

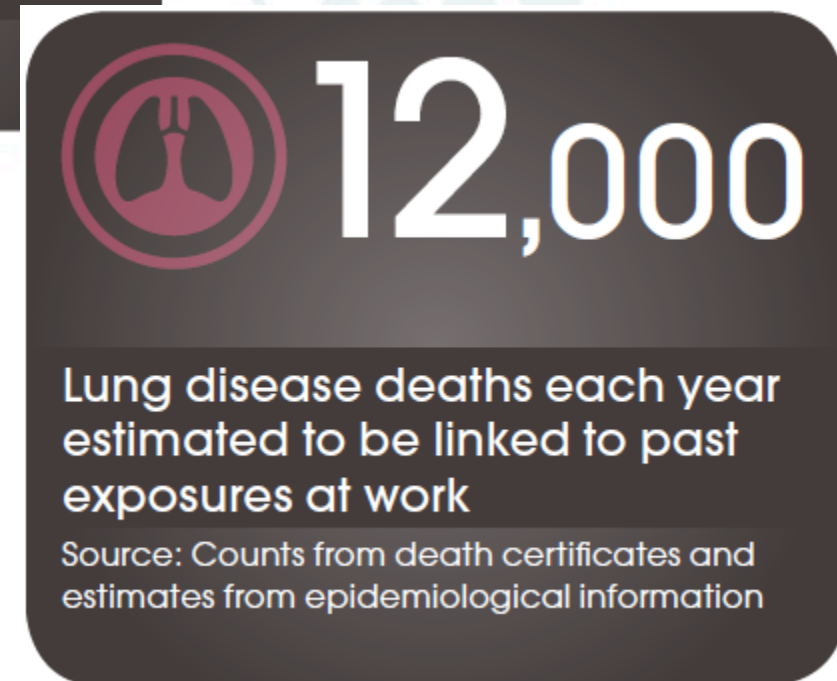
# Do you Breathe Freely?

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Australian Institute of Occupational Hygiene



The *UK Health and Safety Executive* recently published these alarming figures



Source: HSE [Summary statistics for Great Britain 2018](https://www.hse.gov.uk/statistics/causdis/) and [www.hse.gov.uk/statistics/causdis/](https://www.hse.gov.uk/statistics/causdis/)

**Serious claims by nature of injury/disease, 2017-18p\***



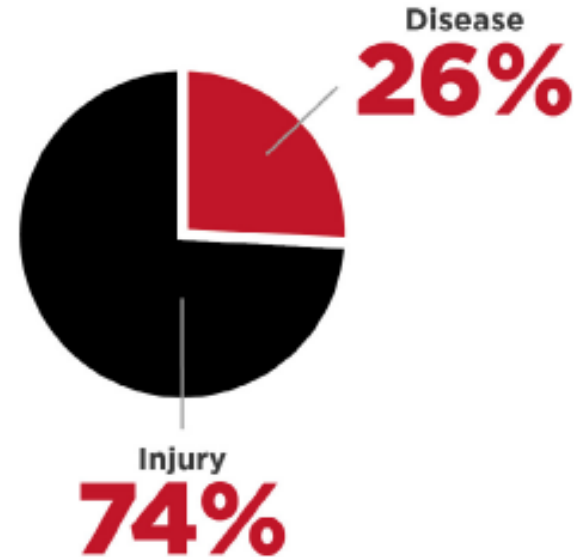
Traumatic joint/ligament  
and muscle/tendon injury

**41%**



Wounds, lacerations, amputations  
and internal organ damage

**16%**



*Safe Work Australia* reports that workers in Australia are **8 times more likely to die** from

**occupational illness or disease** than an accident at work.

Australian Institute of Occupational Hygienists  
Approached our British counterparts to see what they were doing.  
The UK *Breathe Freely* program has been made available to the AIOH.

The screenshot shows the BOHS website with a navigation bar for Manufacturing, Construction, and HI Management Standard. The main content area features a large banner for the 'Breathe Freely' initiative, which aims to reduce occupational lung disease in the UK. The banner includes a search bar and a call to action to sign up. Below the banner are three smaller sections: 'Controlling exposures to prevent occupational lung disease in MANUFACTURING', 'Controlling exposures to prevent occupational lung disease in CONSTRUCTION', and 'The HI Management Standard'.

