



**national safe  
work month**



## **WORKPLACE HEALTH & SAFETY**

**How a CMMS can improve Workplace Health & Safety Practices**

# WORKPLACE HEALTH & SAFETY AUSTRALIA

October marks National Safe Work Month in Australia. The event was established in 2008 as an educational platform to provide policy and guidance in work health and safety. This year's theme is **“think safe. work safe. be safe”**. In this whitepaper, several topics will be explored relating to workplace health and safety, including:

- The impact of National Safe Work Month
- Health and safety gaps still exist
- Workplace machinery risks
- Improvements in health and safety practices
- Opportunities to further facilitate a safe work environment
- Technological solutions for a safer workplace

Since the month's inception, work-related fatalities and worker's compensation claims have declined. **From 2003 to 2015, there were 3,207 work-related deaths in Australia.** The total number in 2015 was 195, which equates to **1.6 deaths per 100,000 workers.** This is the lowest rate since 2003. Between 2000 and 2014, the frequency of worker's comp claims fell by 33 percent from **9.5 serious claims per million hours worked to 6.3.**





### **Your Requirements as an Employer Include:**

Workplace Health and Safety (WHS) regulations require employers to provide safe work environments. Additional requirements include:

- Assessment of risks and implementation of appropriate measures for controlling them
- Ensuring safe use and handling of any goods, materials or substances
- Making available and maintaining safe machinery and equipment
- Evaluating workplace layouts and offering safe system of work
- Providing a suitable workplace environment and facilities
- Having insurance and worker's compensation for employees

### **Employees also have Obligations to Foster a safe Workplace. They must:**

- Comply with instructions related to work health and safety
- Use provided personal protective equipment and participate in proper training on how to use it
- Not interfere, whether willfully or recklessly, with or misuse any work safety equipment
- Not place others at risk
- Not deliberately injure themselves

Employers and employees must work together to create a safe workplace. A big part of a safe workplace is ensuring that all machinery is well maintained. The majority of workplace accidents that occur relate to some type of machinery.



# ROAD & TRANSPORT HAVE HIGHEST FATALITY RATE

From 2002 to 2012, 472 workers in the road transport sector lost their lives at work. In 2012, the fatality rate was 12 times the national average. Road transport also has a higher injury rate compared to other industries. The majority of these fatalities and injuries occurred during transport. When employees act as drivers or passengers as part of their job, the risk for death or injury increases. While companies can perform their due diligence and have protocols in place related to transport, this doesn't mean there aren't gaps and issues outside their control.

Looking at the “why” can help employers overcome the gaps. The leading cause appears to be fatigue, based on government studies. **Between 20 and 30 percent of road accidents involve driver fatigue.** The Bureau of Transport Economics estimates that the **costs of driver fatigue are as much as \$3 billion annually.** These numbers point to some deep concerns related to workers on the road.

**Proper maintenance of work vehicles is also key to reducing injuries.** If employees are responsible for using company owned vehicles to transport goods or any other activity, the maintenance of these vehicles must be kept up to date. If an accident occurs due to the fact that the vehicle's parts weren't serviced, there's the further concern of negligence.

When looking at the cause, it provides insights to organisations on how to address this risk. Government regulation will continue to expand around the topic. Employers can reduce risk with several approaches: education and adopting limitations to avoid fatigue. For employers to understand this on a micro-level, they can collect data related to drivers and vehicles.

# FARMS ARE A DANGEROUS PLACE TO WORK

Farming is another industry with high risk to its workers. In Australia, only one in 10 workplaces are farms, yet they account for one-quarter of all work-related deaths. This accounts for 16 percent of all workplace fatalities.

