



**Mineral Products Association**

The Trade Association for the Aggregates, Asphalt, Cement, Concrete, Dimension Stone, Lime, Mortar and Silica Sand Industries



 **VISION ZERO**  
SAFE & WELL EVERY DAY

# Employee guide to Vision Zero

Clear, Simple, Smart

Version 1.0

## The objectives of this guide

1. To explain what Vision Zero is and how you can be part of it.
2. To explain the values that MPA members would like everyone to action and embrace.
3. To help raise awareness and understanding of 'The Fatal 6' in the work environment.
4. To outline the strategies that MPA and its members will be employing to eliminate serious incidents from our workplace.
5. To highlight our hard targets and how we will measure progress.
6. To reinforce the type of actions and behaviour that will create a safer and healthier workplace for us all.

**One Vision**  
**One Outcome**  
**Everyone**  
**Safe & Well Every Day**

# Vision Zero

**MPA and its members have committed to Vision Zero – to ensure that everyone goes home – Safe & Well Every Day**

**Vision Zero** is built around eliminating the causes of **'The Fatal 6'**. These are the high consequence hazards that analysis has shown are responsible for the majority of the fatalities, serious injuries and long term ill health in the industry. The strategy is to focus on these hazards in the work environment and, through a wide range of measures, achieve zero serious incidents or fatalities associated with 'The Fatal 6' by 2025.

This will only be possible if everyone within the industry understands and commits to this vision. Everyone has a role to play to ensure that they are doing their best to ensure they are keeping both themselves and their colleagues safe.

The Vision incorporates **6 values** relating to Health and Safety. Collectively we will need to embrace these to help bring about changes in our behaviour. Many of these values are already well established in the culture of organisations working within the Mineral Products industry.

The MPA has developed **6 strategies** to support its members in achieving Vision Zero. It will monitor the industry's performance by reviewing both leading and lagging indicators;

- Lagging indicators look back at what has already happened such as the number of fatalities or serious incidents that have occurred.
- Forward looking indicators help to measure activities that should improve health and safety performance in the future.



[\*\*Focus on Vision Zero \(4 min\)\*\*](#)

[\*\*Vision Zero unpacked \(12.30 min\)\*\*](#)

[\*\*Views from the workforce on Vision Zero \(3.15 min\)\*\*](#)

[\*\*Views from the workforce on Leadership \(2.30 min\)\*\*](#)

# 6 values to keep everyone safe



## Empowerment

Every worker has the right to stop any job if concerned it may be unsafe or unhealthy to continue.

---



## Engaged Visible and Consistent Leadership

Committed to achieving the vision of Zero Harm.

---



## Zero Tolerance of Unsafe Working Conditions

That pose a significant risk of injury or to health.

---



## High Quality Implementation

Developing; clear health and safety principles, clarity of expectations, clear simple smart initiatives, no 'box ticking'.

---



## Collaboration and Sharing

Building effective relationships & sharing knowledge and good practices.

---



## Compliance

As a minimum with legal/regulatory requirements and MPA policies and aspiring to world class.

# 6 VALUES TO KEEP EVERYONE SAFE

## Empowerment

Every worker has the right to stop any job if concerned it may be unsafe or unhealthy to continue.



If you feel concerned that you and/or your workmates may be at risk whilst carrying out a task, or if you see anyone acting unsafely, then 'step in' and stop the job until everyone can be sure that proper controls are in place.

## 6 VALUES TO KEEP EVERYONE SAFE

# Engaged Visible and Consistent Leadership



Committed to achieving the vision of Zero Harm.



Good leadership is key to good health and safety. We can all be leaders in our own workplaces by visibly adopting the values and always setting a good example to others. Managers and supervisors should take care to engage with, and listen to, concerns of the workforce, visibly demonstrating their commitment to making workplaces safer and healthier for all.

## 6 VALUES TO KEEP EVERYONE SAFE

# Zero Tolerance of Unsafe Working Conditions



That pose a significant risk of injury or to health.



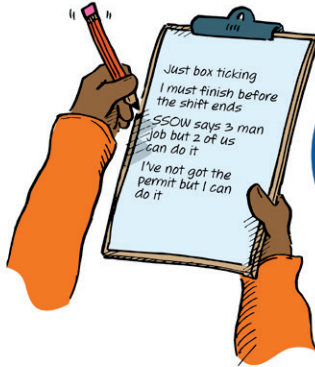
We can all play our part in making our workplaces safer and healthier for example by cleaning, tidying up and keeping designated access routes clear. If you see a problem that you feel you cannot tackle safely or is not within your authority then ensure it is reported to your line manager.

