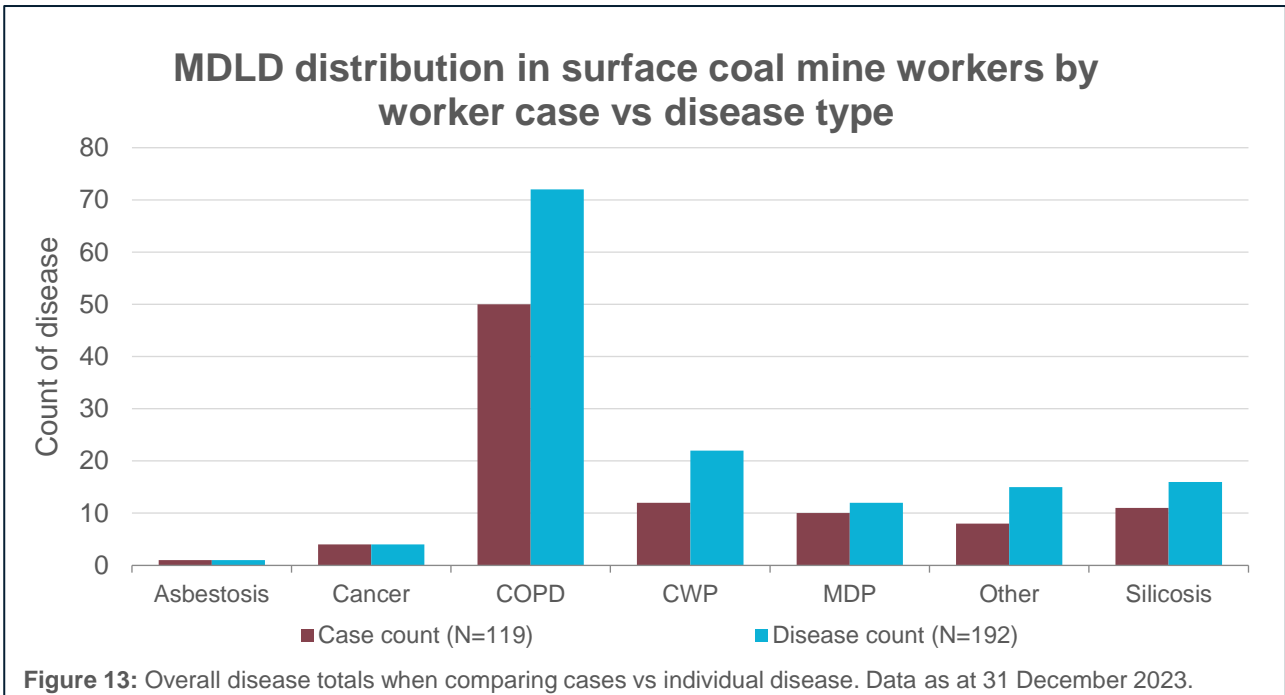
Coal mine workers continue to represent the majority of reported MDLD cases, with COPD remaining the most common disease type. This financial year, 74 per cent of reported cases in current coal mine workers were COPD, singularly or in combination with other diseases (see **Figure 10**).



As in recent years, more MDLD cases were diagnosed among surface coal miners, who have the larger workforce size compared to underground coal miners (see **Figure 11**). COPD in surface workers continue to be reported at a similar frequency, with most cases of multiple MDLDs diagnosed with a COPD (see **Figure 12**). To understand this pattern of multiple MDLDs and its impact on distribution of disease, cases were viewed by individual incidences of disease. This allows for the diseases contained within multiple MDLD to be assigned to their relevant categories. This redistribution puts incidence of COPD higher by 29 per cent when compared to single diagnoses for individual workers (see **Figure 13**). This increase is consistent to that seen in the broader cohort.