MANUFACTURING CONSTRUCTION HI MANAGEMENT STANDARD

BREATHE FREELY Controlling exposures to prevent occupational lung disease in industry

BOHS The Chartered Society for Worker Health Protection

About BOHS

Find an occupational hygienist

What is Breathe Freely Latest News & Events Courses and Training Contact Us

## Do you Breathe Freely?

Breathe Freely is a BOHS initiative, aimed at reducing occupational lung disease in the UK, which causes significant debilitating ill-health and an estimated 13,000 deaths per year.

Click Here to Sign Up, Create or Manage Your Account

Find out more...

What Can an Occupational Hygienist Help With?

Controlling exposures to prevent occupational lung disease in MANUFACTURING

Controlling exposures to prevent occupational lung disease in CONSTRUCTION

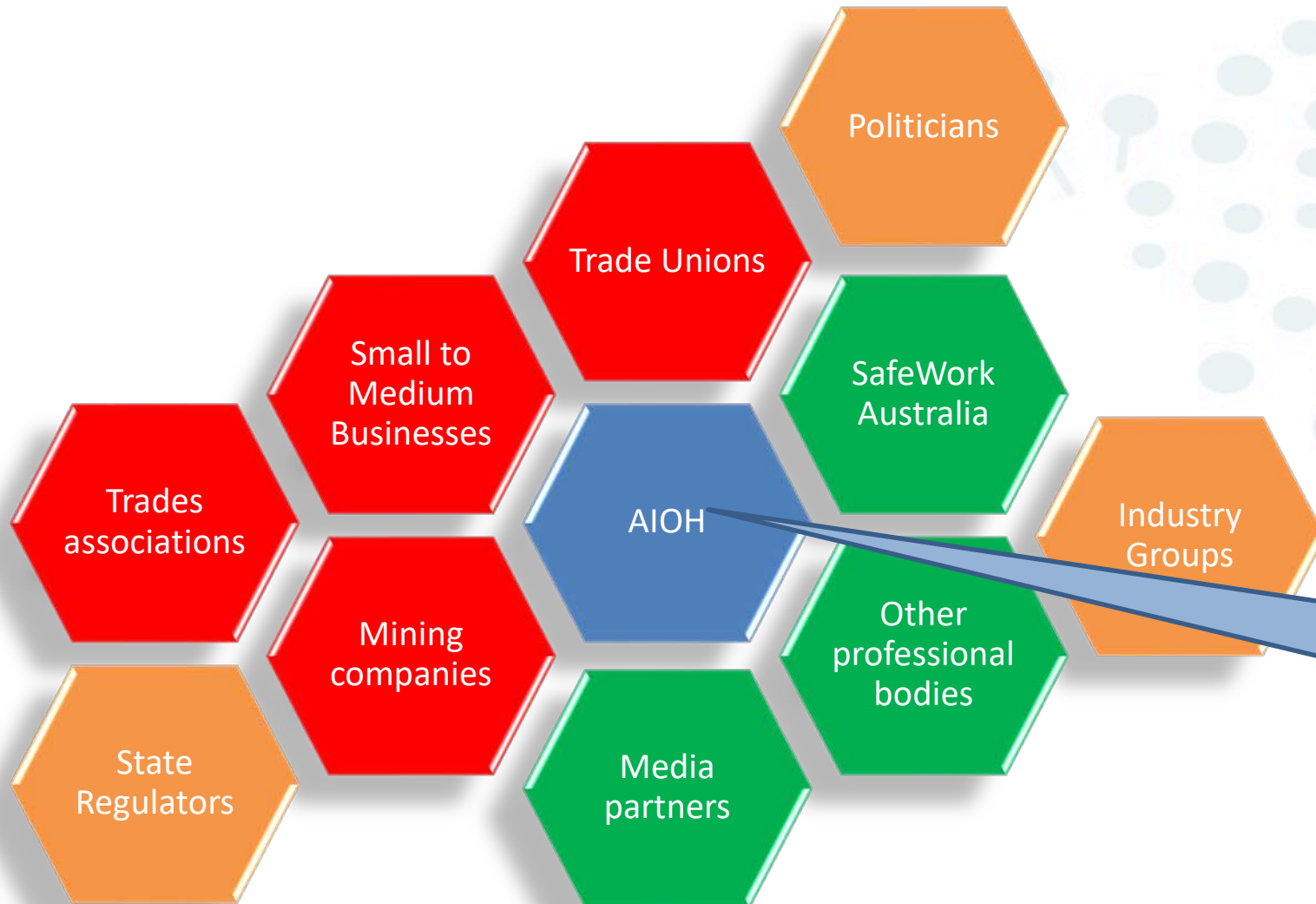
The HI Management Standard

So... Why is the AIOH running with this?

*“We want Australian workers to be able to go home **healthy** as well as **safe** at the end of each day to their family and friends”.*

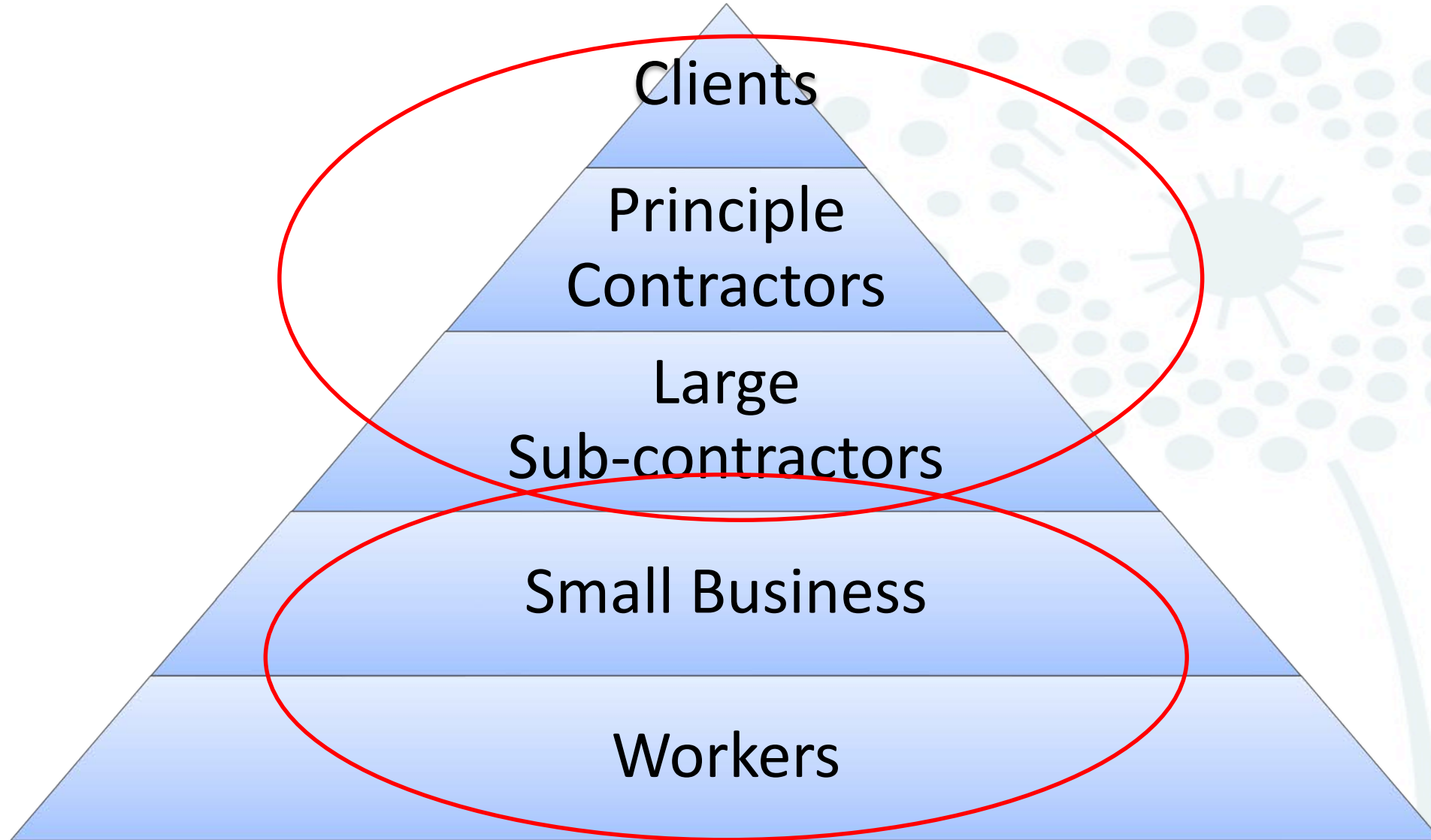
Occupational hygienists use scientific knowledge, skills and experience to assess a workplace for potentially hazardous exposures.





