

# Order 34 Mid-Year Workshop

## Underground Session



Wednesday, 19 July 2023

Cindy James  
Order 34 Manager

# Important Information



- 1 Emergency Procedure
- 2 Toilets and smoking areas
- 3 Introductions

# Today's program



Time	Agenda item	Presenter
9am – 9:20am	Registration + Morning Tea	
9:20 – 9:30am	Welcome and overview	Cindy James
9.30 – 9:40am	Introductions/ General Discussion	Group
9:40 – 10am	Industry Update	Cindy James
Break – 15 minutes		
10.15 – 11.30am	Certificate II in Underground Coal	Mines Rescue - Mark D'Elboux Centennial - Graham Healey
Lunch – 30 minutes		
12 – 12:30pm	Workshop: Unit of Competency Mapping	Facilitated by Mines Rescue RTO - Torin Mackintosh
12:30pm	Summary and close out	Cindy James

# Introductions and General Discussion

## Introductions

- Name
- Company/Operation
- Role
- What you would like to get out of today?



# Industry Update



NSW Resources Regulator Reportable Incident Information



Maintenance of Competence for Practising Certificate Holders



Coal Mines Insurance Injury Claim Information



CS Health Standing Health Committee

# Resources Regulator Incident Summary

1 July 2022 – 30 June 2023



**2,053** Reportable Incidents for All Sectors



**186** Reportable Incidents Summaries provided for All Sectors



**135** Reportable Incidents Summaries provided for the Coal Sector



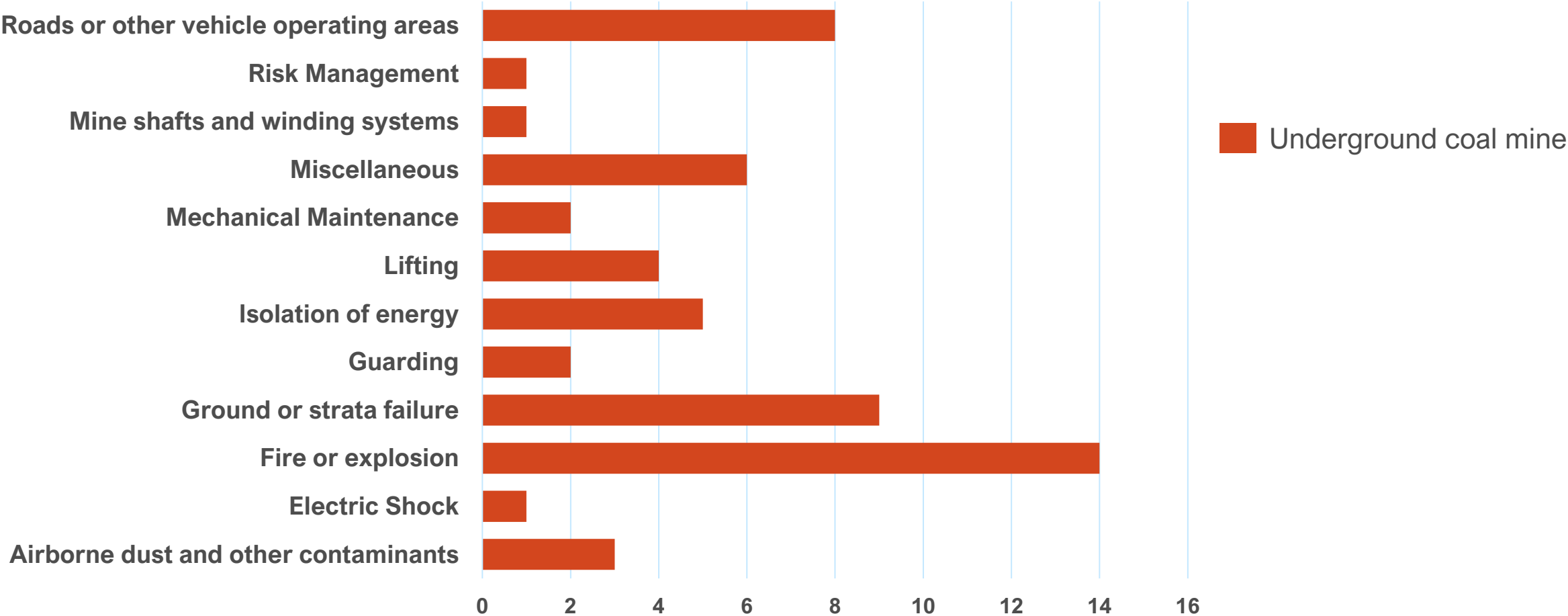
**56** Reportable Incidents Summaries provided for Underground Coal Operations

# Resources Regulator Incident Summary

1 July 2022 – 30 June 2023



## Notifiable Incidents where Summary provided by the Resources Regulator



# Underground Incidents

## Training and Competency



Category	Comments to Industry
<b>Fire or explosion</b>	LHD Operators should receive training to assist them in identifying tyre defects.
<b>Hand-Held Drilling</b>	Workers must remain situationally aware when operating any type of equipment or plant. Training in how to operate hand-held drilling equipment should include the hazards of rotating drill steels and interaction with clothing and long hair. Drill operators should keep both hands on the operating drill at all times and ensure they remain clear of rotating components such as drill steels and chucks.
<b>Isolation of Energy</b>	<p>Inexperienced operators must have appropriate training and supervision. Systems of work should be unambiguous when it comes to discharging stored energy before work is undertaken.</p> <p>Workers must ensure hydraulic systems are isolated and stored pressure is released before working on hydraulic systems. Apprentices must be supervised and trained in workplace tasks.</p>
<b>Ladders</b>	Workers must be trained in the site standards and in the safe use of ladders.
<b>Lifting</b>	Workers must be trained to use lifting equipment before carrying out lifting activities.
<b>Pressurised System</b>	Work involving pressurised systems and components must only be carried out by workers who are competent, trained and appointed.
<b>Risk Management</b>	Mine operators must provide sufficient information, training, and instruction for all reasonably foreseeable tasks that a worker may be expected to complete. Where formalised procedures are not provided, workers are expected to be appropriately supervised and take a risk-managed approach when undertaking these tasks.
<b>Tramming Breaker Feeder</b>	Trainees must have a clear understanding about the operating parameters and characteristics such as braking performance.

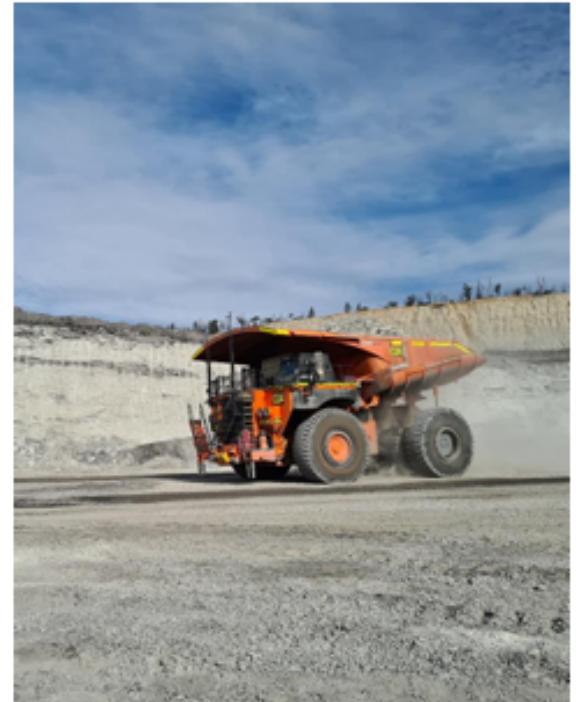
To subscribe go to: <https://www.resourcesregulator.nsw.gov.au/news/weekly-incident-summary>

# Resources Regulator Presentations

## Trainee operators

Seeing an increase in incidents notified relating to trainee operators.

- What triggers a trainee's assessment to go solo?
- What does drive to conditions mean to a trainee?
- What follow up assessments are conducted after a trainee is appointed to operate solo?
- Is there a cap on how many trainees on a shift?
- Is their adequate supervision and mentoring capability on shift?



