

# Quarry Conference 2023

**Paul Hunt**  
CI Extractives

WorkSafe NZ

July 2023

**WORKSAFE**

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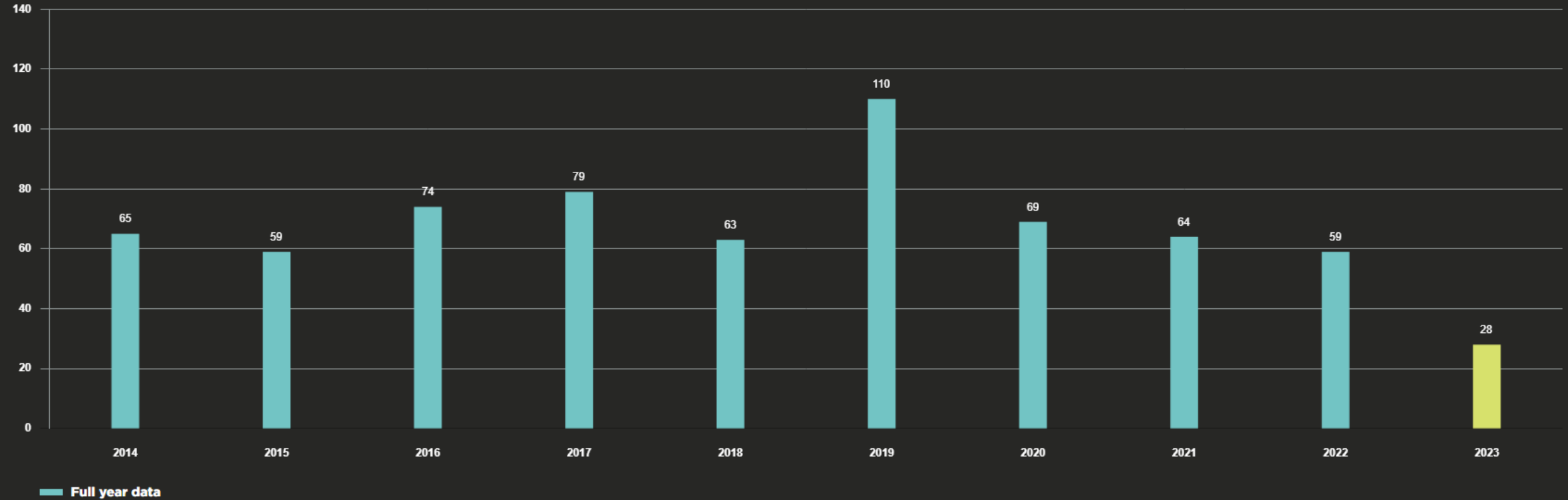
How are we going.....





# NZ – Work related fatalities

These totals include work-related deaths resulting from the February 2011 Christchurch earthquake and the December 2019 Whakaari volcanic eruption.



MONTH	FATALITIES
January	4
February	10
March	8
April	6
	28

63

Total

May 2022 to Apr 2023

5.3

Average per month

May 2022 to Apr 2023

10

Highest value

Feb 2023

1

Lowest value

May 2022

# NZ - Health related fatalities

- Work-related health deaths are estimated at **750-900** a year.
- There are an estimated **5,000-6,000** hospitalisations each year due to work-related ill-health.
- A worker is **15** times more likely to die from a work-related disease than from a workplace accident.

## FATALITIES

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**63 fatalities**

From May 2022 to Apr 2023

**MOST COMMON FACTOR  
INVOLVED IN INJURIES  
RESULTING IN MORE THAN A  
WEEK AWAY FROM WORK**

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**Muscular Stress  
While Lifting,  
Carrying or  
Putting Down  
Objects.**