# Who are Occupational Hygienists..?





# What do Occupational Hygienists do..?

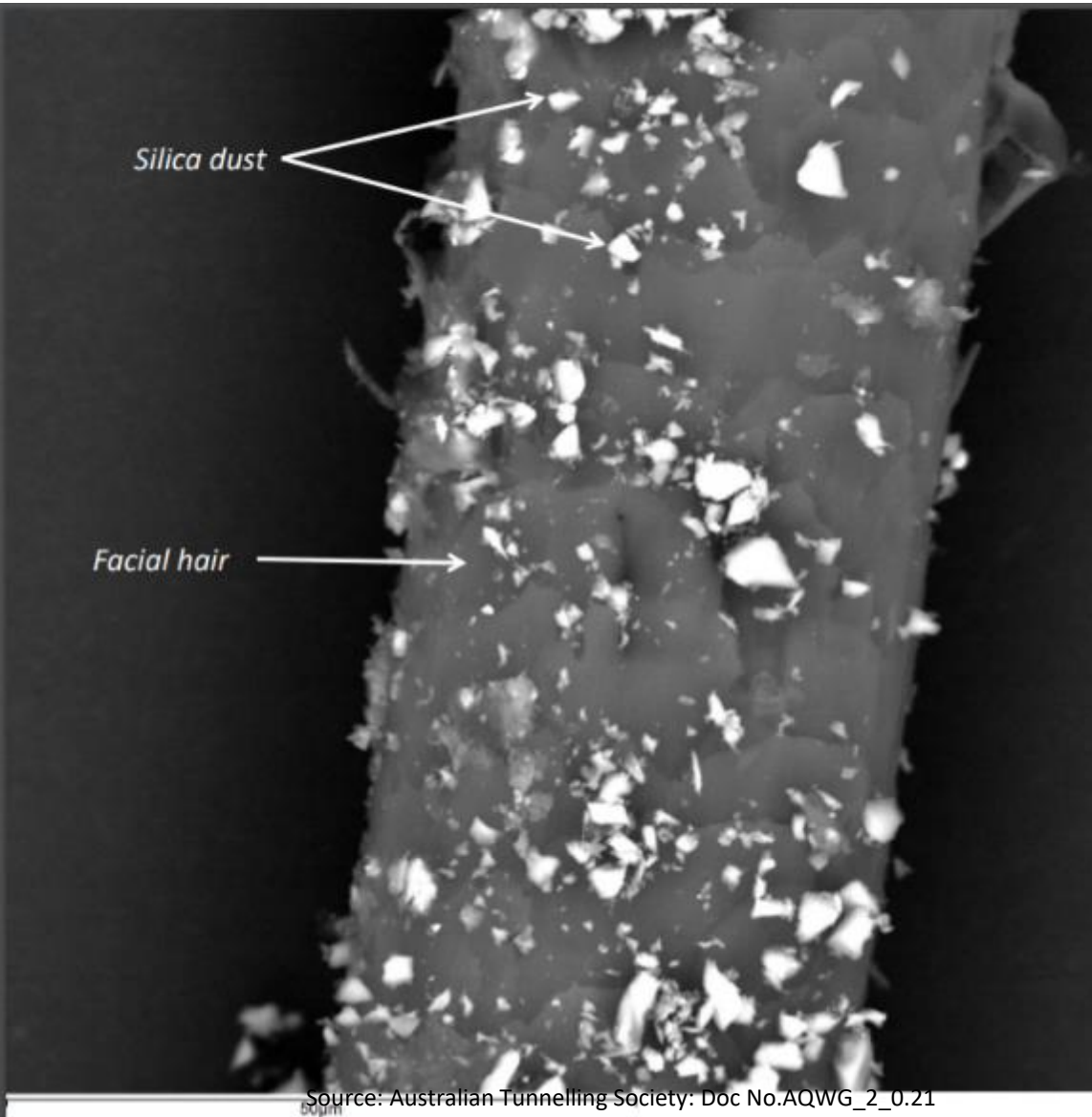


Some tasks are quite obviously dusty



But it's not *always* obvious...





Source: Australian Tunnelling Society: Doc No.AQWG\_2\_0.21



Why is dust a problem..?