# MoC for PC Holders



## Resources Regulator Audits have been conducted by:

- Coal Services Mines Rescue
- Core Mine Training

## Key Information for PC Holders:

- Keep contact details up to date
- Review sections 7.3 and 7.4.1 for what can be claimed and evidence requirements
- Complete the RR Self Assessment and Review log prior to submitting for Audit:
  - Ensure not exceeding any caps in “claimed” hours in their log
  - Ensure no duplicate entries
  - Check for conflicting dates
  - Make sure they have evidence to back up all claims as required

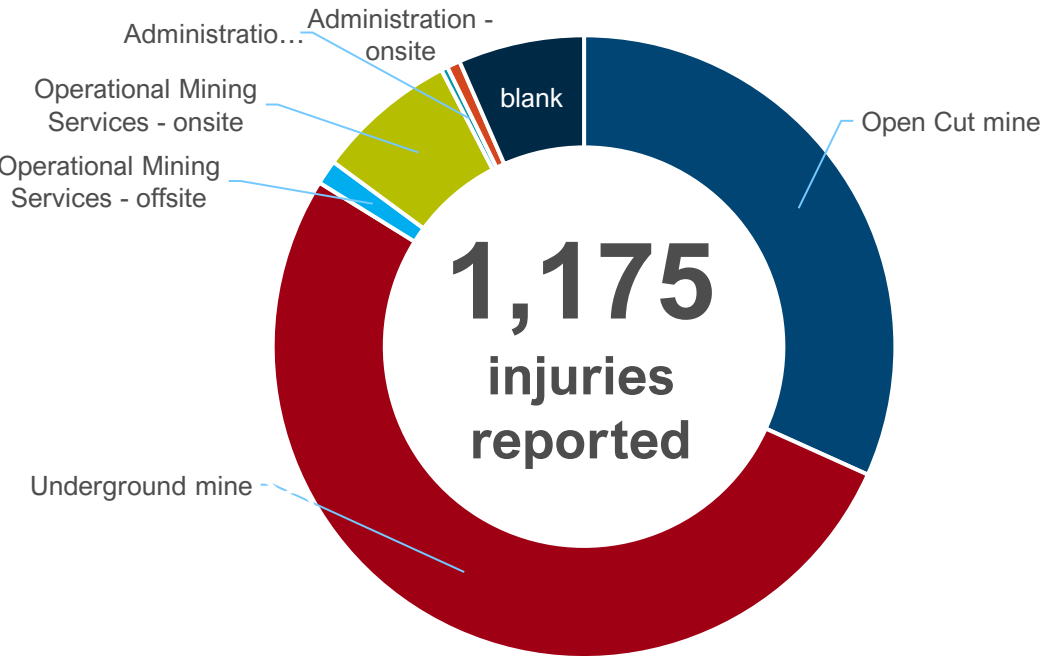


# Coal Mines Insurance

## Workers Compensation Claims and Injury Profile

# NSW coal industry

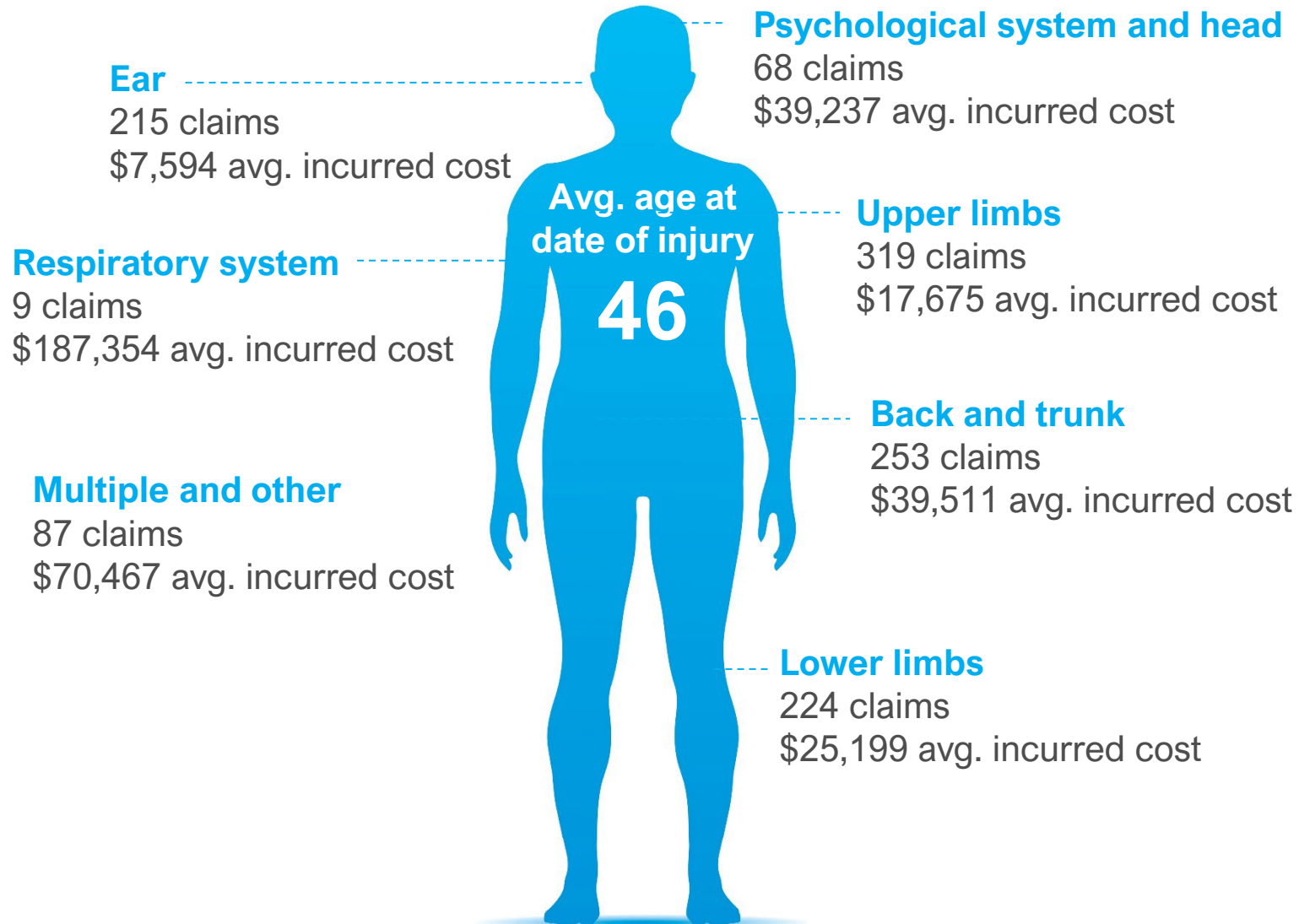
Claims and injury profile 1 July 2022 to 30 June 2023



Open Cut		Underground
32%	Injuries reported	52%
47	Avg. age at date of incident	47
\$34,274.03	Avg. cost incurred	\$22,350.49