From Apr 2022 to Mar 2023

**INJURIES RESULTING IN MORE  
THAN A WEEK AWAY FROM  
WORK**

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**33,435 injuries**

From Apr 2022 to Mar 2023

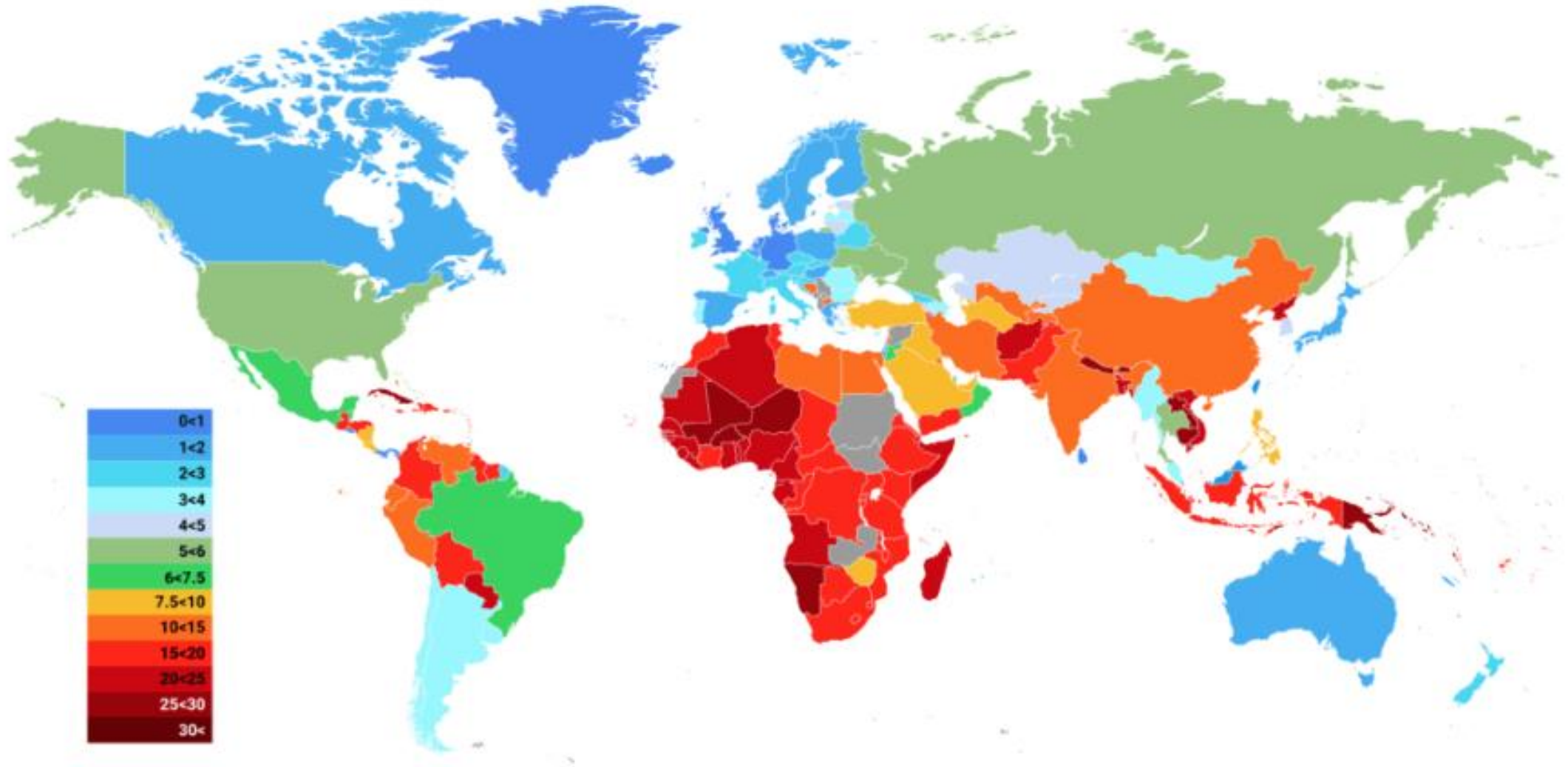
**WORK-RELATED HEALTH  
DEATHS ARE ESTIMATED AT**

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**750-900 a year**

WorkSafe has revised its work-related health estimates, and has also worked on a measure of the quality and length of life lost to injuries and illness

## How Do Workplace Fatality Rates per 100,000 Workers Change Across the Globe?



# Full year fatality data by sector & type



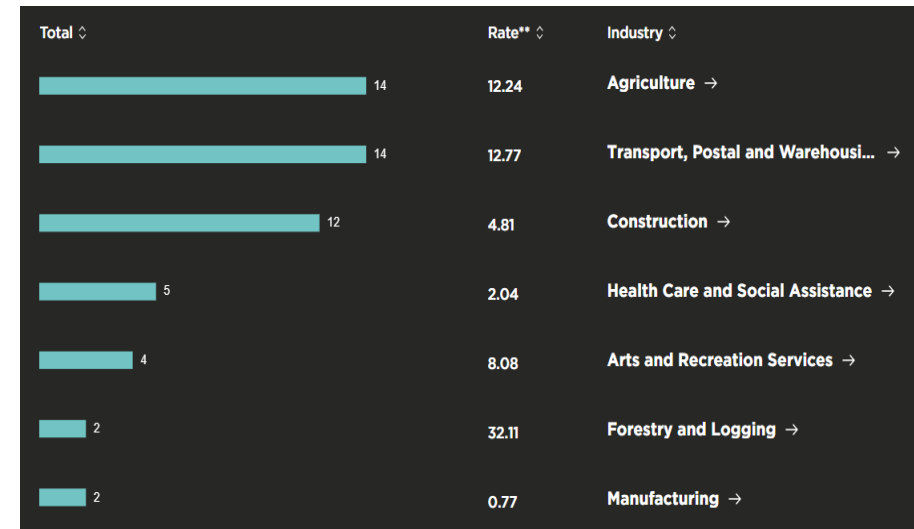
# Fatality data.....Extractives

Workplace Fatalities - Extractives generally 1 per year

Fatality Rate - The rate is **calculated** as fatalities per 100000 workers

( or some use number of fatal **work** injuries x 200,000,000/total hours worked).