# How long can particles stay in the air?

The particle's size makes a big difference

Typical settling rates for different sized particles from a height of 1.5m in still air



The airborne hazard will continue to be present long after work has stopped...



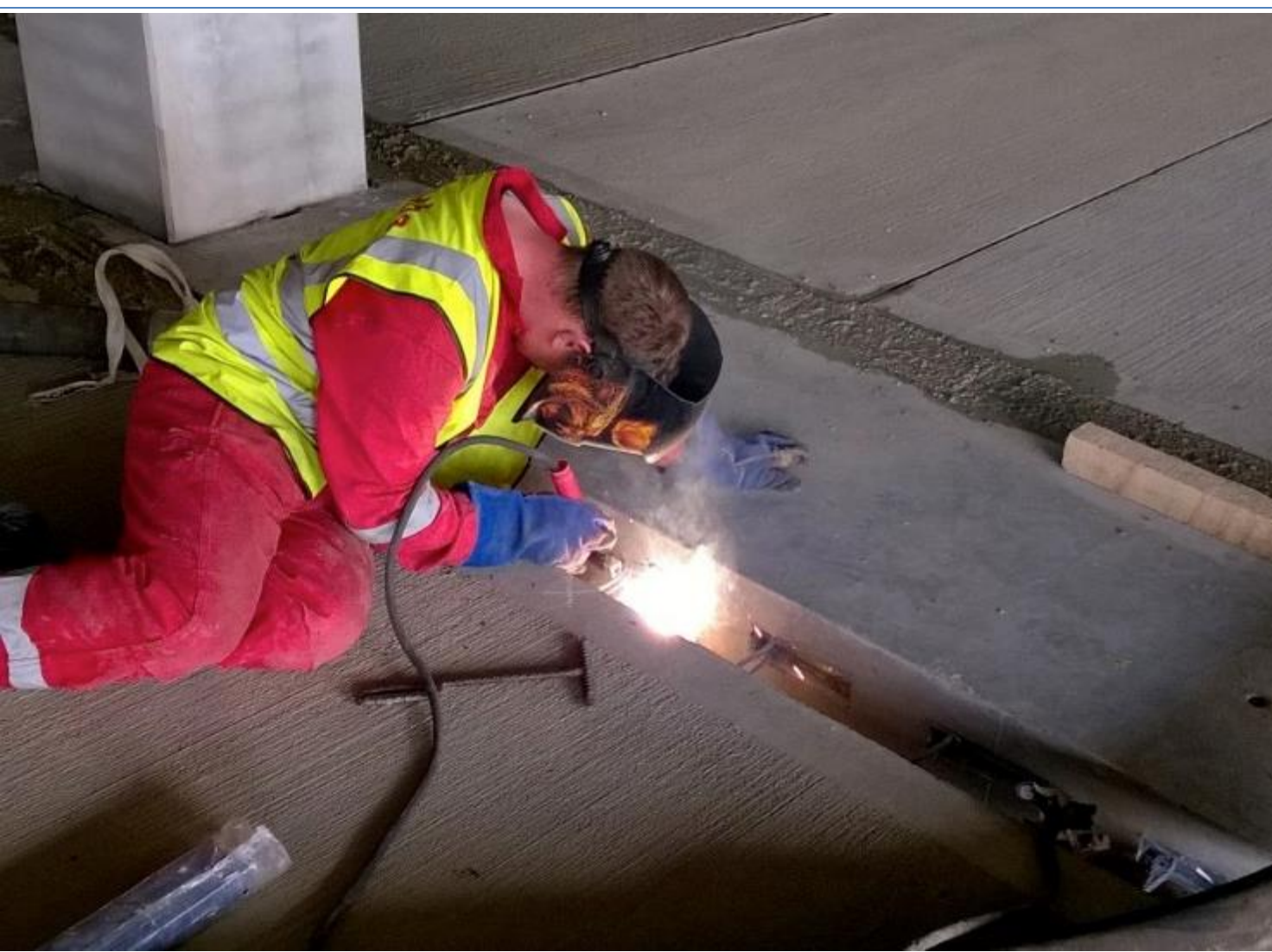
Not just about silica  
dust or Silicosis...