## 6 VALUES TO KEEP EVERYONE SAFE

# High Quality Implementation



**Developing; clear health and safety principles, clarity of expectations, clear simple smart initiatives, no 'box ticking'**



*"We don't work like that"*



High quality implementation is about checking that we have the right training and competences, taking care to follow rules and procedures properly, ensuring we have the right tools for the job and wear the correct PPE. By taking shortcuts or just 'ticking the boxes' we significantly increase the chances of a serious incident occurring.

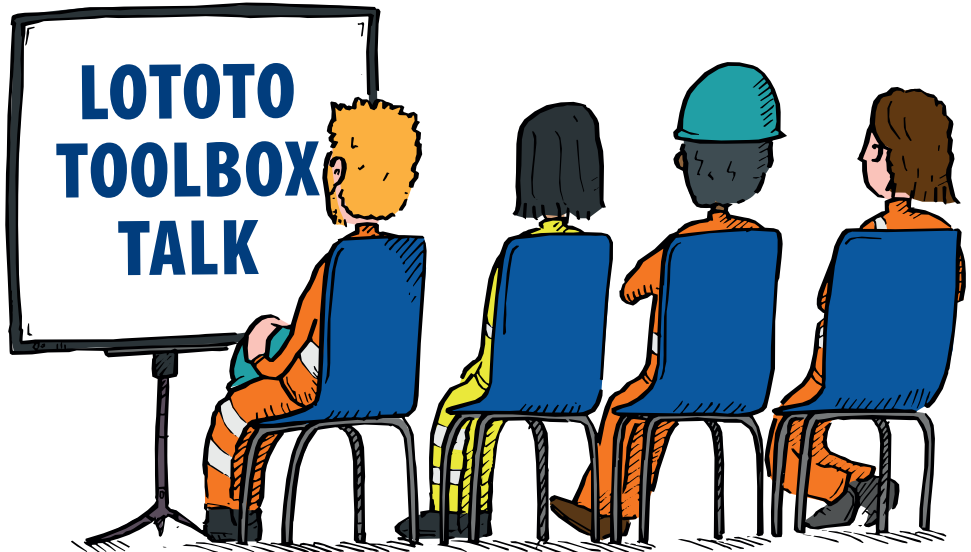


## 6 VALUES TO KEEP EVERYONE SAFE

### Collaboration and Sharing



**Building effective relationships & sharing knowledge and good practices.**



There are many ways we can share or collaborate to make our workplace safer or healthier;

- Sharing our knowledge and experience with others.
- Sharing our good ideas about how things might be improved.
- Reporting our mistakes so that everyone can learn from them and prevent them occurring in the future.
- Actively participating in events such as safety days or toolbox talks.

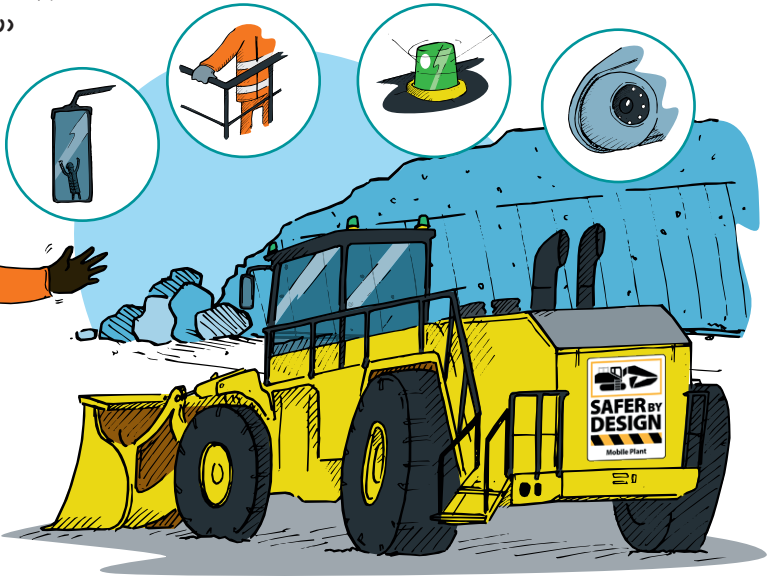
# 6 VALUES TO KEEP EVERYONE SAFE

## Compliance

As a minimum meeting all legal and regulatory requirements and MPA policies and aspiring to be world class.



*“With these modifications our mobile plant and delivery fleet meet World Class H&S standards”*



As individuals and organisations we can all strive to perform to the best of our ability, exceeding the standards and statutory duties that only reflect the minimum that is acceptable.

# 'The Fatal 6'

**Analysis has identified 6 high consequence hazards in the Mineral Products industry that account for 94 % of all fatalities.**

MPA has set up a working group for each theme. They are tasked to develop recommendations and resources to help the industry to eliminate the causes of 'The Fatal 6'

Information about the 'The Fatal 6' and the resources available to help mitigate them are all accessible on 'The Fatal 6' section of Safequarry.