# NSW coal industry Claims and injury profile 1 July 2022 to 30 June 2023

## Body location, claims and average incurred cost

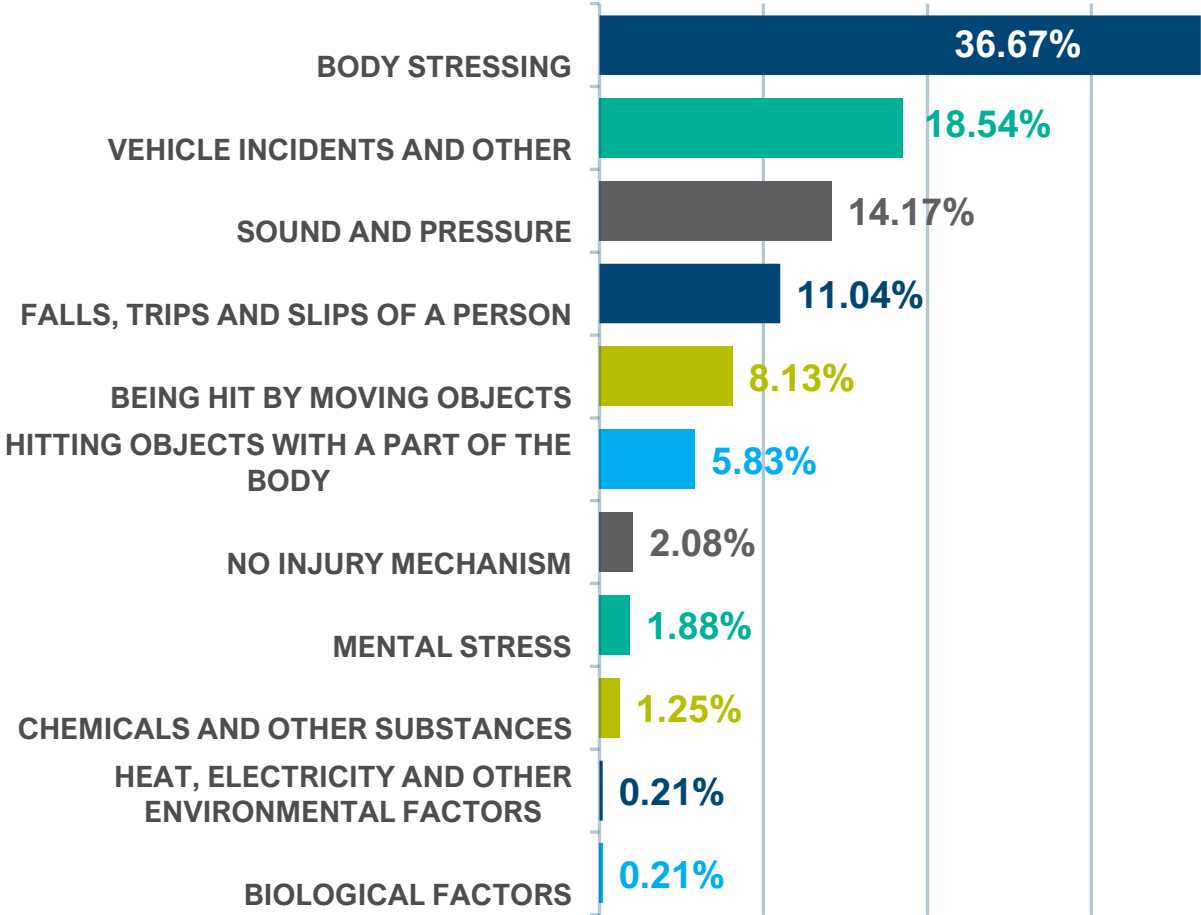


# Underground coal mine owners

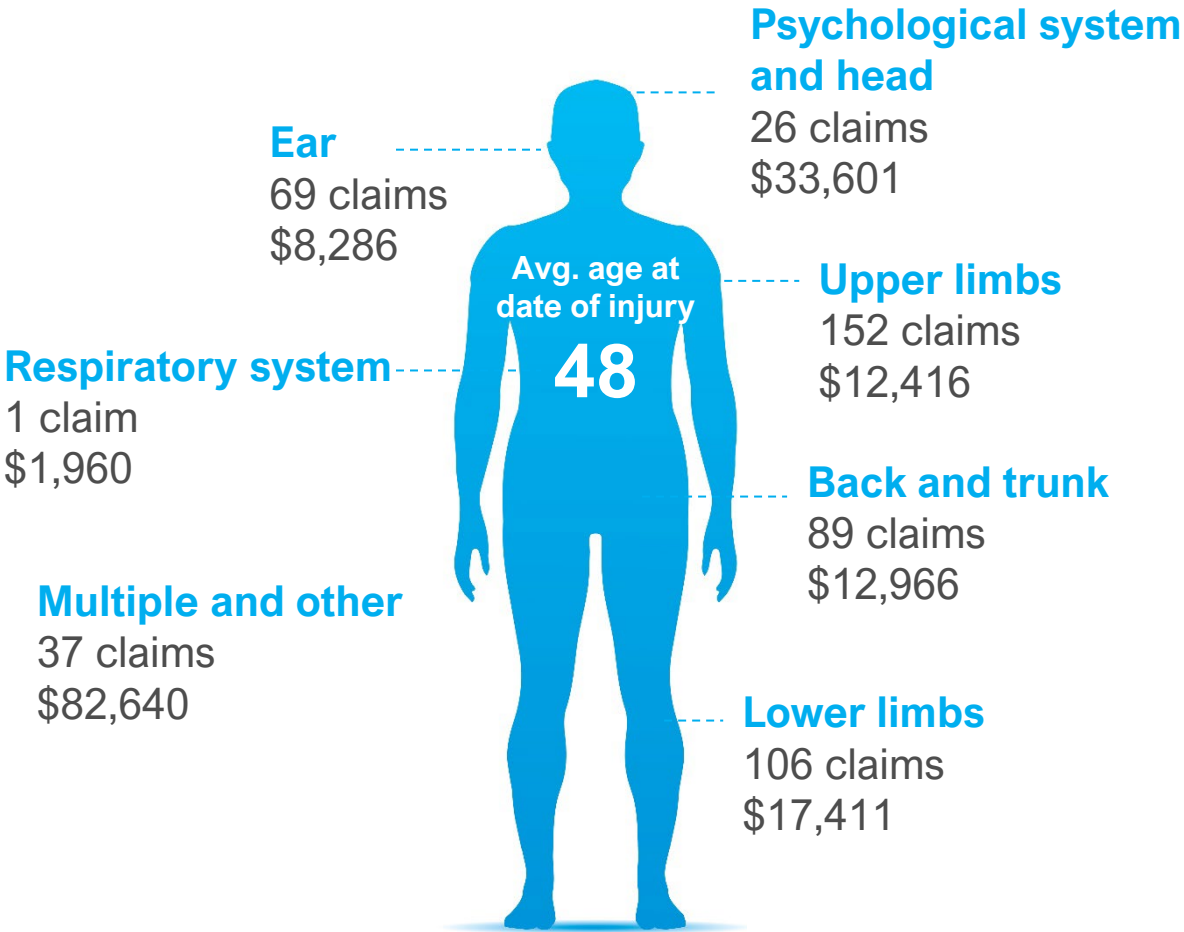
Claims and injury profile 1 July 2022 to 30 June 2023