## Risks and hazards on farms include:

- Animals: from actual injuries caused by animal to infectious diseases like salmonella
- Chemicals (pesticides and herbicides)
- Confined spaces like silos or pits
- Faulty electrical issues
- Falls from heights like roofs or windmills
- Machinery—mostly involved rollovers on tractors but also chainsaws or other tools
- Vehicles
- Weather-related concerns such as heat stroke or hypothermia

There are many ways to address and improve safety on farms. This could include ensuring equipment is maintained to storing chemicals correctly. Farms have lots of different areas that need to be worked, each with their own set of challenges. Having a central way to manage all these facets can provide insights and allow farm operators to be proactive in the pursuit of safety. If a farm uses its pool of data and constantly monitors its diverse areas, they could realise improved safety results.



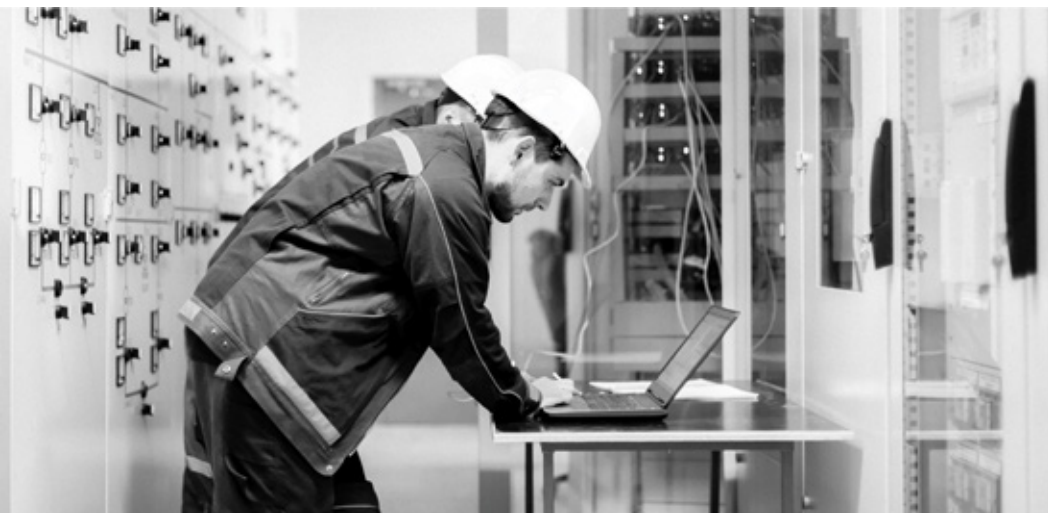
# MACHINE EQUIPMENT ENTANGLEMENT RISKS

Machine equipment entanglement can occur when a part of a worker's clothing or their extremities are caught in a machine. These types of accidents can of course be avoided with protective equipment. But it's also necessary to ensure that machines have proper maintenance so that all parts are working correctly. If a machine has operational issues, this could lead to entanglement. This maintenance could also include ensuring fitting guards are in good condition, inspecting them and regular cleaning.



## ELECTRICAL MAINTENANCE SHOULD NOT BE IGNORED

Another area where lack of maintenance can cause risk is related to electrical components. Equipment requires power to run. This is just one more area that needs to be inspected and serviced regularly. The machinery's electrical history should be recorded. Regular maintenance related to the electrical health of a machine is an area that some workplaces may overlook. Checking the wires and electrical elements should be something on your inspection work order.



# DEFECTIVE MACHINERY



When machinery is not properly maintained, there is a huge risk for workers. When a piece of machinery becomes defective, there is significant opportunity for something bad to occur. Defective machinery doesn't just mean that the equipment was damaged from the beginning.

There are many actions or lack of actions that can cause defects in machinery that had been working as normal. If machinery doesn't receive normal maintenance then certain parts may wear down. Machinery usually has many gears and parts that must work together properly. If maintenance doesn't occur to keep these pieces lubricated, sealed or replaced then it's really a ticking clock on when something will happen not if. But how can you successfully manage all the maintenance and inspections for a group of assets? Paper files and checklists won't help you conquer this challenge. You'll need tools that can keep all your records in one place, reducing the chance that maintenance will be forgotten.