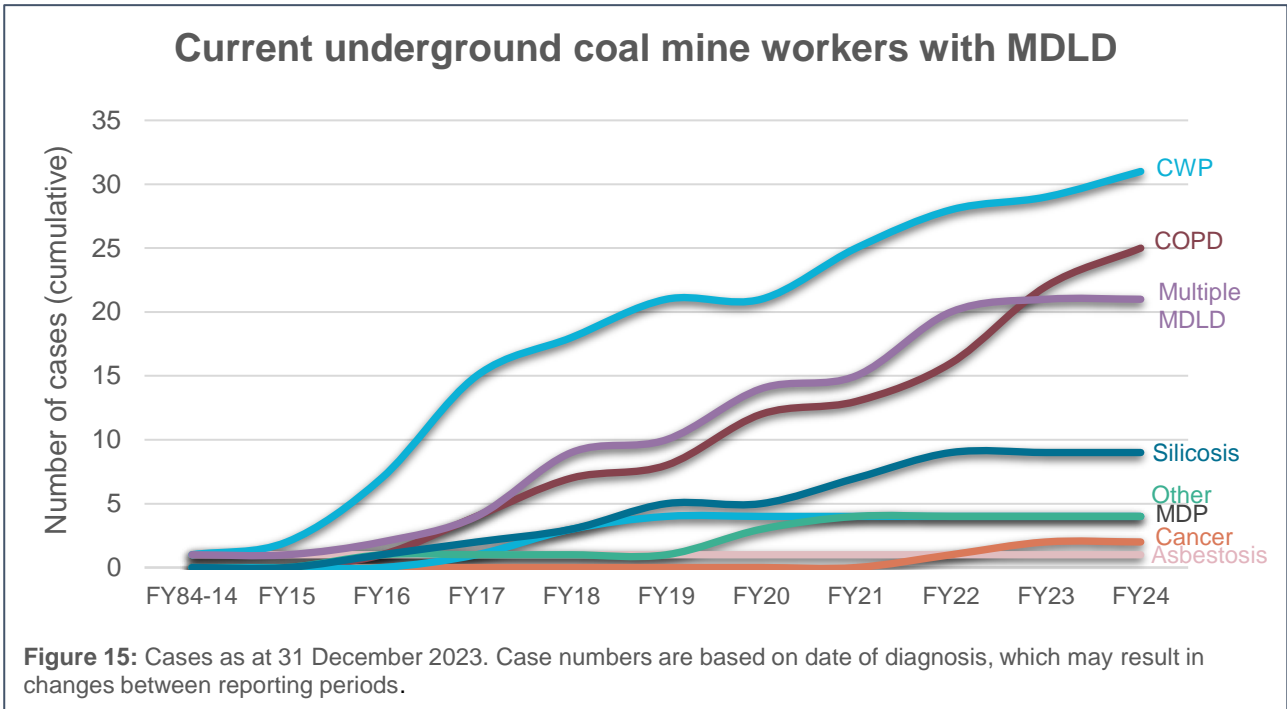


Pneumoconiosis cases also increase when individual disease counts are considered (see **Figure 13**). This increase represents those diagnosed with additional disease and is most evident with a CWP diagnosis. The surface workers with CWP diagnosed with additional conditions usually have long histories in industry within areas of plant operation or blasting (see [Case Study 3](#)). Most of these instances of disease were diagnosed before 2020. Overall, the number of pneumoconioses remains low within surface workers compared to COPD (see **Figure 14**).