## Mechanism of injury



## Body location, claims and average incurred cost

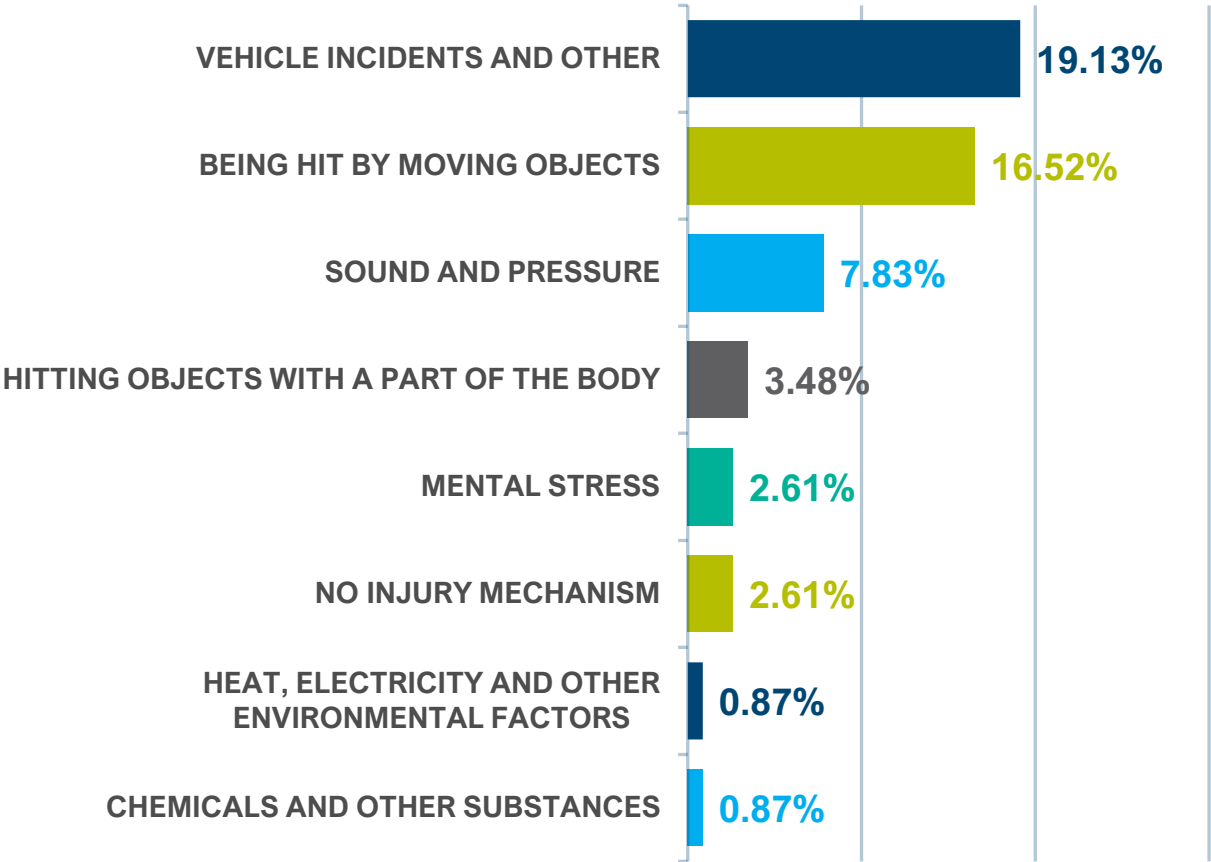


# Underground coal contractors

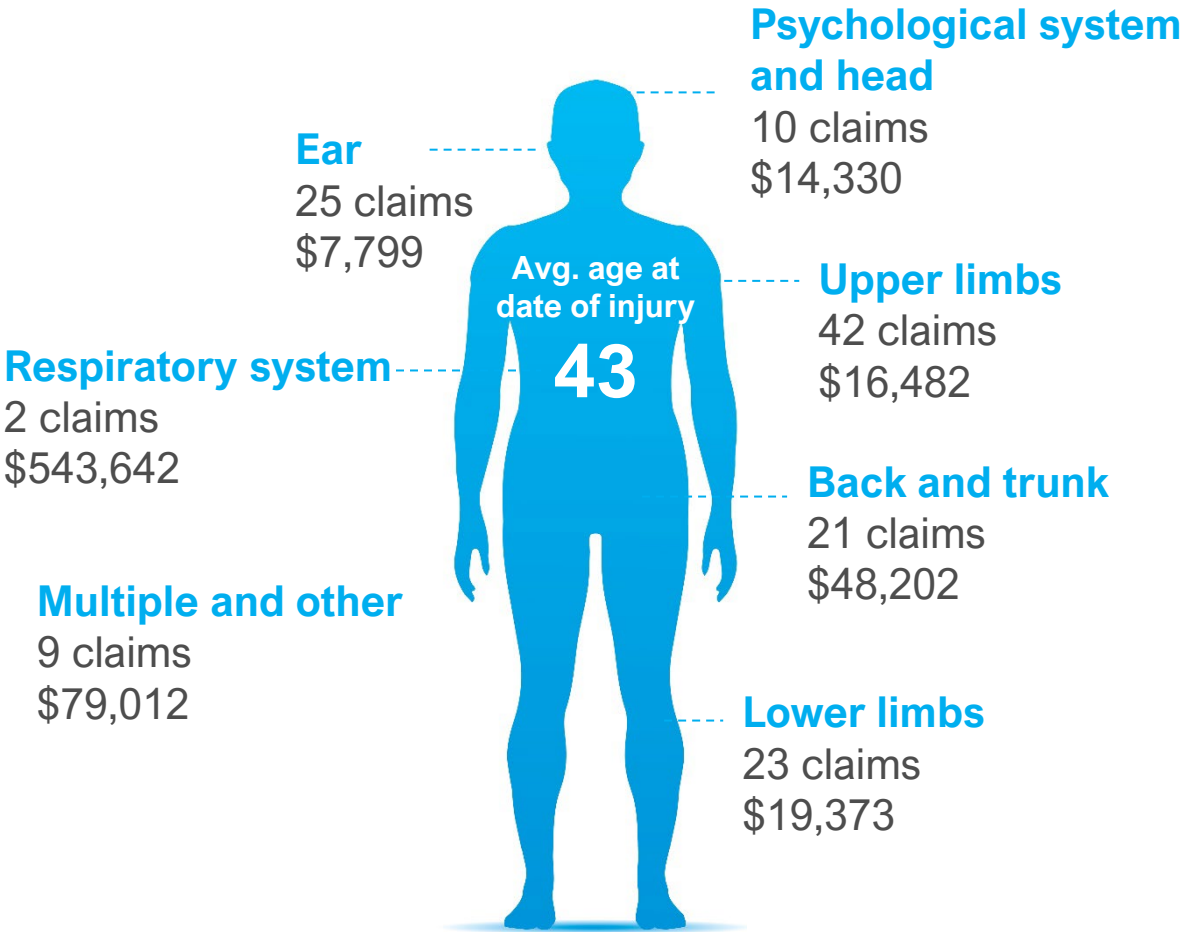
Claims and injury profile 1 July 2022 to 30 June 2023



## Mechanism of injury



## Body location, claims and average incurred cost



# CS Health

## Standing Health Committee

# CS Health Transformation



**Strategy:**  
Proposition

- In 2022, CS Health underwent a structural transformation, moving from a regional operating model to a state-wide functional model.



**Service delivery**  
Digitisation

- The transformation has led to standardisation of service delivery across offices and has improved health reporting.



**Processes:**  
Standardisation



**Organisation:**  
Regional vs.  
Functional

- A dedicated **Preventative Health** function was created within CS Health:
  - Consistent with the preventative focus of Coal Services to ‘protect’ industry
  - The function promotes and delivers preventative health initiatives with an aim to provide effective solutions for **existing** and **emerging health issues** affecting the NSW Coal Industry.



**People:**  
Workforce  
composition



**Technology:**  
Automation

# Standing Health Committee - Function



- Lead positive change in the health outcomes of workers in the NSW Coal Mining Industry.
- Identify and prioritise health initiatives for Industry: **Health Standards** and **Health & Wellbeing**.
- Use organisational data to analyse Industry trends and identify emerging health and injury issues.
- Monitor and analyse all results and outcomes, to ensure initiatives meet the needs of Industry.
- Evaluate results and develop continuous improvement strategies.
- Provide regular reporting to Coal Services Board and Industry stakeholders on initiatives and outcomes.

# Standing Health Committee - Expected Outcomes



- The SHC's role will be to identify areas of need across Industry and to prioritise initiatives.
- Outcomes and timeframes will be agreed by the committee according to each body of work.
- Results will be monitored with post-implementation reviews to measure success and impact on Industry.
- Success will be measured through:
  - **Initiative Completion:** a main body of work will be identified, with opportunities for smaller initiatives to be supported as well.
  - **Initiative Impact:** relevant outcome measures that show risk profiles, injury rates, injury severity or health outcomes will be assessed to highlight the overall impact of the project.
  - **Customer Satisfaction:** satisfaction and utilisation rates will be assessed to determine how the SHC initiatives have impacted industry.



Break – 15 mins

# Underground Certificate II & III in Underground Coal

Mines Rescue - Mark D'Elboux  
Centennial - Graham Healey

## Why have we chosen to deliver the Cert II in UG Coal Mining?

- Nationally recognised training
- Meets industry needs
- Appropriate competency outcomes
- Qualification has legal status
- GUI course completes large portion of qualification
- Who am I? How did I start?

# Background



## Who was targeted in the original development?

- Graduates
- Inexperienced mineworkers

# Background

## Where has the training been completed?

- Southern Mines Rescue
- Western Mines Rescue (Lithgow)
- Angus Place Colliery (Practicals for LMRS)



# Context

- Need for workers in Western District
- Importance of skilled workers, current amount of inexperienced people already in the system.
- Challenges in recruitment
- Value of nationally recognised training



# Target Audience of Qualification

- Entry-level workers
- Perform a range of mainly routine tasks
- Limited practical skills
- Fundamental operational knowledge, in defined contexts
- Working under direct supervision.

# Qualification Structure

- 11 units in total
- 9 core units
- 2 electives

Core units of competency	
<i>Unit code</i>	<i>Unit title</i>
RIICOM201E	Communicate in the workplace
RIIERR203E	Escape from hazardous situations unaided
RIIERR205D	Apply initial response first aid
RIIGOV201E	Comply with site work processes/procedures
RIIMCU217	Apply spontaneous combustion management measures
RIIMCU208E	Conduct basic strata control operations
RIIMCU214E	Conduct ventilation operations
RIIRIS201E	Conduct local risk control
RIIWHS201E	Work safely and follow WHS policies and procedures

# Fire Team Operations

- Requested by industry during consultation
- Valuable skillset for all underground personnel
- Relevant for all districts
- Builds on existing skills and knowledge from GUI
- One day course at MRS



## Electives

***Unit code***

***Unit title***

RIIERR201E

Conduct fire team operations

# Underground Lifting Operations

- Requested by industry during consultation
- Safety focus area for industry at present
- Relevant for all districts
- Builds on existing skills and knowledge of workers
- One day course at MRS



RIIUND207E

Conduct underground lifting operations

# Basic Strata and Gas Management Course



- One day of training completed at MRS
- Theory completed at end of day one
- Practical sign offs completed at mine site
- Clustering of units undertaken to heighten relevance of Spontaneous Combustion unit for NSW mining districts

# Collaboration and Partnerships



- Bob Miller (Centennial) talking with Graham Healey (WMRS) regards Cert II & II September / October 2022.
- Inexperienced Mine Worker Training Schedule proposal from Centennial (GH) to WMRS (MD) February 2023.
- Training Agreement developed from this, 13 week program.
  - Week 1 GUI & FTO
  - Week 7 UGL
  - Week 9 Strata Vent
  - Week 13 sign off Practicals (Angus Place)

# Benefits of Completion



## Industry

Stepping stone to Cert III & IV (Deps & UM), (incidents from inexperience workers, in previous years), now have evidence of accredited training we have completed.

## Individuals

Broader understanding and appreciation of the hazards in UG Coal Mining.

# Flexibility in Delivery

Flexibility in delivery was provided to allow new starters to gain on the job experiences before completing the theory modules in training. This was time allocated between the GUI and the Cert II sessions.

Examples include:

- Workers being exposed to brattice ventilation, aux fans and ventilation tubes prior to the ventilation topics in Gas Management
- Workers being involved in strata control, support plans, secondary support etc prior to the strata module
- Log books are also being used to track individuals progress.

# Adaptations

Classroom adaptations were made to share experiences and learnings across sites to all new starters. The Cert II included group activities for each topic which were used as whiteboard scenarios utilising participants from the different mines.