# RESEARCH SUGGESTS WORKPLACE NOT IN COMPLIANCE WITH SAFETY CODES

Even though regulations exist, that doesn't mean all employers adhere to these. It also means even if they do, they may not be tracking, managing or aggregating the data. St John Ambulance, an organisation dedicated to helping people in sickness, distress, suffering or danger, revealed some dangerous situations in a recent study.

**“ Only 13 Percent of Workplaces in Australia comply with workplace first aid regulations. A further 55% of the workplaces were unaware of the requirement.**

**- St John Ambulance**

**”**

Employers must be vigilant in their interpretation and implementation of practices.

However, employers need to look at their claim data, which may include these examples from above, and use it to inform how they handle workplace safety. Is there an education gap? How are you tracking all the elements related to safety, which can include machinery service to programs to ensuring proper protective devices are available.

# IMPROVEMENTS IN HEALTH & SAFETY PRACTICES

Based on the data previously addressed, there have been improvements, as the number of fatalities and overall worker's comp claims have declined. Looking at the numbers, what has changed?

Do employers have better practices around safety? Have regulations helped keep companies in compliance? Has increased education exposure made individual workers more cognizant of dangers?

Safe Work Week's launch in 2008 brought a national light to the dangers of the workplace. It has also provided employers and employees with educational experiences and ideas. One constant message throughout Safe Work Week is related to creating the safest workplace. This may seem like a simple endeavour with considerations related to space and marking hazards. However, it's much more than just what you see around you. First, environments have to be designed safer.

This is from the inception of an area. A safe, well-designed workplace also needs to be managed effectively from the perspective of managing maintenance, equipment, and staff. The ability to do that comes with more efficient systems and technology.

Some technological advances that have created safer workplaces include a device called SAFEMINE, which is an eye scanner that helps reduce collisions by monitoring fatigue. An infra-red sensor monitors when eyes are open, when eyes are closed, how long they're open for and how long they're closed. This is being currently used in Australian mines.

Another technological improvement is helping reduce falls. The Fall Arrest Platform is portable and capable of holding 100 kilograms of tools, equipment or people.