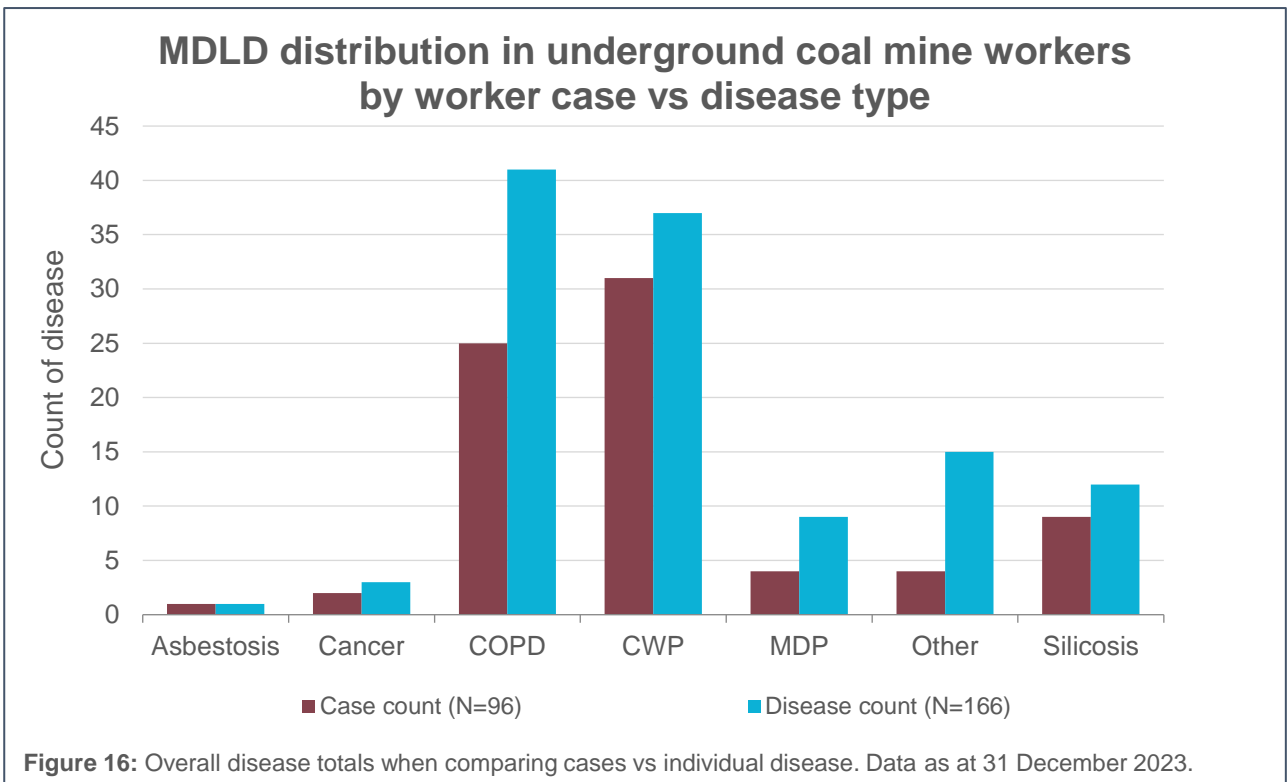


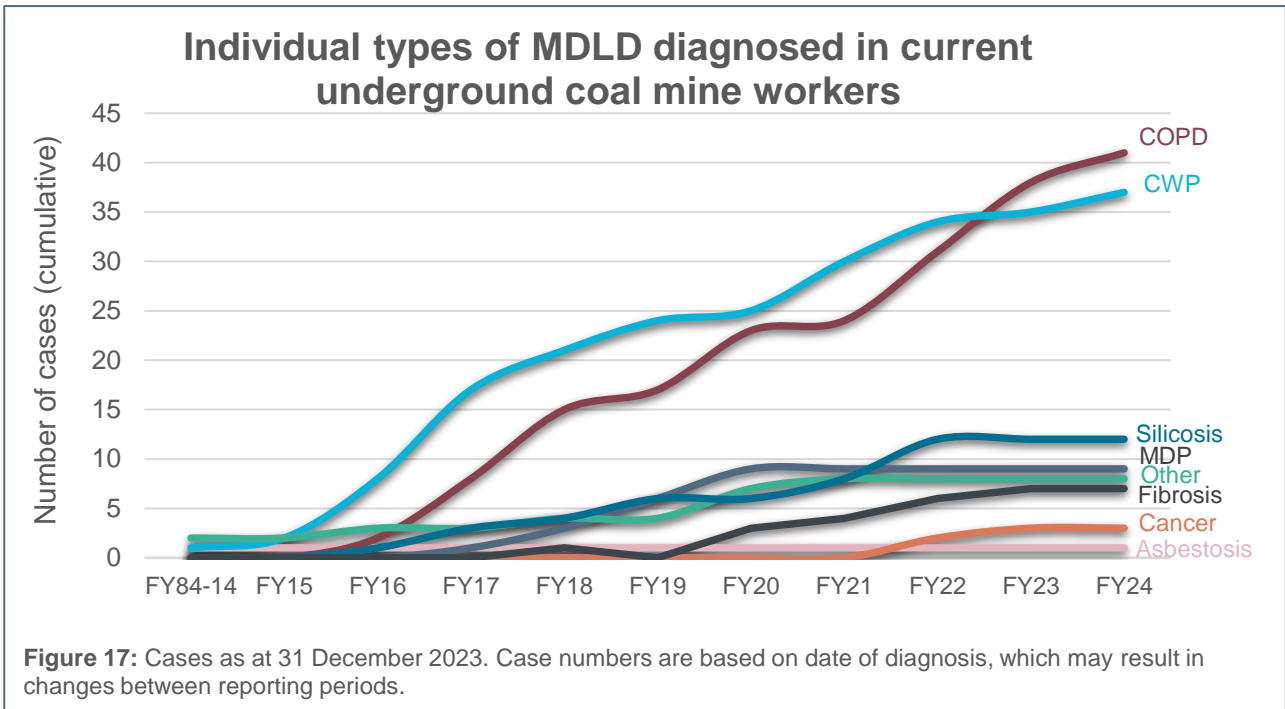
In contrast, among underground workers, COPD constitutes a slightly smaller proportion of overall disease distribution compared to surface workers (**Figure 15**). However, there appeared a slightly higher proportion of COPD diagnosis in the multiple MDLDs (39 per cent for underground workers compared to 30 per cent for surface workers (see **Figure 16**). These two disease categories are in closer proximity after the redistribution of multiple MDLDs, with COPD the most common disease type diagnosed in underground coal miners (see **Figure 17**).





The total number of CWP cases continues to slowly increase, even when all incidences of disease are considered (see **Figure 17**). Similar to recent years, no cases of MDP and silicosis have been reported so far, this financial year.





For both underground and surface workers, diseases diagnosed in the other MDLD category are proportionally most likely to be diagnosed in conjunction with another disease. The most common diseases in the other MDLD category are fibroses. This is consistent with the broader cohort.