## Example: Ventilation Group Activity

- **Airly** participants would sketch and report on mini wall ventilation
- **Springvale** participants would sketch and report on Aux Fan operations
- **Clarence** participants would sketch and report on brattice ventilation

# Results

**8** out of 36  
completed  
to date

24 on track to  
complete  
under current  
scheduling

(on track to complete 17 August 2023).

# Testimonials

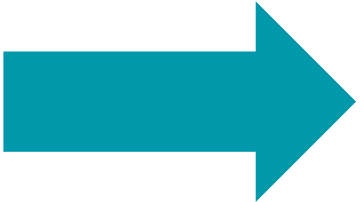


# Challenges




- Ratios of inexperienced mineworkers to experienced.
- Medicals before start dates, availability of appointments vs. scheduled training dates.
- Coordinating across 3 mines, even numbers where possible (3).
- Availability in Mines Rescues schedule (due to class sizes, 5 day week).


# Future Opportunities



Stepping stone to Cert III



Expand on Practical training at Angus Place  
(set up Shuttle Car etc.)



Look at inexperienced mine worker incidents over the next 12 months and look to tailor practicals / training to better suit the industry.

# Conclusion

- ✓ Provided accredited training for our new starters.
- ✓ Given our new starters an insight into some of the major hazards in our industry.
- ✓ Interaction with other mines.
- ✓ Opportunity completing practicals in a controlled environment under direct supervision.



Lunch Break - 30 mins

# Workshop: Unit of Competency Mapping

## Mines Rescue RTO - Torin Mackintosh

# Order 34 Mid-Year Workshop

## Mapping a unit of competency



Australian Government

**RIIUND207E Conduct underground lifting  
operations**

# Agenda



1 Accredited Training vs. Non-Accredited Training

2 Locating a Unit of Competency

3 Using the Information Within a Unit of Competency

4 Mapping

# Lifting and Load Movement Incidents

Resources Regulator  
Department of Regional NSW

NSW  
GOVERNMENT

Safety Alert

Date: October 2022

**Dangers of lifting and pulling activities revealed**

This safety alert provides safety advice for the NSW mining industry.

**Issue**

Two workers have suffered injuries within 3 days during lifting and pulling activities at 2 NSW underground coal mines.

In consideration of the circumstances of each incident, it was fortunate the injuries were not far worse.

Resources Regulator  
Department of Regional NSW

NSW  
GOVERNMENT

Safety Bulletin

December 2022

**Dangerous lifting equipment incidents increase**

This safety alert provides safety advice for the NSW mining industry.

**Issue**

A significant rise in the number of dangerous incidents involving lifting equipment has prompted the NSW Resources Regulator to review recent events in the NSW mining industry.

Within a one-month period between mid-October and mid-November, 2022, there were 7 lifting-related dangerous incidents, with 4 of these occurring over 5 days. The incidents involved cranes, chain/lever hoists and self-propelled jigs, with a range of causes and contributing factors.

ALERT | ALERT | ALERT | ALERT | ALERT

Coal Inspectorate | Alert | No.406 V 1 | 27 March 2022

**Fatal accident underground working with suspended load**

**What happened?**

Coal mine workers at the Moranbah North underground mine were conducting infrastructure

NSW  
GOVERNMENT

**Weekly incident summary**

**Week ending 9 June 2023**

This incident summary provides information on reportable incidents and safety advice for the NSW mining industry. To report an incident to the NSW Resources Regulator: phone 1300 814 609 24 hours a day, 7 days a week.

**At a glance**

High level summary of emerging trends and our recommendations to operators.

Type	Number
Reportable incident total	31
Summarised incident total	5

Summarised incidents

# Risk Assessment

RISK ANALYSIS					
	CONSEQUENCE				
	1. INSIGNIFICANT Dealt with by in house first aid	2. MINOR Treated by medical professionals, hospital out patients	3. MODERATE Significant non permanent injury overnight hospital stay	4. MAJOR Extensive permanent injury eg. Loss of fingers, extended hospital stay	5. CATASTROPHIC Death, permanent disabling injury eg. Loss of hand, quadriplegia
LIKELIHOOD					
A. Almost certain to occur in most circumstances	MEDIUM 8	HIGH 16	HIGH 18	CRITICAL 23	CRITICAL 25
B. Likely to occur frequently	MEDIUM 7	MEDIUM 10	HIGH 17	HIGH 20	CRITICAL 24
C. Possibly and likely to occur at sometime	LOW 3	MEDIUM 9	MEDIUM 12	HIGH 19	HIGH 22
D. Unlikely to occur but could happen	LOW 2	LOW 5	MEDIUM 11	MEDIUM 14	HIGH 21
E. May occur but only in rare circumstances	LOW 1	LOW 4	LOW 6	MEDIUM 13	MEDIUM 15

## Results

- using appropriate tools and equipment for the lifting task
- identifying and not using faulty equipment, materials and tools

# Skills Matrix



		HSE			Finance		Logistics			Managem...		Logistics		Ma...		Logistics		
		Health & Safety (Occupational)	SAP - Basic User	SAP - Key user	Shipment Plannig	SAP - Logistics Transactions	SAP Transactions - Logistics R...	German Language	French Language	Specific Customer Logistics In...	Transport Quotations	Phone Usage	Transport Documents	Packaging requirements for da...	Packaging by transport type	Shipment Tracking		
<div><div></div><div>Coverage 99%</div></div>																		
Required		8	3	2	8	8	5	1	1	8	8	8	8	8	8	8		
Trained		8	4	5	9	7	5	3	2	7	8	7	6	8	8	7		
Training status		✓	+1	+3	+1	-1	✓	+2	+1	-1	✓	-1	-2	✓	✓	-1		
 Austin, Lloyd	47%	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>		
 Bass, Michael	92%	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	N/A	N/A	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	N/A		
 Matt, Davis	92%	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	N/A	N/A	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>		
 Blunt, Paul	79%	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	N/A	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>		
 Brown, Peter	93%	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	N/A	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>		
 Ciuescu, Katalina	86%	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	N/A	<div></div>	<div></div>	<div></div>	<div></div>		
 Mayfield, Debbie	77%	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	N/A	N/A	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>		
 Rantio, Sakari	57%	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	N/A	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>		
 Lovely, Emma	71%	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	N/A	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>		

**No training in using appropriate lifting equipment or identifying faulty equipment is recorded for the required workforce**

# Accredited vs. Non-Accredited



- What do you need to achieve?
- Which option is going to be best for your organisation?

# Non-Accredited

- Procedures
- Codes of practice
- Australian Standards
- MDG's
- TRG's
- MECP

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## Guideline for the prevention, early detection and suppression of fires in coal mines

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Produced by Mine Safety Operations  
Industry & Investment NSW