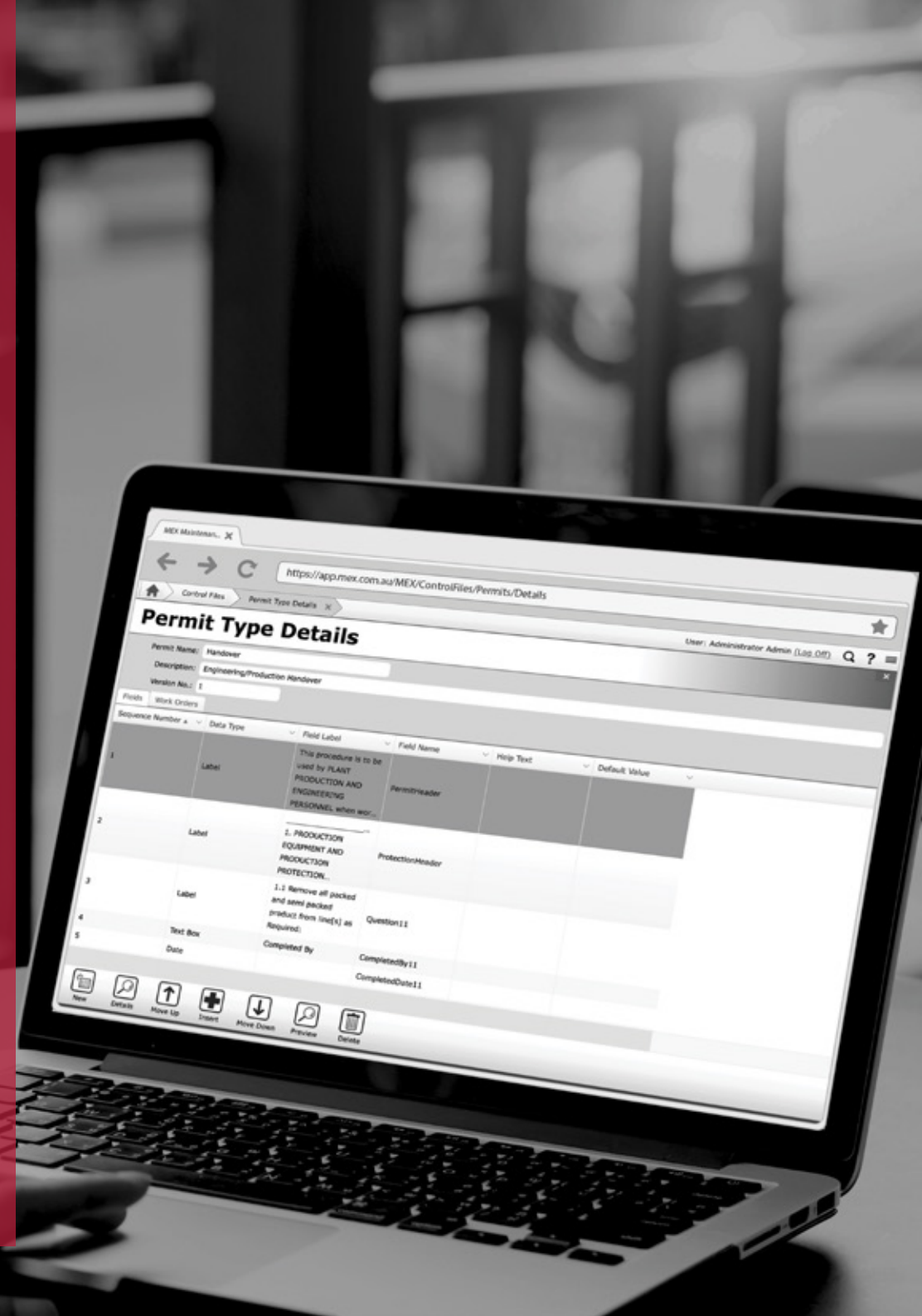


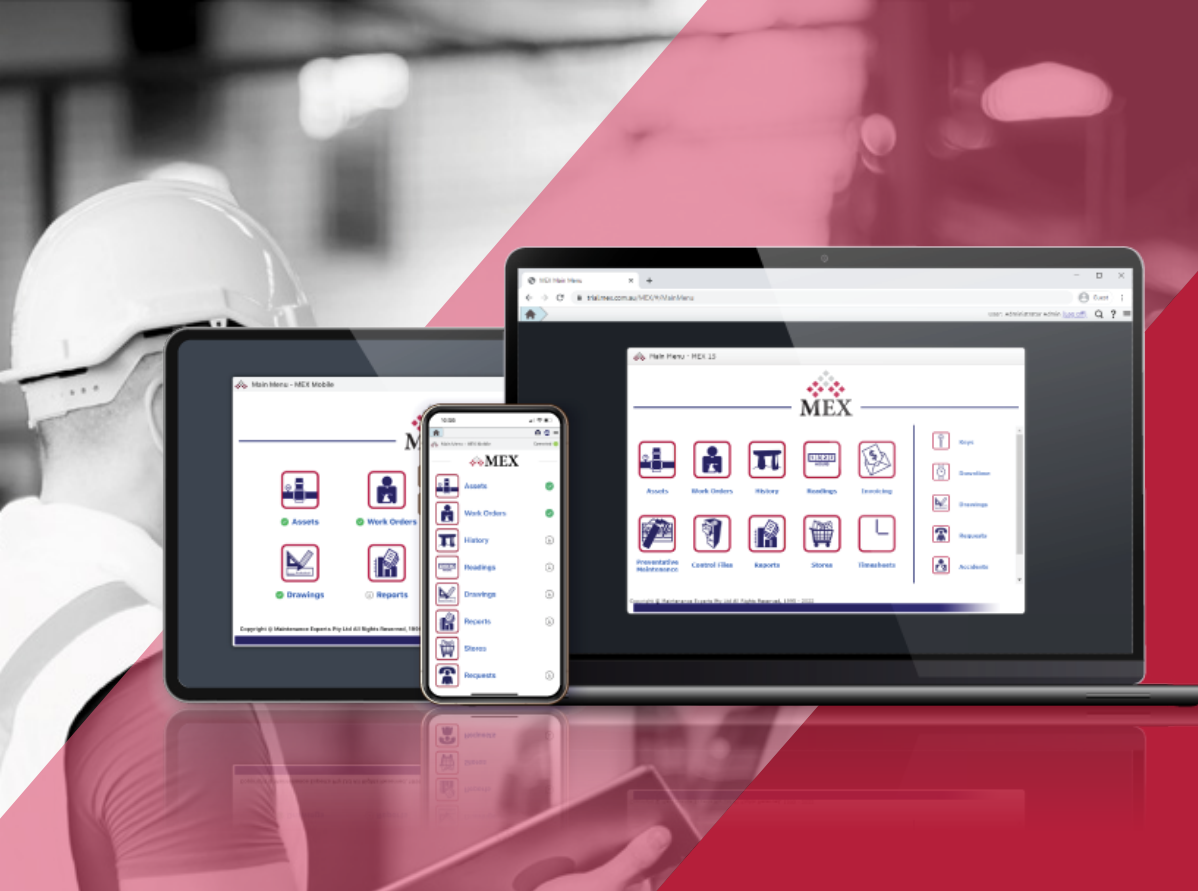
# OPPORTUNITIES TO FACILITATE A SAFER WORK ENVIRONMENT THROUGH TECHNOLOGY

One of the most prominent ways that technology can play in creating a safer workplace is by using **Computerised Maintenance Management Software**.

This type of software platform allows for more effective equipment monitoring. When organisations are monitored appropriately, there is a great opportunity to reduce accidents and workplace safety risks.

A software program like this can track inspections, alert users to preventative maintenance and create maintenance requests that can then be forwarded to the appropriate party for action. This is a proactive approach to workplace safety, which is of course more ideal than simply being reactive to situations.





## HOW MEX MAINTENANCE SOFTWARE CAN HELP KEEP WORKPLACES SAFE

MEX is a Computerised Maintenance Management System (CMMS). It has the potential to reduce workplace health and safety risks through correct monitoring and managing of equipment.



### MANAGE MAINTENANCE

MEX has the ability to transform maintenance. It can manage day to day maintenance workloads, allow for scheduling of preventative maintenance and inspections and produce necessary reports instantly. MEX is built to make things run more smoothly while safety is always top of mind.



### KEY SAFETY FEATURES

MEX has dedicated features designed to improve and promote safety in the workplace including; Auditing, Work Order creation and analysis, all of which can create a safer workplace.

## AUDITING FOR DEFECTS

Auditing for defects is an important function. MEX offers this feature, which is critical in improving and maintaining workplace health and safety standards. Auditing is the process of addressing a series of questions or checkpoints that are designed to assess the safety of a piece of equipment and identify any precursors of operational or safety risks. If an issue is identified, a work request is created in MEX. These are then used to track safety defects to resolution. If approved, these requests can then be turned into Work Orders to capture the work or repair required on the equipment.

## WORK ORDERS FOR SAFETY

Work Orders detail the maintenance needs of assets and machinery and are created as a result of a maintenance request, a Preventative Maintenance schedule or where needed to maintain an asset. To ensure that workers performing any tasks do so safely, permit requirements can also be added to work orders. The Work Order can also include a risk score and documentation.

## EASY ANALYSIS

Analysing Work Orders based on priority level and maintenance type (e.g. breakdown or corrective) allows for in-depth reporting. This reporting provides insights and the ability to determine the overall safety of a part or entire asset and whether replacement is preferable.



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