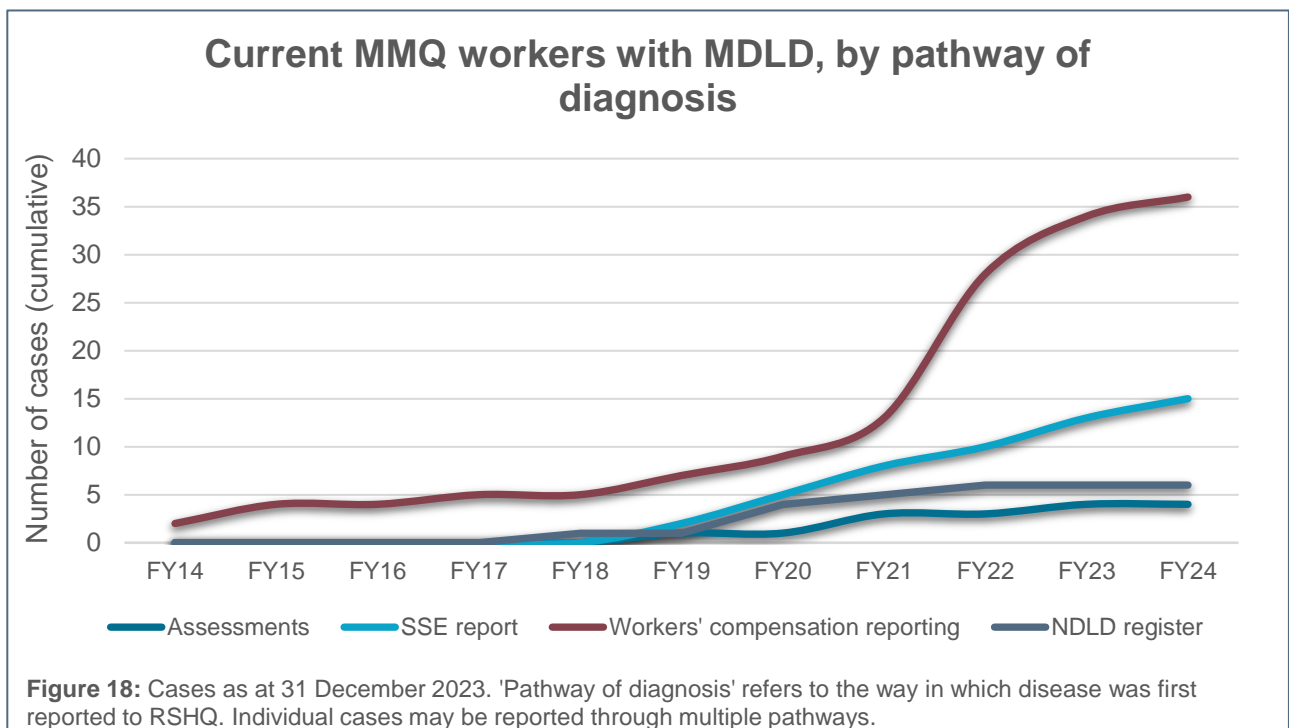
# MINERAL MINES AND QUARRY SECTOR

## Current workers with significant MMQ history

### Disease reporting for current MMQ workers

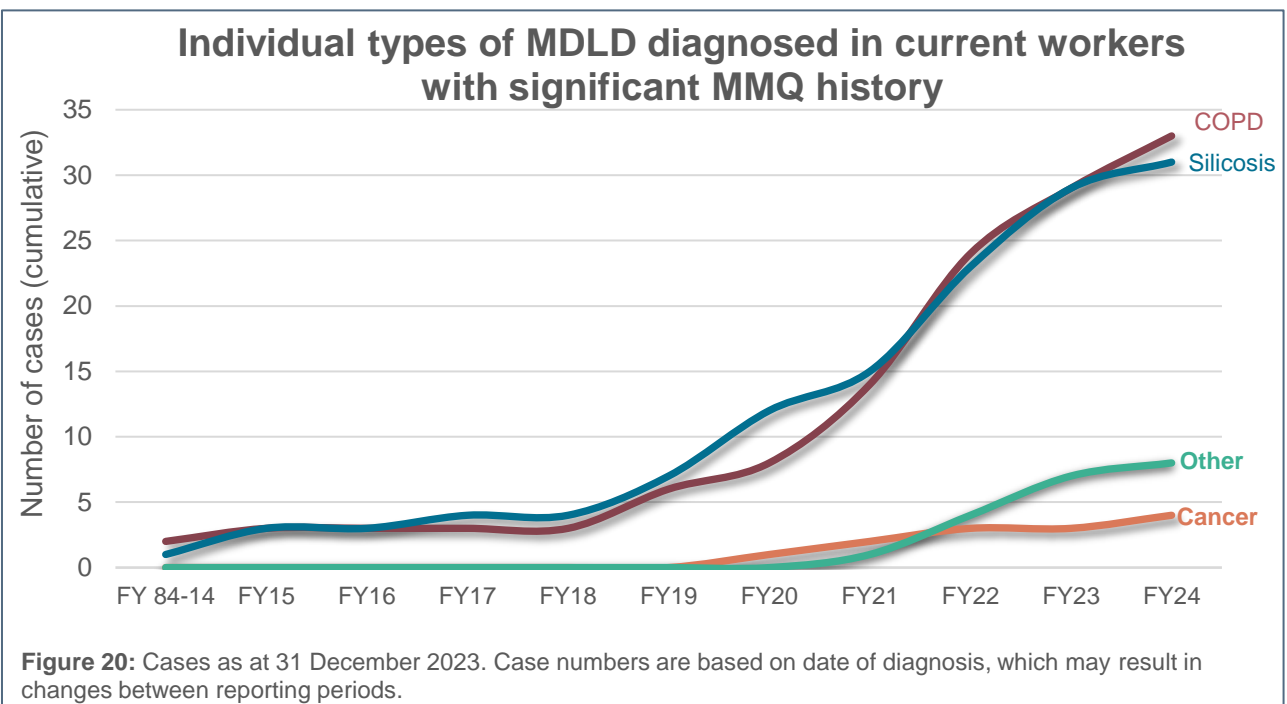
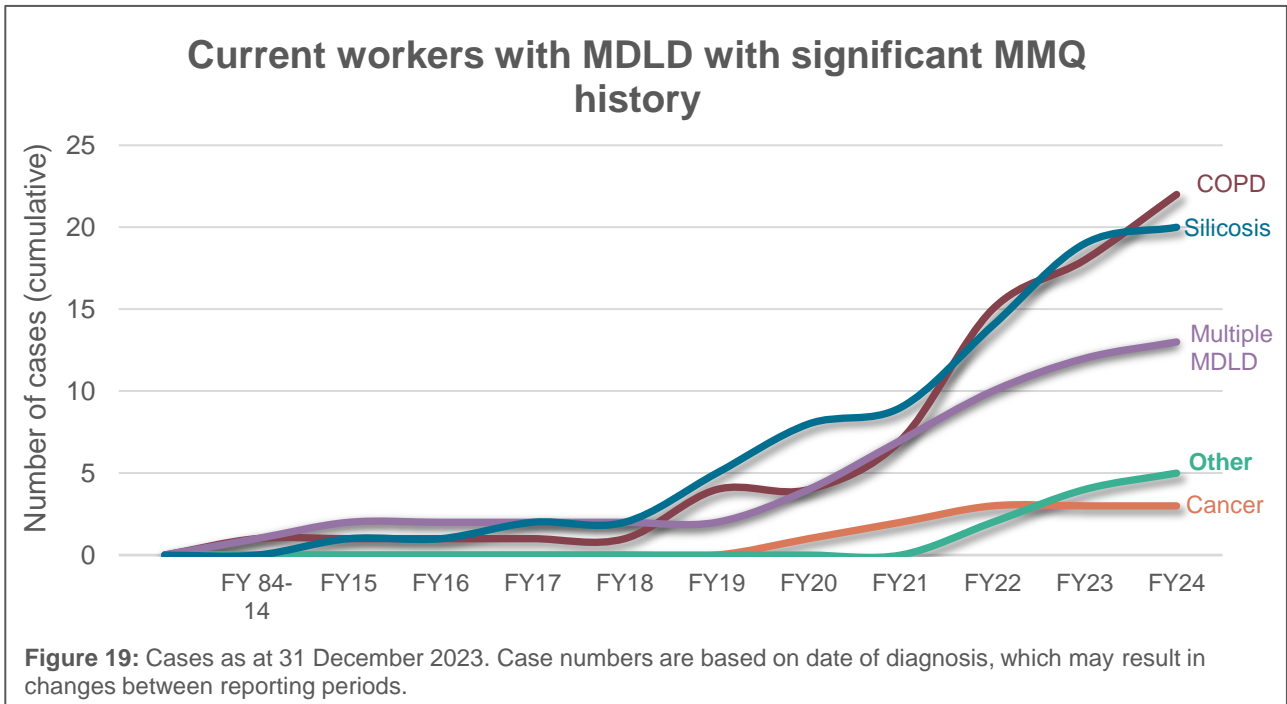
MDLD cases are increasingly reported in the mineral mining and quarry sectors, in line with increasing awareness of MDLD and the introduction of mandatory respiratory health surveillance in 2022. These respiratory health assessments and subsequent SSE disease reports to RSHQ are important in the identification of MDLDs, to inform industry health surveillance and to offer support to workers diagnosed with MDLD.

There were 10 notifications of a prescribed disease from MMQ SSEs to RSHQ in the last six months (see **Figure 18**). A high proportion of these notifications were only made after the SSE became aware of an accepted workers' compensation claim. The obligation to report disease is not conditional on an accepted compensation claim. As a disease diagnosis does not always result in a worker lodging a claim, this can lead to underreporting of disease. SSEs are required to notify RSHQ on the approved form under the Mining and Quarrying Safety and Health Regulation 2017 for all instances of prescribed disease that the SSE becomes aware of, including via the mandatory respiratory health surveillance process. Prescribed diseases must be reported regardless of whether the cause is thought to be work-related.



Overall, since the last report, nine cases of MDLD were diagnosed among those with significant MMQ work history. Seven of these cases were among current workers.