Either calculation gives a fatality rate of about 16  
for the extractives industry



Health related fatalities

– use those numbers x15 and you might extrapolate 15 health related deaths

Compulsory Health checks have now commenced

First notification of chronic silicosis for two workers at a quarry site



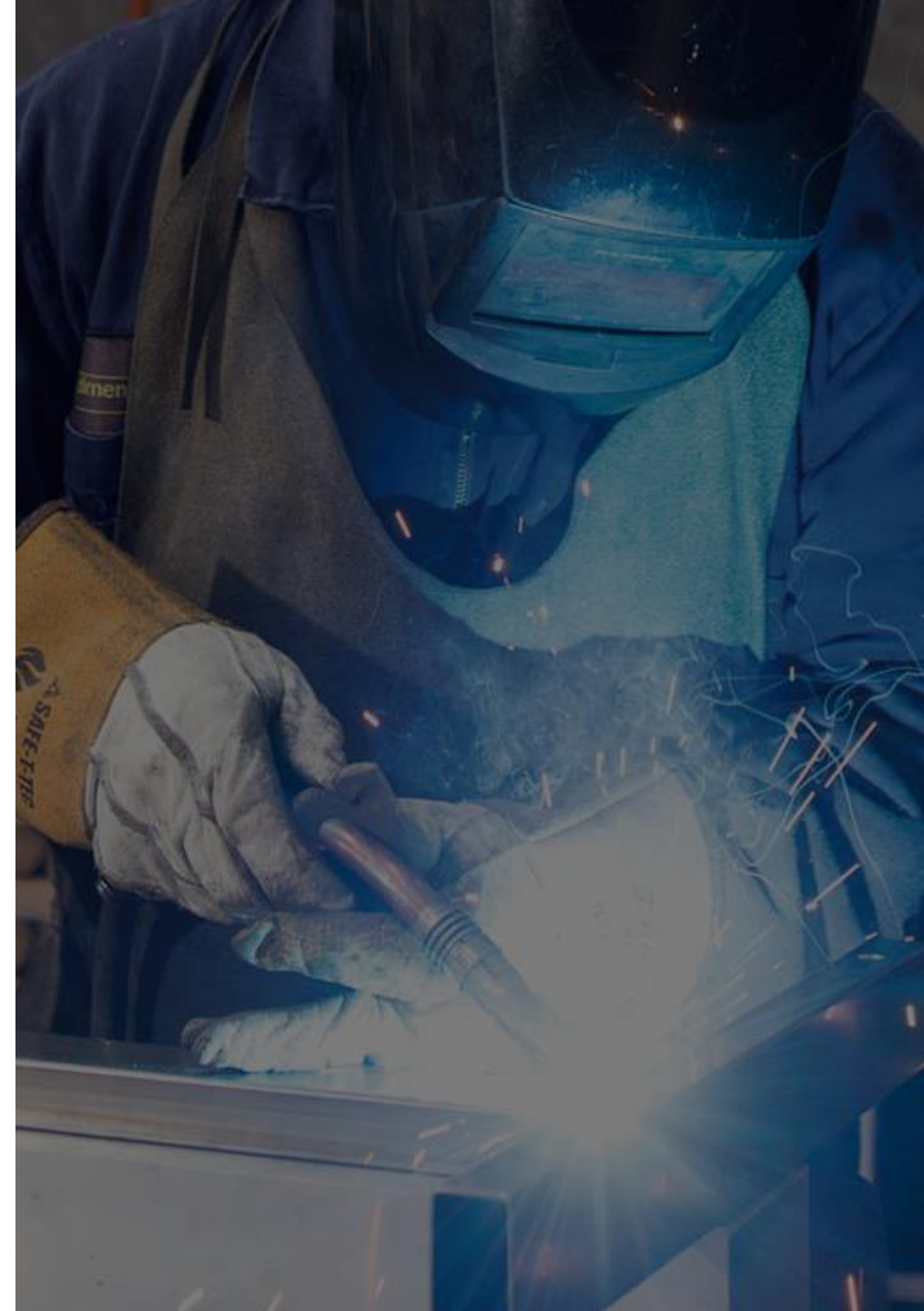
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# Healthy Work

Carcinogens and airborne risks

Learn about identifying and controlling carcinogens and airborne risks at one of our WorkSafe roadshows being held around New Zealand between 20 September and 15 November 2022.

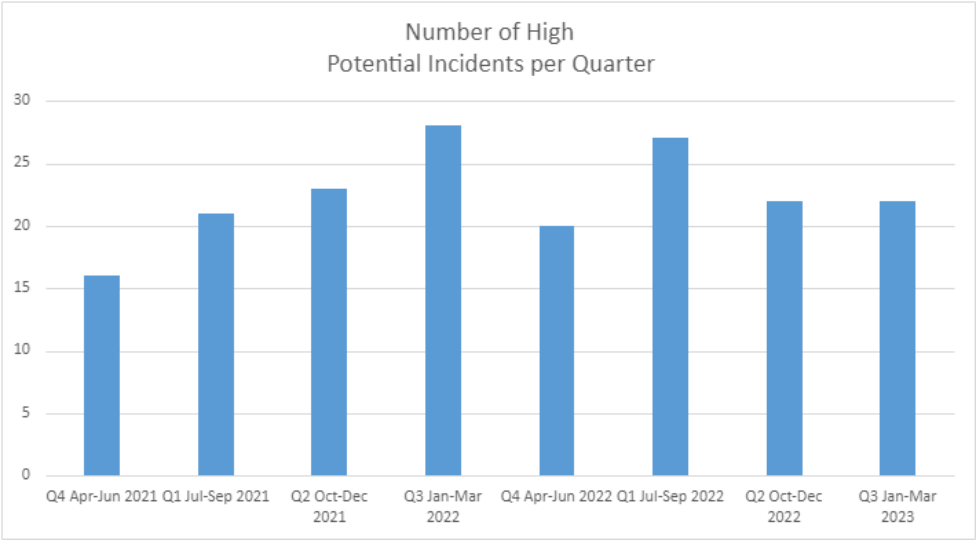
These interactive roadshows include a focus on asbestos, silica, welding fume, and wood dust, with the opportunity to engage with our team and subject matter experts.