Resources Regulator  
Department of Regional NSW

Technical reference guide

Withdrawal and emergency escape from underground  
coal mines

Produced in consultation with the Mines Rescue working group

Resources Regulator  
Department of Regional NSW

NSW code of practice

Mechanical engineering control plan

Work Health and Safety (Mines and Petroleum Sites) legislation

February 2023

## Managing the risks of plant in the workplace

Code of Practice

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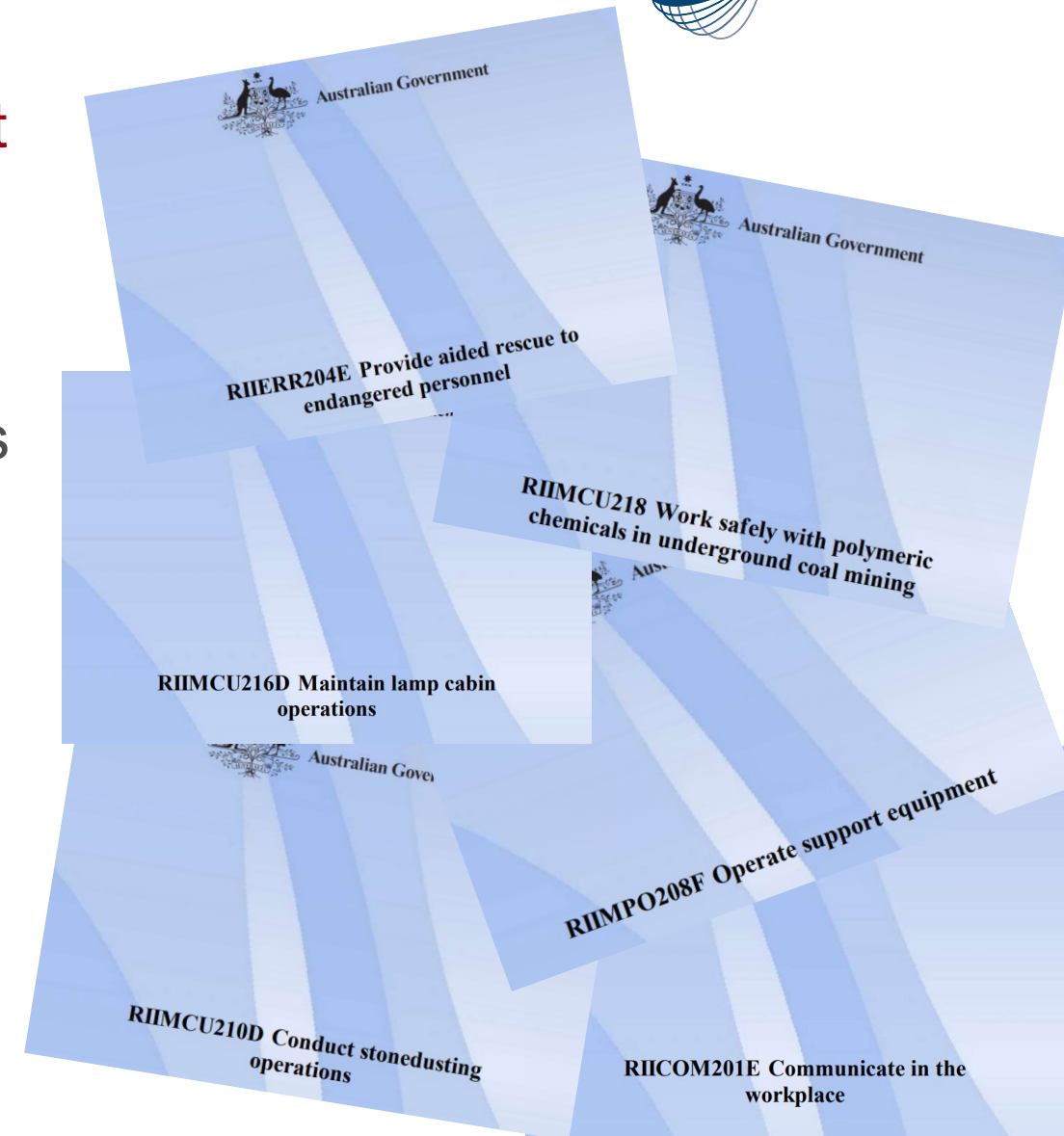
OCTOBER 2021



# Accredited

In short, accreditation is formal confirmation that the course:

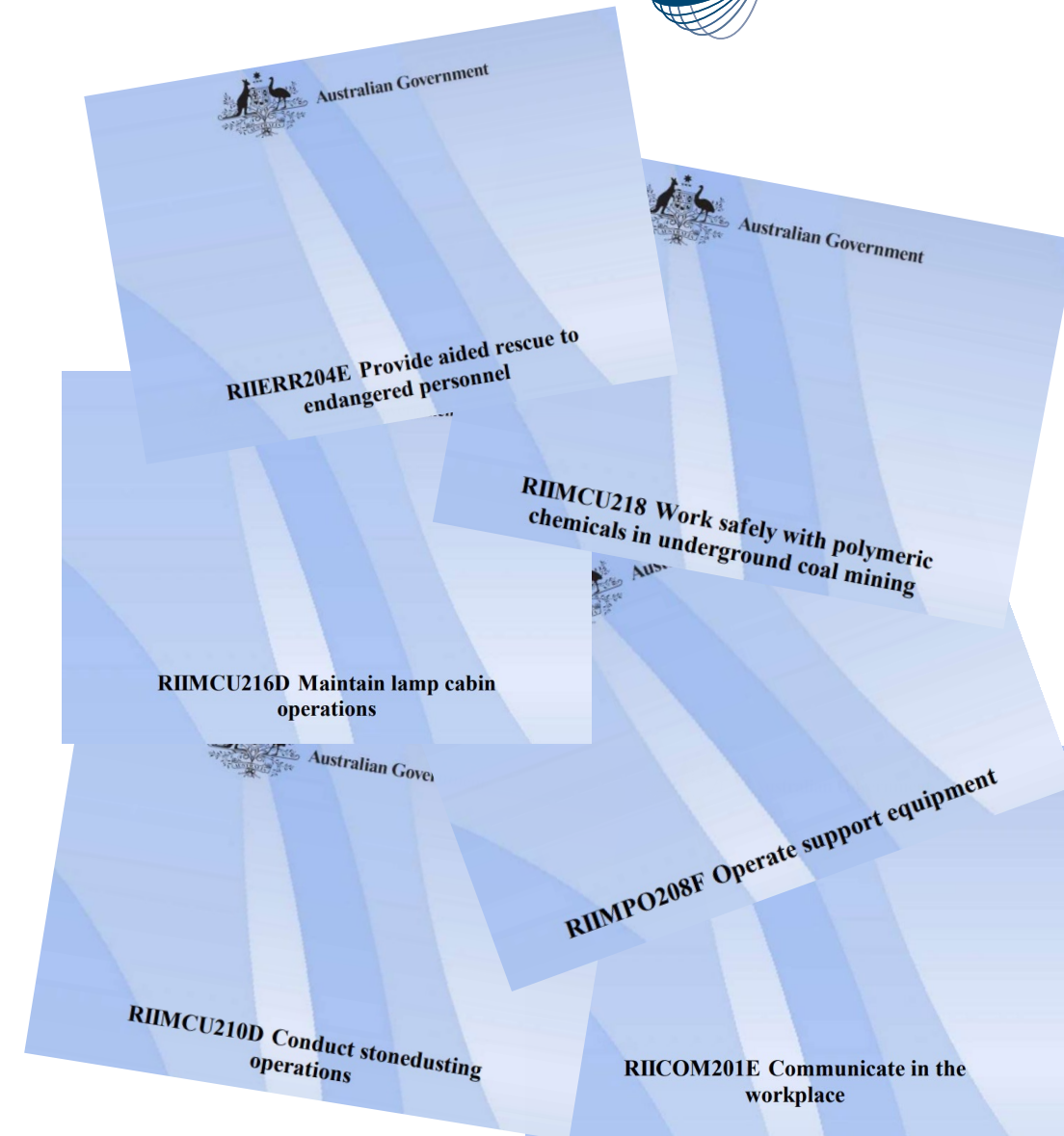
- is nationally recognised and meets quality assurance and training package requirements
- meets an established industry, enterprise, educational, legislative or community need
- provides appropriate competency outcomes and a satisfactory basis for assessment
- is aligned appropriately to the Australian Quality Framework (AQF) where it leads to a VET qualification.



# Accredited

## Assessment Conditions

- Assessment conditions describe the conditions under which a student must demonstrate this, including any specific requirements for resources, trainers, assessors and the context for assessment
- It is possible that you cannot meet assessment conditions and therefore cannot consider an accredited UOC.
- You **CANNOT** assess a learner on content that is not in the UOC.



# Locating a Unit of Competency



The screenshot shows the training.gov.au website. At the top, there's a navigation bar with 'About us' and 'Sign in'. Below that, the 'training.gov.au' logo is displayed, along with the text 'A JOINT INITIATIVE OF THE AUSTRALIAN AND STATE AND TERRITORY GOVERNMENTS'. The Australian Government crest is also visible. A search bar is present with the text 'underground lifting' and a 'Search' button. The main content area features a heading 'Training.gov.au is the national register of vocational education and training (VET)' and two tabs: 'Nationally recognised training' (selected) and 'RTO/Organisation'. Below the search bar, there's a section titled 'What is training.gov.au?' with a paragraph explaining the register and a list of two types of training: 'Nationally recognised training (NRT)' and 'Registered training organisations (RTOs)'. To the right, a section titled 'National Register Enhancements' provides information about the project and the new TGA website. At the bottom, a section titled 'Looking for something else?' offers three options: 'I am looking to choose a VET course and training provider.' (redirecting to myskills), 'I want to be or hire an apprentice.' (redirecting to AUSTRALIAN APPRENTICESHIPS), and 'I want to explore career ideas and occupations.' (redirecting to Your Career).

**training.gov.au**  
A JOINT INITIATIVE OF THE AUSTRALIAN  
AND STATE AND TERRITORY GOVERNMENTS

About us | Sign in

Australian Government

Search Reports Resources More

You are on the updated home page that includes an improved search function that allows you to filter and export search results. You can still access the previous version of the home page and search [here](#).

**Training.gov.au is the national register of vocational education and training (VET)**

Nationally recognised training RTO/Organisation

underground lifting X Search

### What is training.gov.au?

Training.gov.au is the national register of VET, as required by [s 216 of the National Vocational Education and Training Regulator Act 2011](#). Information held on the national register includes:

1. **Nationally recognised training (NRT):** training packages, qualifications, units of competency, skill sets and accredited courses.
2. **Registered training organisations (RTOs)** that are approved to deliver nationally recognised training.

The national register is intended for VET sector professionals, including: RTOs, trainers and assessors, regulators, training package developers, researchers, and policy makers.