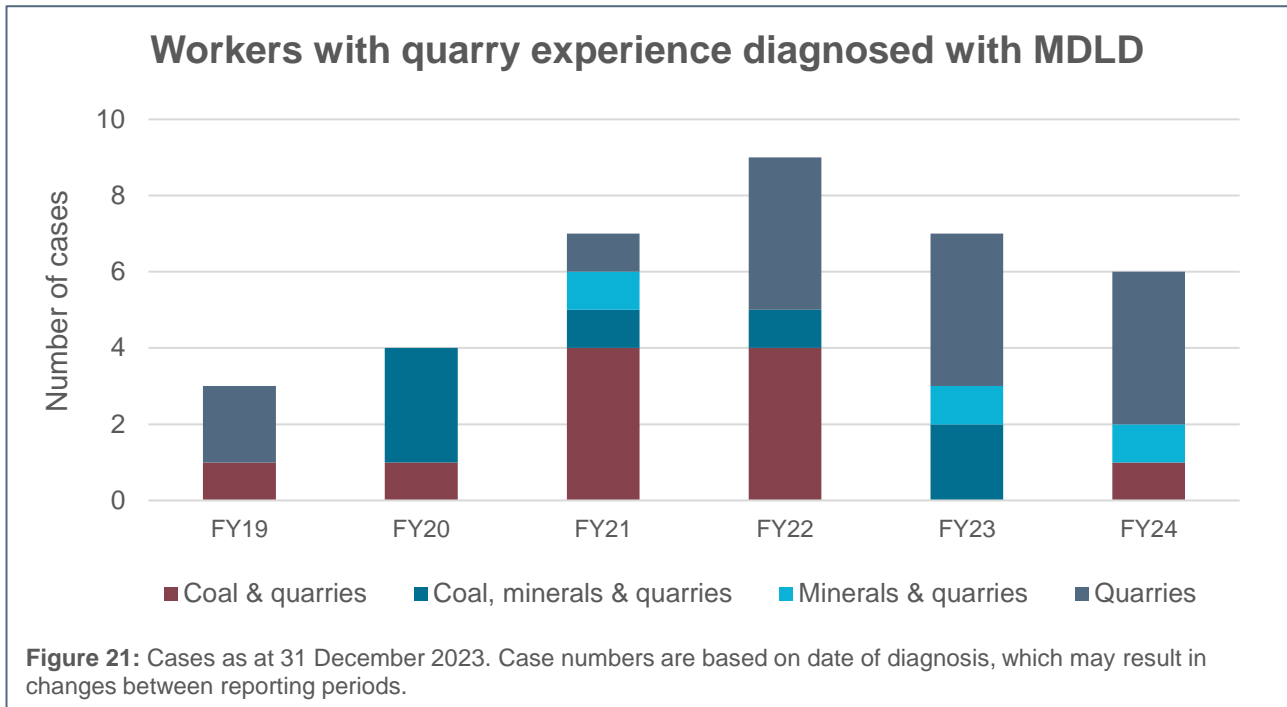
The most common diseases reported among current workers with significant MMQ history are silicosis and COPD, both singularly and in combination together (see **Figure 19**). The most common disease types diagnosed in workers with multiple MDLD are silicosis and COPD (see **Figure 20**). When considering incidences of disease among MMQ workers, COPD and silicosis are more closely aligned in their volumes and trajectories since 2020-21.



## Disease distribution for quarry workers

Since 2018, RSHQ has received reports of MDLD among 35 workers that have had some quarrying experience. This represents eight per cent of all workers reported with MDLD. Fifteen diagnosed workers have only worked in the quarrying industry. This is an increase of four since the last report (see **Figure 21**). These workers often have substantial work histories across a variety of positions, highlighting the importance of ongoing respiratory screening for quarry workers across industry sectors and reporting of prescribed diseases to RSHQ.

Quarry workers are most commonly diagnosed with COPD, followed by silicosis. However, the small number of reported cases limits conclusions from this cohort.