# HPI data Extractives

QUARTER	Q2 OCT-DEC 2019	Q3 JAN-MAR 2020	Q4 APR-JUN 2020	Q1 JUL-SEP 2020	Q2 OCT-DEC 2020	Q3 JAN-MAR 2021	Q4 APR-JUN 2021	Q1 JUL-SEP 2021	Q2 OCT-DEC 2021	Q3 JAN-MAR 2022	Q4 APR-JUN 2022	Q1 JUL-SEP 2022	Q2 OCT-DEC 2022	Q3 JAN-MAR 2023	TOTAL PREVIOUS 12 MONTHS
Number of high potential incidents per quarter	28	34	15	20	24	23	16	21	23	28	20	27	22	22	91

TABLE 6: High potential incidents per quarter



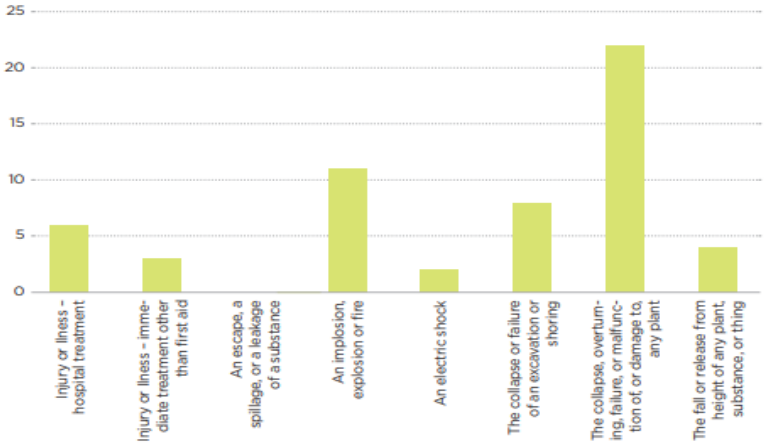
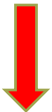
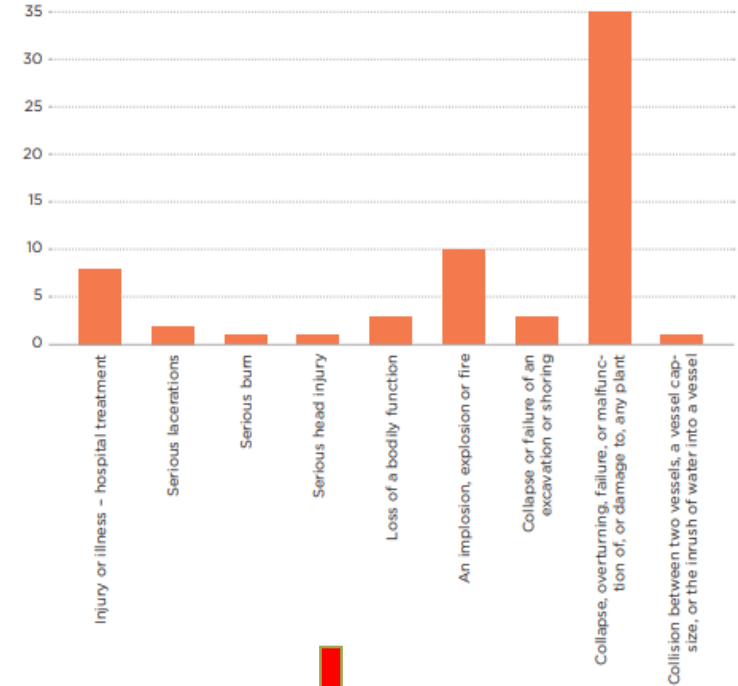
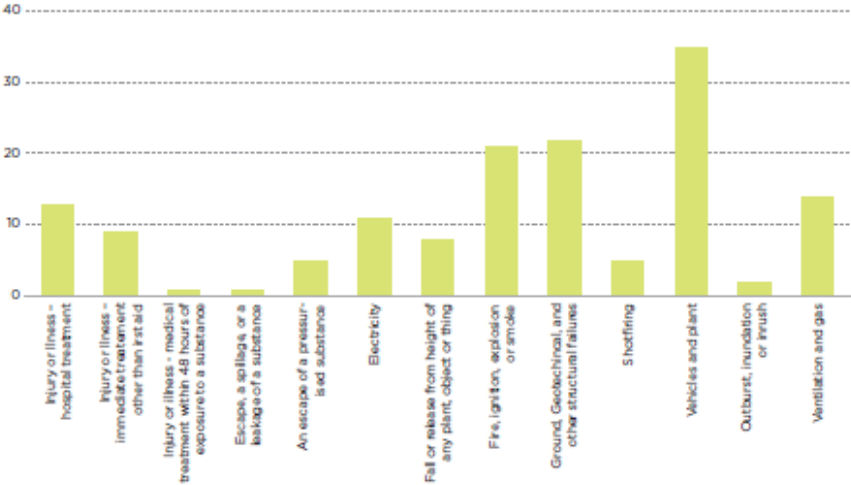
## High potential incidents

A high potential incident at a mine, quarry or tunnel is 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.