Asbestos...  
Mesothelioma



Wood dust...  
Nasal tumours



Welding fume...  
Asthma or Lung Cancers



Diesel Exhaust Emissions...  
Lung Cancer



Volatile Organic  
Compounds...  
Formaldehyde...  
Isocyanates...

Respiratory health issues include  
asthma and cancer - 6 to 7% of  
cancer in construction due to painting

Breathe Freely Program provides simple & specific information for a wide spectrum of airborne exposures across a number of industries:

- Engineered Stone
- Construction
- Welding
- Mining



Controlling exposures in  
**CONSTRUCTION**



Controlling exposures in  
**WELDING**



Controlling exposures in  
**ENGINEERED STONE**

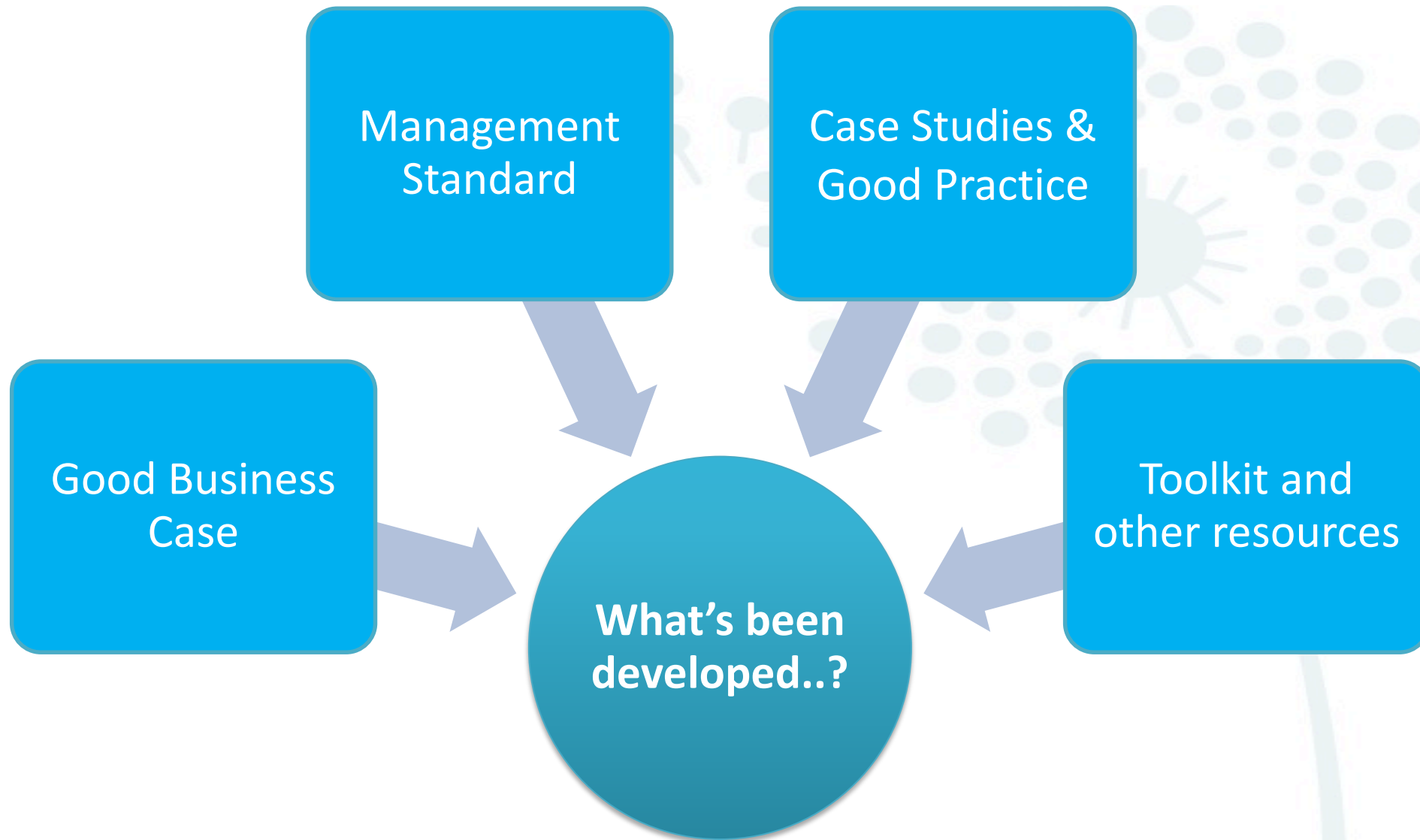


Controlling exposures in  
**MINING**

# Web based information hub

[www.breathefreelyaustralia.org.au](http://www.breathefreelyaustralia.org.au)





Managers Toolkit  
Engineered Stone Silica Dust



Managers Toolkit

**Let's Talk:**  
**Silica Dust - Working with Engineered Stone**

Controlling Exposures to prevent occupational lung disease in the construction industry



## Engineered Stone Worker

### HAZARDS AND RISKS

Engineered stone bench tops contain up to **95** per cent crystalline silica. Natural stone such as granite may contain from 20 to 60 per cent. When engineered stone is worked by cutting, grinding and polishing with power tools, airborne dust is generated that can cause serious lung

### CONTROL OPTIONS

**Engineering controls**

**Water suppression:**

- Automate systems for large cut outs and use water for dust suppression and, if necessary, local exhaust ventilation.
- Water is key for dust suppression and

### MANAGING THE RISK

**Training & communication, supervision, maintenance & testing of controls** and **air monitoring\*** are all vital aspects of managing the risk, in addition to health surveillance which can be a requirement in certain circumstances.

# We also have a number of reference guides developed and more in the pipeline

BREATHE FREELY Australia