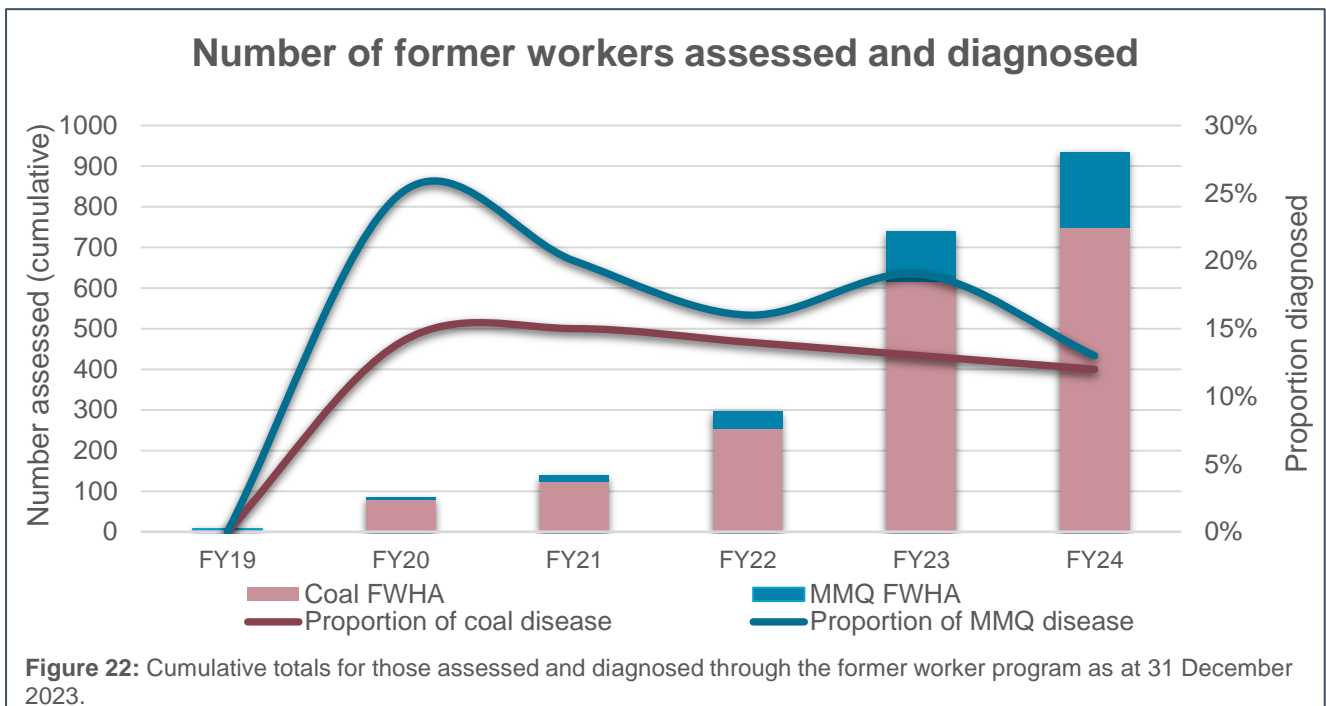




## FORMER WORKER PROGRAM

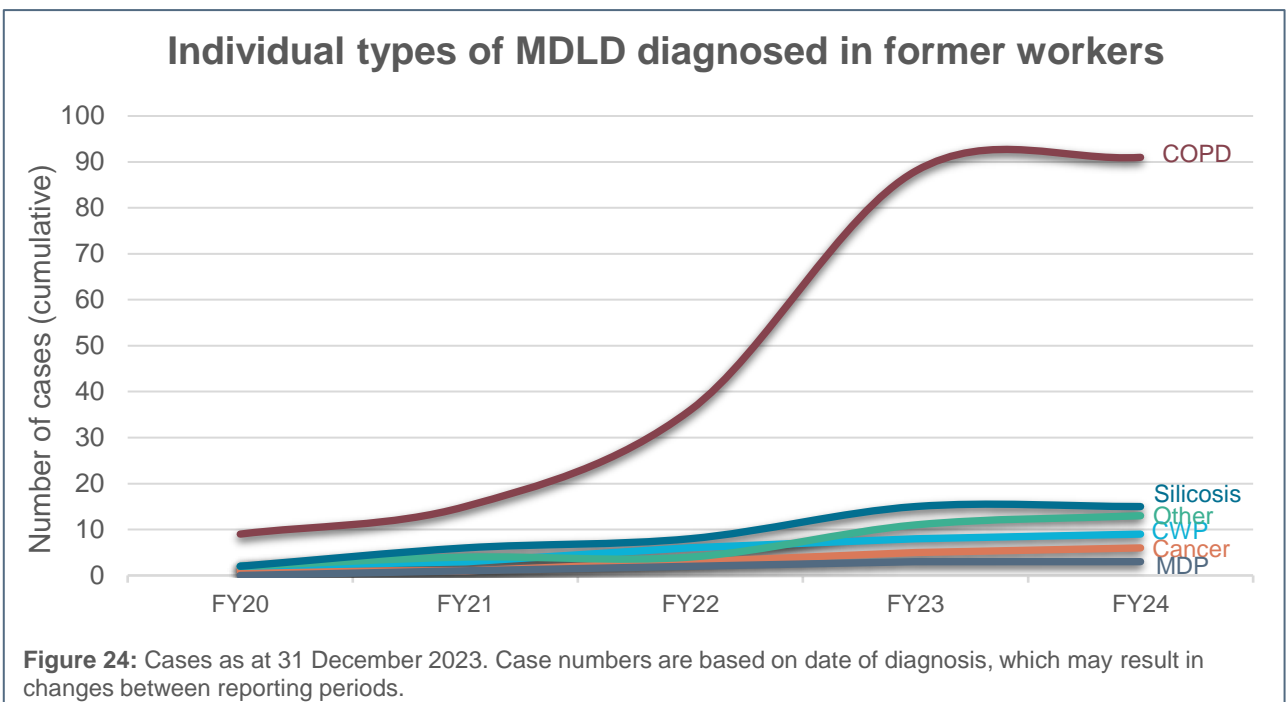
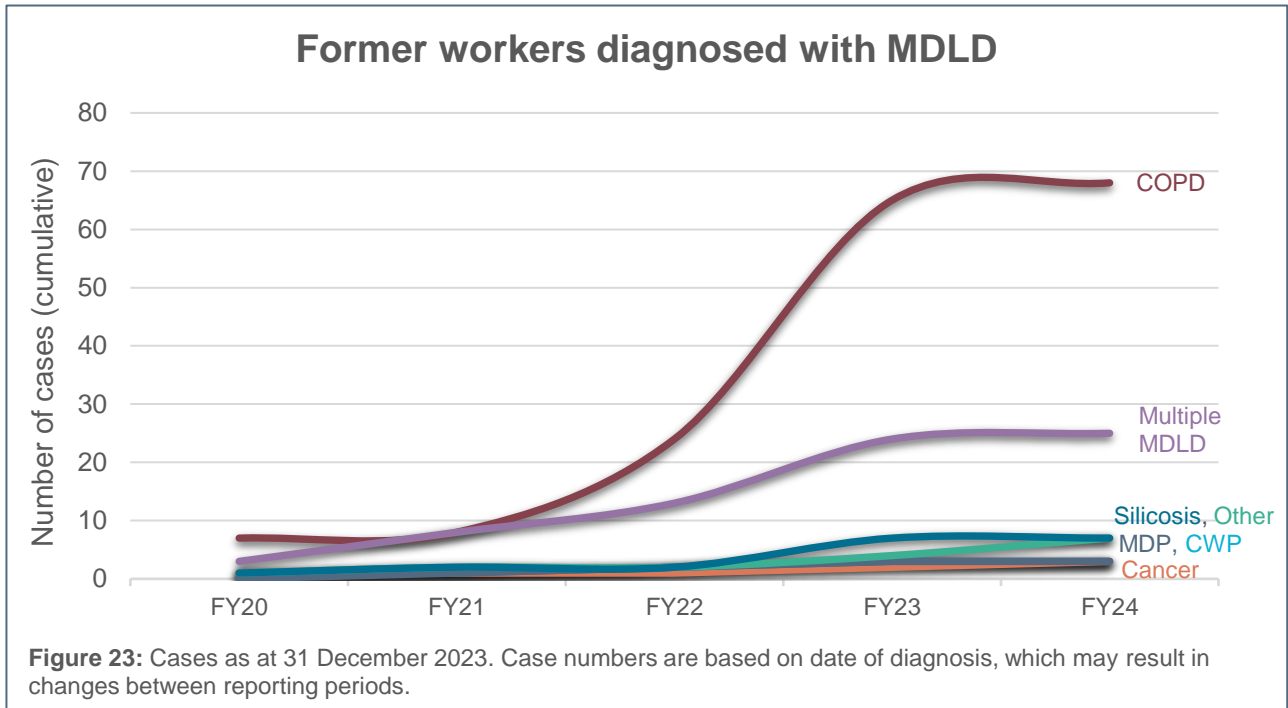
RSHQ offers free, ongoing respiratory health screening for retired and former miners and quarry workers. Many former workers who have undergone assessments have been employed in the coal mining sector at some stage in their career. The age of diagnosed former workers ranges from 55 – 85 years and includes both retired miners and those who have left mining and quarrying for careers in other industries.