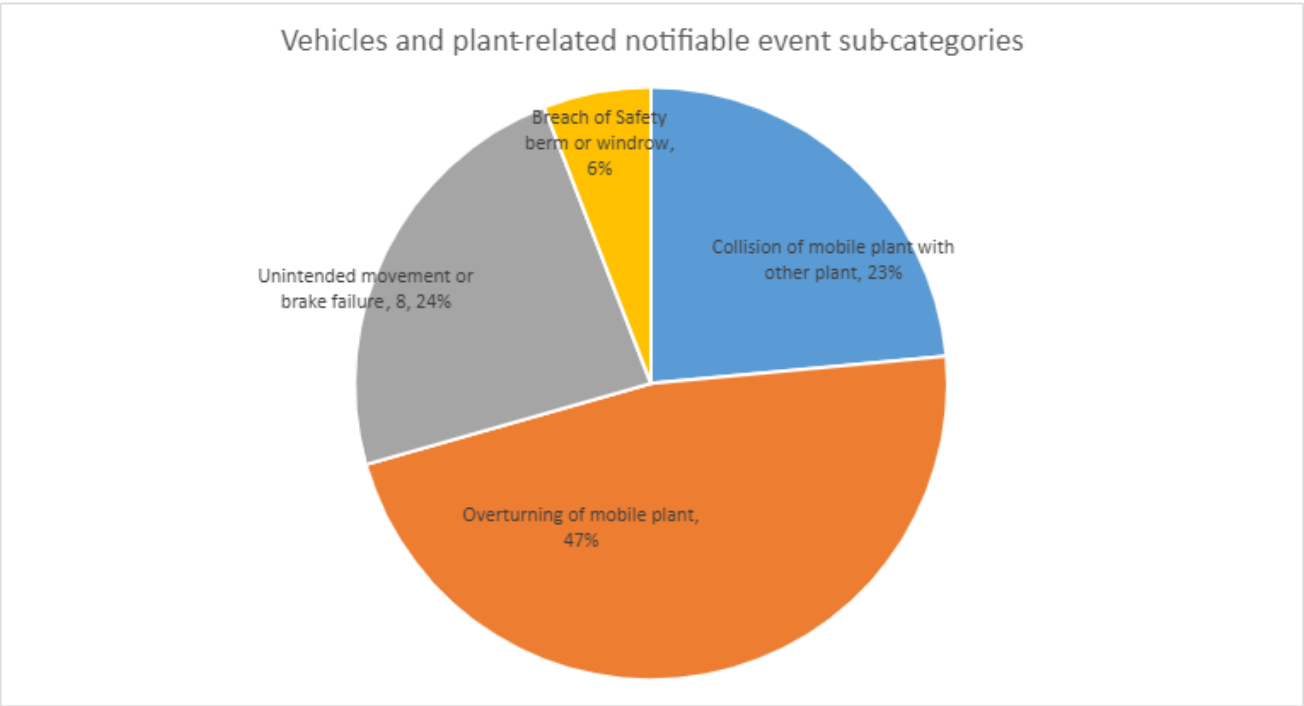
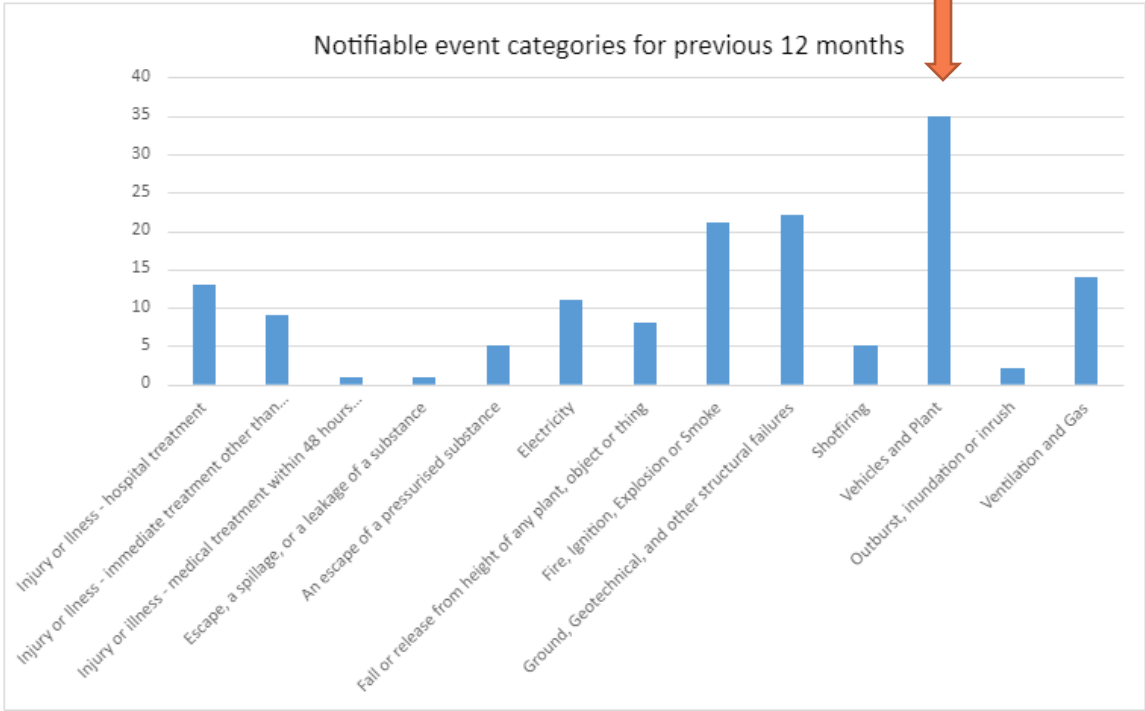