'The FATAL 6'

1

Contact with moving machinery and isolation

2

Workplace transport and pedestrian interface

3

Work at height

4

Workplace Respirable Crystalline Silica

5

Struck by moving or falling object

6

Road Traffic Accidents

Mitigating high consequence hazards



[www.safequarry.com](http://www.safequarry.com)

[Register now for Safequarry alerts](#)



[Download the Safequarry app](#)

# 'The Fatal 6'

# 1

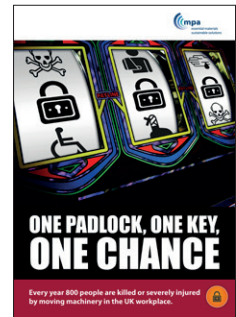
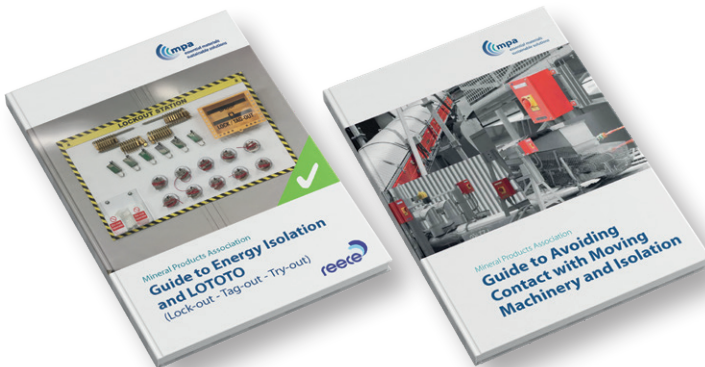
## Contact with moving machinery and isolation.

22% of fatalities in the industry have been as a result of contact with moving machinery often associated with reactive maintenance and a failure to correctly isolate all sources of energy.

Fatalities or serious injuries mainly due to a failure to isolate machinery, poor guarding, inadequate exclusion areas, poor procedures or a failure to follow them. These tragic incidents often involve horrific injuries associated with entrapment, crushing, amputations, pinching, lacerations or burns.

Stored energy can take many forms, tension in belts, jammed machinery when released, static, hydraulic pressure, steam under pressure, inertia on flywheels.

A wide range of resources are available that provide guidance and support in this area.



Click here for more information and resources on Fatal ...



# 'The Fatal 6'

## 2

### Workplace transport and pedestrian interface.

Workplace transport incidents have resulted in 19% of fatalities within the industry often involving contact with pedestrians.

Mobile plant and other transport present a serious risk of fatal or major injuries without effective traffic management.

REMEMBER – Every time you are travelling on foot across a site, YOU are a pedestrian so these figures aren't meaningless – they are related to your personal safety. Furthermore, every time you are in control of a vehicle, YOU are a driver and are responsible for the safety, not only of yourself, but of those colleagues working around you.



Click here for more information and resources on Fatal ...

1

2

3

4

5

6

# 'The Fatal 6'

## 3

### Work at height.

17% of fatalities in the industry involved a fall from height.

Operatives are exposed to risks associated with working at height whilst undertaking daily activities such as loading, inspecting silos and other processing plants, sampling, access and egress from mobile plant and undertaking a wide range of maintenance tasks.

Fatalities or serious injuries incurred when individuals fall, often onto hard services or plant. In most cases this is attributable to a combination of factors such as failing to follow a safe system of work, a fault in a safety device or a failure to use it, the individual being distracted, poorly designed equipment in relation to operator access and egress.



[Click here for more information and resources on Fatal ...](#)

1

2

3

4

5

6

# 'The Fatal 6'

## 4

### Workplace Respirable Crystalline Silica.

Unlike the other five constituents of 'The Fatal 6', which relate primarily to trauma as a result of a single incident, the hazard from workplace respirable crystalline silica (RCS) arises from occupational exposure to elevated concentrations over many years.

The potential health impacts of exposure to RCS include chronic obstructive pulmonary disease (COPD), silicosis and lung cancer, all of which can prove fatal. Prolonged exposure to RCS in the workplace is also linked to the development of auto-immune disorders, kidney disease and cardiovascular impairment.

The risks primarily arise when working in enclosed spaces and in close proximity to the source. Those most likely to be at risk are individuals involved in operations such as crushing, dry processing, bagging, milling, mechanical sawing, grinding and polishing of minerals containing crystalline silica and concrete products.

Operators of mobile plant and individuals engaged in maintenance and cleaning, may also be exposed to elevated concentrations of RCS in some situations.

Therefore it is essential to mitigate the risks by implementing good practices to minimise airborne dust generation and reduce workers' RCS exposures.

<https://www.nepsi.eu/good-practice-guide>



Click here for more information and resources on Fatal ...