The number of former workers undergoing screening has continued to increase, with an additional 285 former workers assessed in the last six months (see **Figure 22**). This increased uptake is reflected in the number of cases reported. Overall, the proportion of disease within assessed former coal mine workers has slowly declined since the program's early years of operation. This is reflective of increased uptake of the screening program that has increasingly attracted a wide range of former workers aside from those with health concerns. In contrast, the proportion of disease diagnosed within former MMQ workers assessed has fluctuated as fewer individuals have taken up the service, and any long-term trends should be considered with caution at this time. Additional diagnoses of MDLD are likely as further investigations are concluded for some workers.



COPD remains the most common MDLD diagnosed via the former worker screening program, either singularly or in combination with other diseases (see **Figure 23**). COPD is proportionally more common among former workers than current workers (see **Figure 24**). Redistribution of multiple MDLDs based on their individual disease types showed that, like in other mine cohorts, most multiple MDLDs contained COPD. Twenty-five per cent of all former worker COPD cases were diagnosed in conjunction with another work-related

disease, which is slightly less than for diagnosed current workers. Additionally, while there is a smaller proportion of CWP, silicosis and other disease among the former worker cohort, there is a higher likelihood that these types of diagnoses will present with additional conditions (see **Figure 24**).



These diagnoses among the former worker cohort cover individuals in a variety of positions and mining sectors. They are not limited to individuals who smoke or have remained in mining for their entire working life, highlighting the importance of regular screening after leaving the mining and quarrying industry, even if transitioning to employment in another industry.



# CASE STUDIES



## Case 1 – COPD

- Diesel fitter
- Coal

Current worker, 40+ year work history as a diesel fitter at the same mine. Employed in the workshop and in the field with notable dust exposure. Non-smoker. Diesel fitters also have potential for other hazard exposures such as diesel exhaust and industrial cleaners. Highlights the potential for a range of airborne contaminants as causative agents to COPD as well as dust particles and accumulative exposure over time.



## Case 2 – Multiple MDLD

- Cable jointer (Electrical)
- Underground coal

Former worker diagnosed with DDF and COPD, 30+ year work history repairing mine shutter cables. Worked across various coal sites with significant dust exposure. Non-smoker. Dust inhalation during installation and maintenance process leading to inflammation and scarring of lung tissue over time. Highlights the potential for exposure to result in a broad range of respiratory conditions and importance of screening even after leaving industry.



## Case 3 – CWP

- Shot firer, truck driver
- Coal and quarry

Current worker diagnosed with CWP and COPD, 30+ year work history above ground. Worked in shotfirer and truck driver roles, including 20 years working in explosives and with significant dust exposure. Non-smoker. Highlights the risk of exposure for those involved in blasting activities or those in proximity, as well as the need for dust minimisation practices and ongoing health surveillance.