Data now all reported Schedule 5  
Collapse overturning, malfunction or  
damage to any plant  
now  
Vehicles and Plant



# Notifiable Events





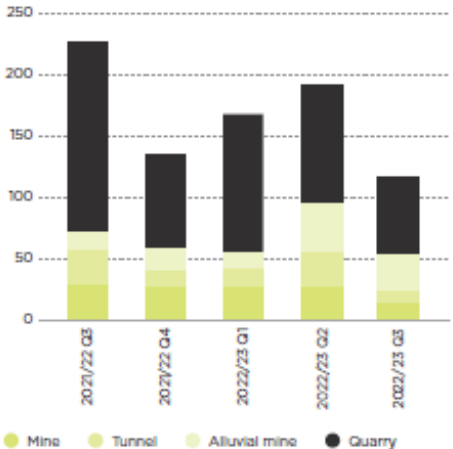
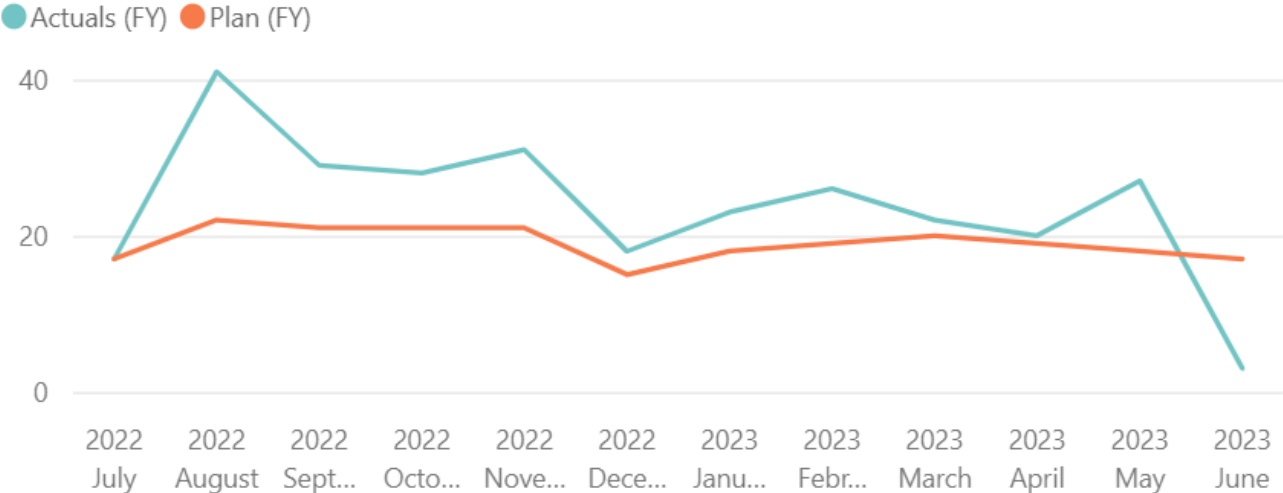
# 67

**Alluvial mines**  
 Number of mines that have been  
 verified (57) or have notified of an  
 Appointed Manager to WorkSafe (10)  
 (Includes 2 Iron sands mines)