### National Register Enhancements

The National Training Register Enhancement Project is improving the infrastructure and technology that underpins the national register. This will support the vocational education and training sector well into the future.

The new TGA website is scheduled for release in the first half of 2024 and will feature more powerful reporting tools, improved navigation, and a mobile-responsive design.

More information, including how you can participate, can be found [here](#).

### Looking for something else?

I am looking to choose a VET course and training provider.

Redirect to

**myskills**

I want to be or hire an apprentice.

Redirect to


**AUSTRALIAN APPRENTICESHIPS**  
Your Life. Your Career. Your Future.

I want to explore career ideas and occupations.

Redirect to


**Your Career™**

# Locating a Unit of Competency



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Australian Government

Home > Search

NRT

RTO/Org

underground lifting

X

Search

Export list ▼

Sort by: NRT Type

Display: 10

< 1 of 1 >

You haven't included any filters yet.

4 result item(s) match your search.

MNCU1011A - Conduct underground lifting operations

Status/Usage: Deleted

Release: 1

TP developer: PwC's Skills for Australia

NRT Type: Unit of competency

No RTOs with this item on scope.

RIIUND207A - Conduct underground lifting operations

Status/Usage: Superseded by: RIIUND207D

Release: 1

TP developer: PwC's Skills for Australia

NRT Type: Unit of competency

No RTOs with this item on scope.

RIIUND207D - Conduct underground lifting operations

Status/Usage: Superseded by: RIIUND207E

Release: 2

TP developer: PwC's Skills for Australia

NRT Type: Unit of competency

No RTOs with this item on scope.

RIIUND207E - Conduct underground lifting operations

Status/Usage: Current

Release: 1

TP developer: PwC's Skills for Australia

NRT Type: Unit of competency

See RTO List

Displaying items 1 - 4 of 4

Sort by: NRT Type

Display: 10

[Back to top](#)

Refine your search

Status/Usage

☐ Current (1)

☐ Superseded - Equivalent (2)

☐ Superseded - Non-Equivalent (0)

☐ Deleted (1)

☐ Current (Re-accreditation pending) (0)

☐ Cancelled (0)

☐ Non-Current (0)

NRT type

☐ Training package (0)

☐ Qualification (0)

☐ Unit of competency (4)

☐ Skill Set (0)

☐ Accredited course (0)

☐ Accredited course unit/module (0)

Education level

>

Recognition Manager

>

Occupations (ANZSCO)


>

Field of Education (ASCED)

>


Export list ▼

# Locating a Unit of Competency



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NRT RTO/Org

Keyword search Search

[Home](#) > [Training](#) > RIIUND207E

[Export summary to Word](#)  
[Export summary to PDF](#)  
[Notify me of changes](#)

## Unit of competency details

### RIIUND207E - Conduct underground lifting operations (Release 1)

#### Summary

Usage recommendation: **Current**

Mapping:

Mapping	Notes	Date
Supersedes and is equivalent to <a href="#">RIIUND207D</a> - Conduct underground lifting operations		22/Sep/2020

Release Status: **Current**

Releases:

Release	Release date
<b>1 (this release)</b>	<b>23/Sep/2020</b>

Companion volumes: Unit of competency

- [Companion Volume Implementation Guide is found on VETNet](#)

Assessment requirements

- [Companion Volume Implementation Guide is found on VETNet](#)

Delivery: [Find RTOs approved to deliver this unit of competency.](#)

#### Training packages that include this unit

Code	Title	Release
<a href="#">RII</a>	Resources and Infrastructure Industry Training Package	5.0-9.0

# Locating a Unit of Competency

## Content

Compare: [Compare content of this unit of competency with other releases or training components](#)

Download:  [Unit of competency \(1.26 MB\)](#)  [Unit of competency \(195.27 KB\)](#)

 [Assessment requirements \(1.26 MB\)](#)  [Assessment requirements \(208.82 KB\)](#)

## Unit of competency

### Modification History

Release	Comments
Release 1	This version first released with RII Resources and Infrastructure Industry Training Package Version 5.0.

### Application

This unit describes the skills and knowledge required to conduct underground lifting operations in coal mining. It includes developing preliminary lifting plans, preparing anchors, directing load movements, connecting load to movement devices and dismantling and removing or restoring load shifting equipment.

It applies to those working in operational roles. They generally work under supervision to undertake a prescribed range of functions involving known routines and procedures and take some responsibility for the quality of work outcomes.

No licensing, legislation or certification requirements apply to this unit at the time of publication.

# Vital Review – Performance Evidence

## Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including evidence of the ability to:

- conduct underground lifting operations on at least two occasions, including:
  - developing a preliminary lifting plan, including a minimum of five of the following:
    - confirmed details of underground lifting requirements
    - confirmed dimensions
    - site access and egress
    - suitability and availability of materials
    - tools and equipment
    - identification of potential hazards
    - probable control measures
    - identification of site coordination requirements
  - obtaining, interpreting and clarifying work requirements, including in the following forms:
    - shift briefings
    - handover details
    - work orders
  - selecting and preparing appropriate anchors
  - identifying and confirming appropriate safe working loads and centre of gravity
  - directing load using appropriate signals
  - connecting load to movement device
  - applying load movement procedures to ensure stability of the load
  - dismantling and removing or restore load shifting equipment.

During the above, the candidate must:

- locate and apply required documentation, policies and procedures and confirm work activity is compliant
- implement the requirements, procedures and techniques for the safe, effective and efficient conducting of underground lifting operations, including:
  - selecting and using the required tools and equipment
  - identifying and label unserviceable equipment, materials and tools
  - moving loads laterally using multiple lifting devices
- work with others to conduct underground lifting operations in a way that meets required outcomes, including:
  - organising work activities to meet task requirements
  - communicating clearly and concisely with others to receive and clarify work instructions
  - complying with reporting requirements and procedures.

# Vital Review – Knowledge Evidence

## Knowledge Evidence

The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including knowledge of:

- key policies, procedures and documentation required to conduct underground lifting operations, including those related to:
  - work health and safety
  - site and equipment safety
  - operational and maintenance activities
  - record maintenance and reporting
- principles and techniques for developing preliminary lifting plans, including:
  - confirmed details of underground lifting requirement
  - confirmed dimensions and mass
  - site access and egress
  - suitability and availability of materials
  - tools and equipment
  - identification of potential hazards
  - probable control measures
  - identification of site coordination requirements
- principles and techniques for identifying and responding to relevant hazards and emergencies
- principles and techniques for interpreting underground lifting work requirements, including in the following forms:
  - shift briefings
  - handover details
  - work orders
- characteristics, technical capabilities and limitations of hand tools and equipment required for underground lifting operations, including:
  - slings
  - ropes
  - shackles
  - eye-bolts
  - chain blocks
  - lever hoists
  - elephants foot
- verbal and hand signal techniques for load moving
- principles and techniques for applying movement devices, including:
  - load haul dump (LHD) jib attachments
  - manual and mechanically operated chain blocks/lever pullers
  - roof supports and winches
- site requirements for housekeeping, completing maintenance records and reporting requirements
- basic techniques for communicating job activities with others.

# Vital Review – Elements and Criteria

## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Plan for underground lifting	<ul style="list-style-type: none"><li>1.1 Obtain, interpret, confirm and clarify work requirements</li><li>1.2 Access, interpret and apply documentation required for conducting underground lifting operations</li><li>1.3 Develop preliminary underground lifting plan according to job requirements</li><li>1.4 Confirm control measures for hazards associated with the use of lifting equipment and other lifting devices with relevant personnel</li><li>1.5 Finalise and confirm underground lifting plan and schedule resources according to job requirements</li></ul>
2. Prepare for underground lifting	<ul style="list-style-type: none"><li>2.1 Identify, select, inspect and assemble underground lifting equipment, materials and tools according to job requirements</li><li>2.2 Label unserviceable equipment, materials and tools according to site requirements</li><li>2.3 Select and prepare appropriate anchors according to strata control plan</li></ul>
3. Move loads	<ul style="list-style-type: none"><li>3.1 Identify and confirm appropriate safe working loads and centre of gravity</li><li>3.2 Direct load movement in an underground environment, according to job requirements, using standard load moving signals</li><li>3.3 Connect lifting gear to load according to site requirements</li><li>3.4 Connect load to movement device, according to site requirements, using appropriate and certified equipment</li><li>3.5 Confirm stability of the load by applying load movement, temporary bracing and/or load support procedures</li><li>3.6 Comply with required specifications during placement and securing of load</li><li>3.7 Dismantle and remove/restore load shifting equipment according to site requirements</li></ul>

# Vital Review – Assessment Conditions

## Assessment Conditions

Mandatory conditions for assessment of this unit are stipulated below. The assessment must:

- include access to:
  - personal protective equipment
  - equipment required to conduct underground lifting operations
- be conducted in a safe environment; and,
- be assessed in the context of this sector's work environment; and,
- be best assessed where infrastructure is available to facilitate lateral load movement using multiple lifting devices; and,
- be assessed in compliance with relevant legislation/regulation and using policies, procedures and processes directly related to the industry sector for which it is being assessed; and,
- confirm consistent performance can be applied in a range of relevant workplace circumstances.