Controlling exposures to prevent occupational lung disease

AIOH BOHS



Respiratory Protective Equipment (RPE) Guidance 5/5

## 5. Fit testing

As our faces come in all shapes and sizes, each wearer needs to be supplied with a Doo mask which fits them properly. Fit testing is a method which demonstrates how well a face mask fits an individual wearer's face.

### Is Fit Testing a legal requirement?

Selecting a suitable mask is a legal requirement, and fit testing is a means of demonstrating suitability for the intended wearer.

### What type of face masks need to be fit tested?

#### All tight-fitting masks

These are masks whose performance relies on achieving a good seal between the mask and the wearer's face. These include:

#### Disposable masks

P1, P2 and P3 filtering face pieces



#### Re-usable half masks



#### Full face masks

Including those used with powered respirators and breathing apparatus



BREATHE FREELY Australia

Construction Managers Toolkit

## Let's Talk: Wood Dust




Hi  
In Health  
In Safety  
New Zealand  
Member



BREATHE FREELY Australia

Construction Managers Toolkit

## Let's Talk: Welding Fume




Hi  
In Health  
In Safety  
New Zealand  
Member



### Diesel Fume



### Dust Control in Hard Demolition



### Housekeeping



### Removal of Lead-Based Paint



### Silica



### Water Suppression on Tools



### Welding Fume



### Wood Dust





# HI Standard Self-Assessment Tool



The HI Standard is a self assessment tool to help companies manage their workplace health risks, by identifying their strengths and weaknesses and potential areas for improvement.

# Delivering the message



Occupational Hygienist

Engaging & Supporting

Providing & Sharing  
Practical Solutions



# Breathe Freely

## Join in to be part of the solution

[www.breathefreelyaustralia.org.au](http://www.breathefreelyaustralia.org.au)