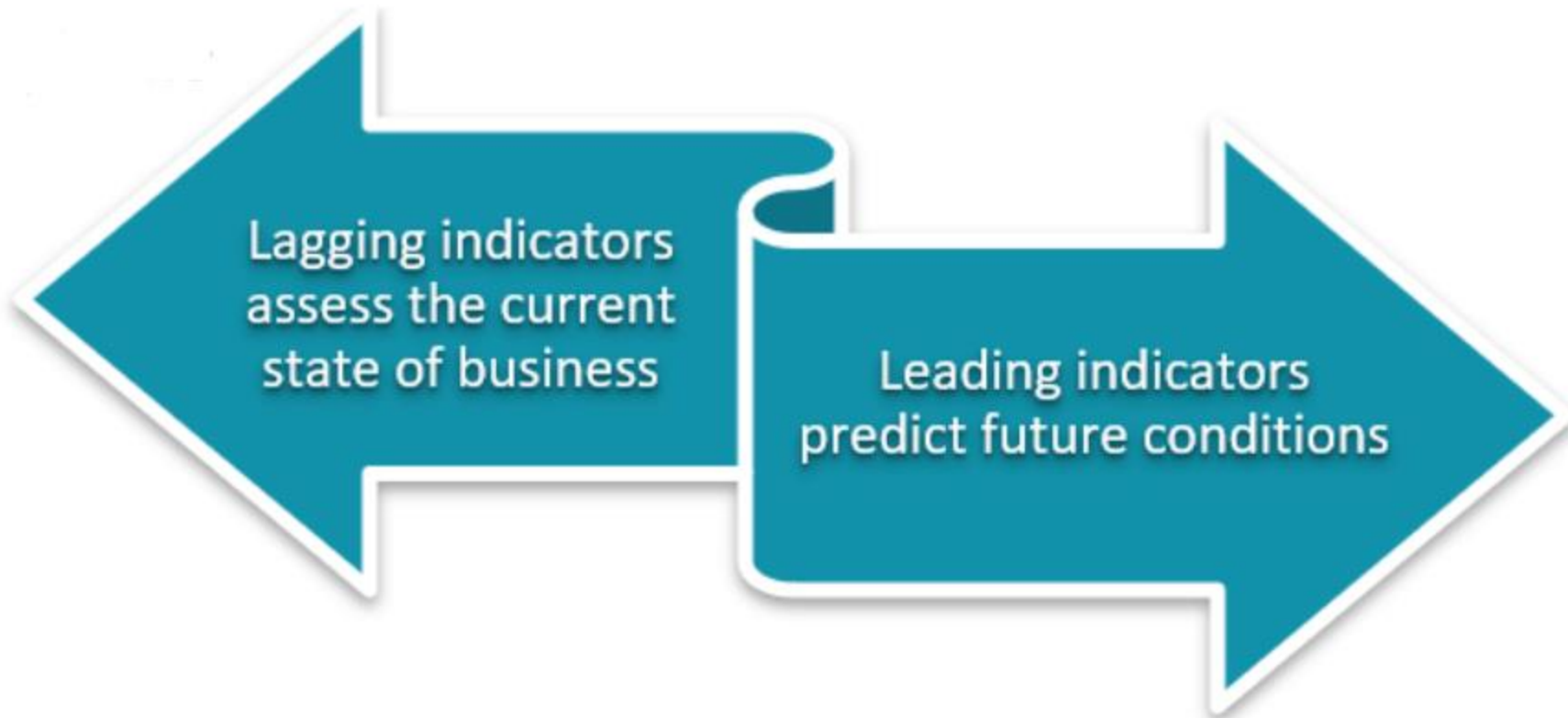
# 955

**Quarries**  
 Number of quarries that have been  
 verified (828) or have notified of an  
 Appointed Manager to WorkSafe  
 but not yet verified (127)

## Inspections Plan vs Actual



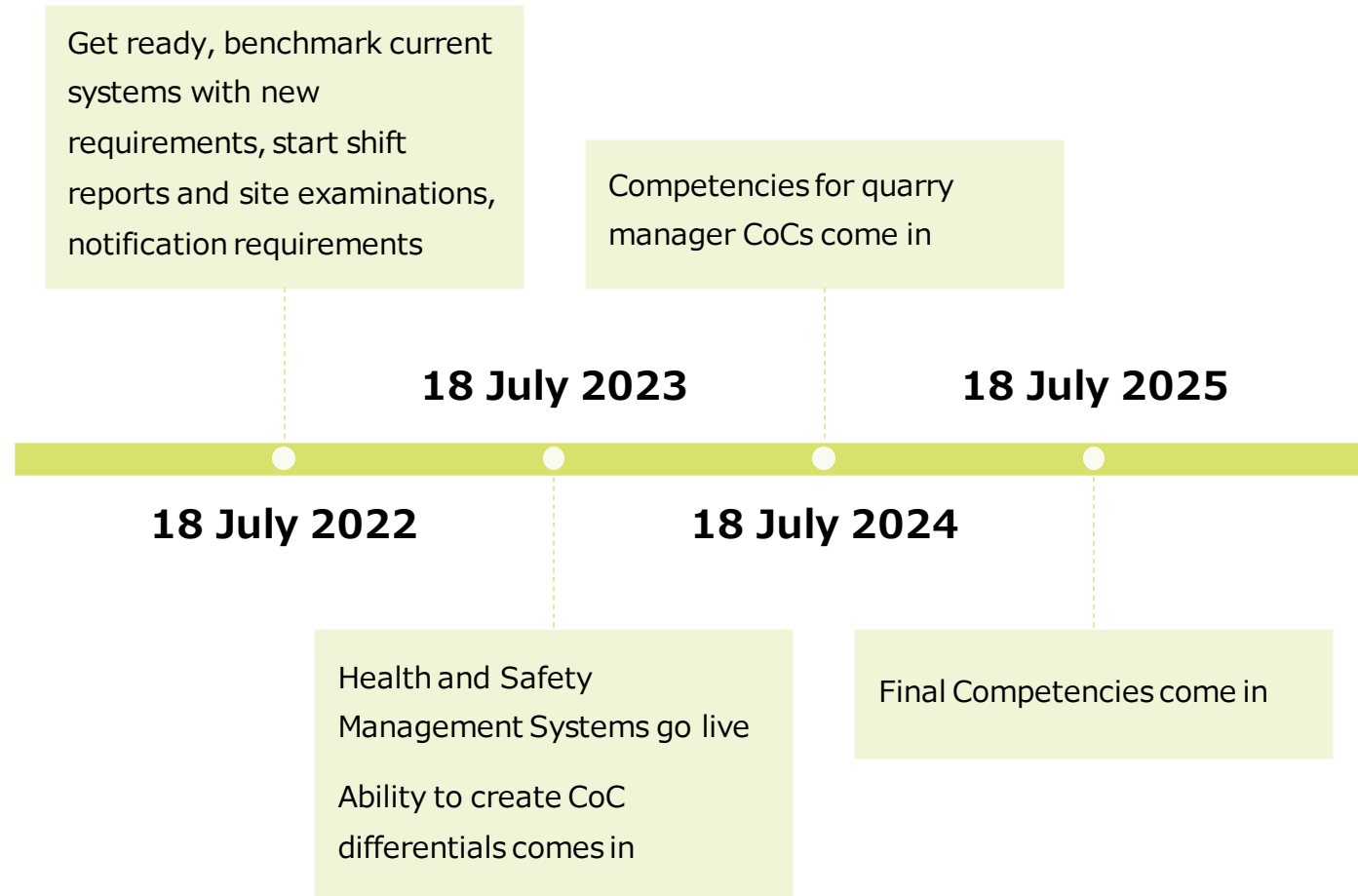
**FIGURE 15:**  
 Enforcement actions  
 issued by sector