Where personal safety or environmental damage are limiting factors, assessment may occur in a simulated work environment\* provided it is realistic and sufficiently rigorous to cover all aspects of this sector's workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.

# Using the Information Within The UOC



Stage 1

Identify the Evidence required



Stage 2

Select appropriate Assessment Methods



Stage 3

Identify Assessment Tools

# Using the Information Within the UOC

## Stage 1 - Identify the Evidence required

### Visualise Competency

- A key step in unpacking a Unit of Competency involves developing a picture of competence.
- This is a description of how a unit or cluster of Units of Competency is applied within a work context.

### Create an Evidence Required List

- Review knowledge as well as performance evidence and compile a list of the evidence required

# Using the Information Within the UOC

## Stage 2 - Select appropriate Assessment Methods

### Assessment Methods

- Theory questions
- Direct observation
- Structured activities
- Third party evidence



# Using the Information Within the UOC

## Stage 3 – Identify Appropriate Assessment Tools

### Direct Observation Tool

- Observation checklist
- Assessor instructions
- Learner instructions

### Questioning Tool

- Written questions
- Sample responses
- Assessor instructions
- Learner instructions

### Project Tool

- Project brief
- Sample responses
- Assessor instructions
- Learner instructions

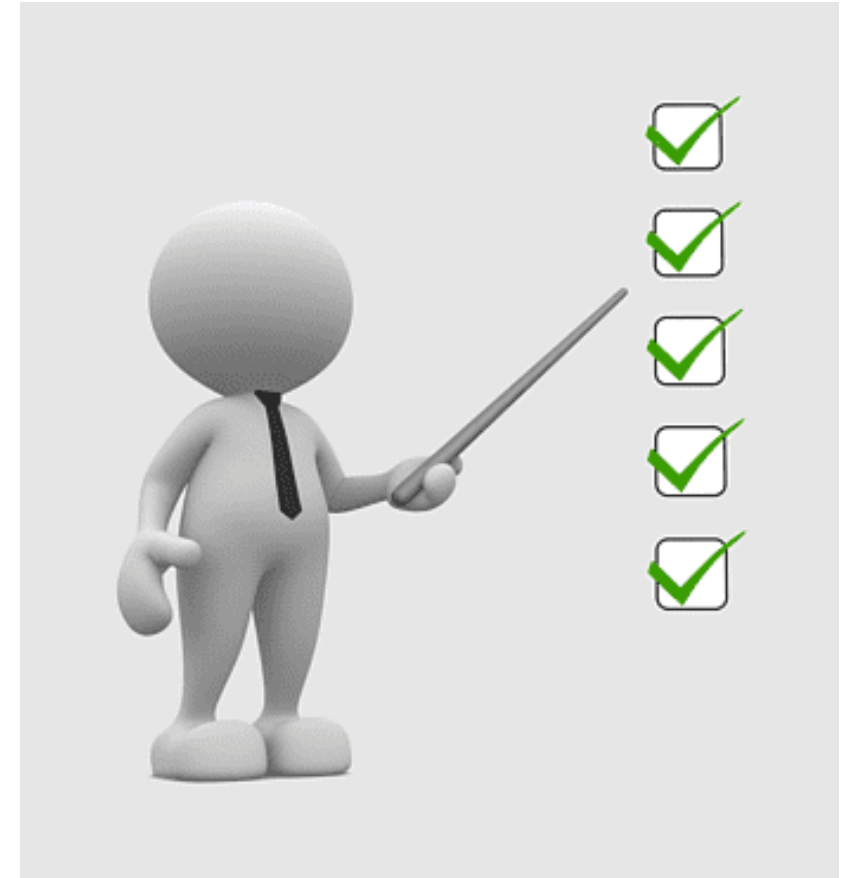
# Mapping

- Through mapping, we are trying to match what's in the assessment tool to the unit of competency and its assessment requirements - effective mapping ensures everything gets covered!
- Done well, accurate mapping gives us assurance that our delivery has addressed all components of the unit of competency and that learners have the opportunity to meet all requirements.



# Mapping

- To summarise in its simplest form mapping is simply matching the criteria of the unit to all the stuff in your assessments.
- This includes:
  - All performance criteria
  - All performance evidence
  - All knowledge evidence
  - All assessment conditions



# Mapping

Knowledge Evidence:	Assessment Activities:	
	Assessment Task 1 - Theory	Assessment Task 2 – Practical Assessment Task 3 – Practical
The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including knowledge of:		
<ul style="list-style-type: none"> <li>Key policies, procedures and documentation required to conduct underground lifting operations, including those related to:                             <ul style="list-style-type: none"> <li>Work health and safety</li> <li>Site and equipment safety</li> <li>Operational and maintenance activities</li> </ul> </li> </ul>		
	Q2, Q3, Q8, Q12, Q13, Q14	2.2, 3.2, 2.3, 3.3
	Q2, Q3, Q5, Q6, Q7, Q9, Q17	2.2, 3.2, 2.3, 3.3
	Q2, Q3, Q8	2.2, 3.2, 2.3, 3.3
Performance Evidence:	Assessment Activities:	
	Assessment Task 1 - Theory	Assessment Task 2 – Practical Assessment Task 3 – Practical
The candidate must demonstrate the ability to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including evidence of the ability to:		
<ul style="list-style-type: none"> <li>Conduct underground lifting operations on at least two occasions, including:                             <ul style="list-style-type: none"> <li>Developing a preliminary lifting plan, including a minimum of five of the following:                                     <ul style="list-style-type: none"> <li>Confirmed details of underground lifting requirements</li> <li>Confirmed dimensions</li> <li>Site access and egress</li> </ul> </li> </ul> </li> </ul>		
		2.2, 2.3, 3.2, 3.3
		2.1, 3.1, 2.2, 2.3, 3.2, 3.3
		2.2, 2.3, 3.2, 3.3
		2.2, 2.3, 3.2, 3.3

# Mapping

## Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in performance criteria and foundation skills of this unit, including evidence of

- conduct underground lifting operations on at least two occasions, including:
  - developing a preliminary lifting plan, including a minimum of five of:
    - confirmed details of underground lifting requirements *2.1, 2.2, 2.3*
    - confirmed dimensions *2.1, 2.2, 2.3*
    - site access and egress *2.1, 2.2, 2.3*
    - suitability and availability of materials *2.1, 2.2, 2.3*
    - tools and equipment *2.2, 2.3*
    - identification of potential hazards *2.2, 2.3*
    - probable control measures *2.1, 2.2, 2.3*
    - identification of site coordination requirements *2.1, 2.2*
  - obtaining, interpreting and clarifying work requirements, including in forms:
    - shift briefings *2.1, 2.2*
    - handover details *2.1, 2.2*
    - work orders *2.1*
  - selecting and preparing appropriate anchors *2.1, 2.2*
  - identifying and confirming appropriate safe working loads and centre
  - directing load using appropriate signals *2.4, 2.5, 3.4, 3.5, Q1*
  - connecting load to movement device *2.3, 3.3*
  - applying load movement procedures to ensure stability of the load *2.4*
  - dismantling and removing or restore load shifting equipment. *2.6, 3.1*

## Knowledge Evidence

The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including knowledge of:

- key policies, procedures and documentation required to conduct underground lifting operations, including those related to:
  - work health and safety *Q 2, 3, 8, 12, 13, 14*
  - site and equipment safety *Q 2, 3, 5, 6, 7, 9, 17*
  - operational and maintenance activities *Q 2, 3, 8*
  - record maintenance and reporting *Q 8*
- principles and techniques for developing preliminary lifting plans, including:
  - confirmed details of underground lifting requirement *Q 19, 20*
  - confirmed dimensions and mass *Q 6, 7, 8, 21*
  - site access and egress *2.2, 3.2*
  - suitability and availability of materials *Q 6, 7, 8*
  - tools and equipment *2.2, 3.2*
  - identification of potential hazards *Q 2, 8, 10*
  - probable control measures *Q 2, 8, 10*
  - identification of site coordination requirements *2.1, 3.1, 2.2, 3.2*
- principles and techniques for identifying and responding to relevant hazards and emergencies *Q 4, 5, 10, 26*
- principles and techniques for interpreting underground lifting work requirements, including in the following forms:
  - shift briefings *Q 20*
  - handover details *Q 20*
  - work orders *Q 20*

# Questions?



# Conclusion

- What worked?
- What would you like to see/discuss in the future?
- Survey to be sent out following these workshops
- General feedback and questions





Coal Services