1

2

3

4

5

6

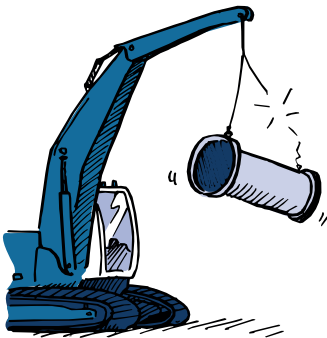
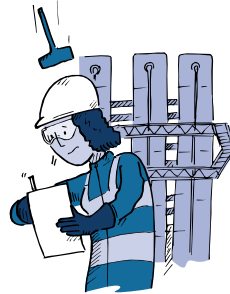
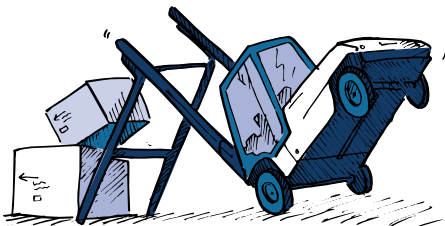
# 'The Fatal 6'

# 5

## Struck by moving or falling object.

31% of the fatalities in the industry have been associated with individuals being struck by moving or falling objects.

Incidents involving injuries from a falling or moving object commonly are associated with operators dropping tools, parts or dislodging materials that either fall on them or a colleague, individuals being struck during loading or unloading, materials being ejected during a manufacturing process, materials falling from conveyors or other transportation system and failure of strapping/lifting devices during maintenance procedures.



Click here for more information and resources on Fatal ...

[1](#)[2](#)[3](#)[4](#)[5](#)[6](#)



# 'The Fatal 6'

## 6

### Road traffic accidents.

Circa 10% of fatalities involving employees or contractors in the industry have been as a result of RTAs - this figure excludes the fatalities involving other road users or pedestrians.

The mineral products industry uses a wide range of vehicles including, tippers, truck-mixers, flat beds, bulk tankers, vans and cars. This fleet of vehicles is driven by employees, hauliers, owner drivers and contractors, some of whom may not have English as a first language.

In delivering millions of tonnes of product, many thousands of journeys are made every day on behalf of the industry. Many of these journeys are on congested urban streets or on rural roads in all weather conditions.

The MPA guidance, other road safety programmes and the MP Connect Card will all help to mitigate the risks in road transport.

mp connect



Click here for more information and resources on Fatal ...

1

2

3

4

5

6

## 6 strategies for MPA and its members to follow

- An unrelenting approach to **eliminating the things that can kill or seriously harm people** through adoption of industry safety principles and good practices focused on **'The Fatal 6'**.
- Developing **competent and committed leaders** at all levels.
- Promoting **recognition** as a means to support a positive culture within the workforce.
- Creating **forward looking measurement systems** which **balance** the measurement of 'the presence of safety' with the 'absence of incidents'.
- Helping members to create workplaces where **health and well-being is protected and promoted**.
- Actively promoting and facilitating **engagement** from all member organisations.



# Lagging and Leading Indicators

## MPA will monitor the following:

**Lagging indicators** – which record what has actually happened – these include **MPA's hard targets** which show whether we are succeeding in making our workplaces safer and healthier.

**Leading indicators** - which are those activities which are likely to lead to a reduction in fatalities and serious incidents in the future.

## Lagging

- **Hard Target 1** - Zero Reportable Incidents (fatalities or serious injuries) relating to 'The Fatal 6' by 2025.
- **Hard Target 2** - A 50% reduction in Lost Time Injury Frequency Rate (LTIFR) to 1.5 by 2025.
- **Hard Target 3** - Zero incidences of uncontrolled personal exposures to RCS above the Workplace Exposure Limit (WEL).

## Leading

### Achieving more of the following:

- Auditing of isolation
- Driver and contractor competency/skills cards
- Participation in H&S Leadership workshops
- H&S Good Practice awards submissions
- Sharing of High Potential incidents
- Occupational health screening
- Routine monitoring of silica exposures
- Engagement in MPA H&S events
- Engagement in MPA Safety Days
- Engagement with MPA's 'Safer by Sharing'
- Engagement with MPA's 'Exchanging Places'



# VISION ZERO

## SAFE & WELL EVERY DAY

One Vision  
One Outcome  
Everyone  
Safe & Well Every Day



essential materials  
sustainable solutions

The Mineral Products Association is the trade association for the aggregates, asphalt, cement, concrete, dimension stone, lime, mortar and silica sand industries.

**Mineral Products Association**

38-44 Gillingham Street, London SW1V 1HU

Tel: 020 7963 8000

Fax: 020 7963 8001

[info@mineralproducts.org](mailto:info@mineralproducts.org)

[www.mineralproducts.org](http://www.mineralproducts.org)

**All content correct as of December 2020**

For further MPA information visit

[www.mineralproducts.org](http://www.mineralproducts.org)

© Mineral Products Association 2020