# The last year – Lead indicators

- The introduction of the new regulations. Part 1
- General observations from Inspectors has been good –
- General understanding of Part 1 regulations
- Good attendance at H&S Workshops
- Industry Bund report
- Innovative learning material produced by operators – Videos etc.
- CoC numbers remain stable , pass rates remain stable
- Some good examples of proportionate H&S systems

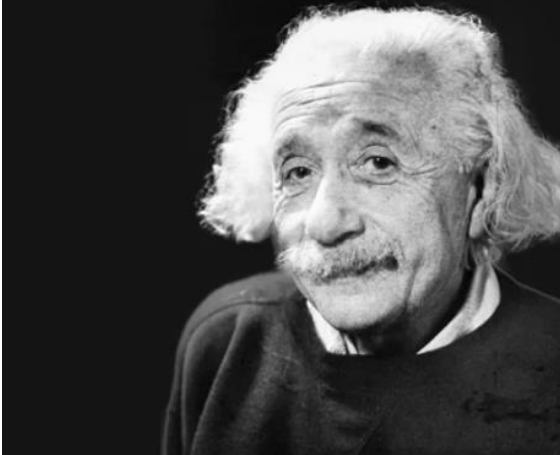


# Focus on.....

- What we have always done

Insanity: doing the same thing over and over again and expecting different results.

ALBERT EINSTEIN



- What we starting to do and will do more of!

Part 2 Regulations

Introduction of more quality management type processes

RA – worker participation,  
Principal hazards,

WorkSafe – focus more on education to enable the development of these systems

Audit focus

Improve Sector Competency



Organizational Risk Management Maturity Chart

<b>No risk management</b> <ul style="list-style-type: none"> <li>No or little training</li> <li>Poor or no communication</li> <li>Superficial incident investigation</li> <li>Negligence</li> <li>Dishonesty</li> <li>Hiding of incidents</li> </ul>	<b>Reactive risk management</b> <ul style="list-style-type: none"> <li>Minimum / inconsistent training</li> <li>Some communication on need to know basis</li> <li>Minimum legal compliance</li> <li>Incident investigation but limited analysis</li> </ul>	<b>Compliant risk management</b> <ul style="list-style-type: none"> <li>Training / awareness</li> <li>Established communication channels</li> <li>Total legal compliance</li> </ul>	<b>Pro-active formal risk assessment</b> <ul style="list-style-type: none"> <li>Ownership culture</li> <li>Involvement at all levels</li> <li>High level of training / awareness</li> </ul>	<b>Risk assessment integrated into all systems</b> <ul style="list-style-type: none"> <li>Eliminate problems before they occur</li> </ul>
<p>Accept that incidents happen</p> <p><b>Vulnerable</b></p> <ul style="list-style-type: none"> <li>No "near miss" discussions and analysis</li> <li>No plans and procedures</li> </ul>	<p>Prevent a similar incident</p> <p><b>Reactive</b></p> <ul style="list-style-type: none"> <li>Some "near miss" discussions and analysis</li> <li>Few plans and procedures</li> </ul>	<p>Prevent incidents before they occur</p> <p><b>Compliant</b></p> <ul style="list-style-type: none"> <li>Regular people involvement and focus</li> <li>Causal incident analysis based on event potential</li> <li>Planned monitoring and audits</li> </ul>	<p>Improve the systems</p> <p><b>Proactive</b></p> <ul style="list-style-type: none"> <li>Near miss involvement</li> <li>Beyond legal compliance</li> <li>Seek to actively engineer out inadequacies</li> <li>Incident learnings shared with all levels</li> <li>Well-designed plans / procedures</li> </ul>	<p>Way we do business</p> <p><b>Resilient</b></p> <ul style="list-style-type: none"> <li>Individually internalized</li> <li>Integrated management systems</li> <li>Self-regulating style</li> <li>All threats considered in decision-making</li> <li>Systems enhancement through external evaluation / auditing</li> </ul>



Work is safe for  
workers and those  
affected by work

**SAFE  
WORK**

**Our goals  
for Aotearoa  
New Zealand**

**HEALTHY  
WORK**

Work is healthy  
for workers and  
those affected  
by work

**EQUITABLE  
OUTCOMES**

Work is  
healthy and  
safe for all  
in Aotearoa





**Any Questions?**

