# Health and Safety at Work reform



The Government has announced changes to a range of outdated, complex and incomplete health and safety requirements. New health and safety regulations will provide more clarity and certainty for businesses and better safety and health for workers.

From 2008 to 2019, on average 54 people a year died at work from injuries involving plant (e.g. machines, vehicles and equipment) and structures (e.g. scaffolding and excavations). That's three-quarters of all work-related injury deaths. New Zealand's work-related acute fatalities are high by international standards, approximately twice that of Australia and four times the rate of the United Kingdom.

During the public consultation, many stakeholders supported changing the regulations that apply to plant and structures and wanted greater clarity and certainty. The changes have been designed to ensure the rules are clear, effective, flexible, durable and proportionate, making it easier for businesses to manage risks, and better ensure people come home from work safe and healthy.

The changes will create better regulations and release business from the burden of not being clear of what's required of them.

The Government will release a draft of the new plant and structures regulations in early 2022. People will have the chance to comment on how the changes are best implemented during that process. Support and guidance will be provided to businesses to give them time to prepare. The final regulations are expected to be in place by late 2022.



# Summary

Plant and structures are everywhere – they are used in a wide range sectors and for many different purposes at work. They are involved in 79% of work related injury fatalities. Risks associated with plant and structures kill and seriously injure people every day.

**Plant** includes any vehicle, machinery, equipment, tool, vessel and/or aircraft, appliance, container, implement or tool. Examples include cranes, tractors, scaffold components, conveyors, forklifts, power tools, boilers and theme-park rides.

**Structures** include anything that is constructed, whether fixed or moveable, temporary or permanent. Examples include scaffolding and excavations. The new regulations will apply to structures not already covered by the Building Act.

A Person Conducting a Business or Undertakings (PCBU – usually the business entity, not an individual) will need to apply the Prescribed Risk Management Process for any work with plant, mobile plant, work at height and on excavations.

The Prescribed Risk Management Process is an existing process set out in the General Risk and Workplace Management Regulations 2016. It requires PCBUs to identify hazards that could give rise to reasonably foreseeable risks, manage them using a hierarchy of control measures, maintain effective control measures, and review and revise control measures to make sure they're effective.

The Government has designed the regulations to be proportionate, effective, clear and cost-effective so workers are protected from harm and businesses know how to do this well. Some of the regulations manage risks that are common across New Zealand workplaces, such as machinery and equipment, while others will only apply to workplaces with higher risk plant such as cranes and boilers. The regulations have been designed to be proportionate to these varying levels of risk, ensuring that businesses are taking the right level of action and not doing more than they need to.



#### Existing duties in the Health and Safety at Work Act, which apply to all plant and structures

- Ensure the health and safety of workers and others is not put at risk (s36)
- Provide and maintain safe plant and structures (s36)
- Businesses must ensure the safe use, handling, and storage of plant and structures (s36)
- Businesses that control plant must ensure it is without risks to health and safety (s37)

# The proposed regulations will layer controls according to risk

#### Regulatory controls that will apply to all plant and structures

- Obligations

   on designers,
   manufacturers,
   importers,
   suppliers of plant
   and structures
- Obligations
   on installers/
   commissioners/
   constructors
   of plant and
   structures
- Obligations on businesses that manage plant, eg adequate guarding and safety features

#### Additional controls that will apply to specific plant with specific risks

- Eg protections for the operator and passengers, safe operating methods
- Eg mobile plant, lasers, forklifts, scaffolding etc

## Additional controls that will apply to high risk plant

- > Design register
- Extra duties
   on designers,
   manufacturers,
   suppliers, and
   importers
- Eg vehicle hoists, scaffolding componentry

#### Additional controls that will apply to highest risk plant

- Register of individual items of plant
- Eg boilers, tower cranes, amusement devices (fairground rides), steep slope harvesting equipment

The higher the risk of the plant or structure, the **more layers** of controls that apply

# LOWER RISK FEWER CONTROLS

#### Fewer controls means for example:

- General duties
- > Performance or outco me-based regulations

# HIGHER RISK MORE CONTROLS

#### More controls means for example:

- > Authorisations eg permit, register
- > Mandatory controls in regulations
- > Sometimes prescriptive

# The changes in more detail

#### **Working with Plant**

'Plant' includes machinery, equipment, vehicles and tools. Almost 65% of workplace deaths from injury involve plant.

Relevant sectors: manufacturing, construction, agriculture, forestry, transport, fisheries.

#### **Overview of changes:**

These changes modernise and build on the existing requirements to improve the management of risks from working with dangerous machinery parts, and the operation, cleaning and maintenance of machinery, tools and equipment.

- > A specified process used to determine appropriate guarding for each plant.
- > Plant is safely installed, maintained, cleaned, and stored.
- > Operational controls, emergency stops and warning devices are of safe design.
- > Specific steps are taken to avoid unsafe use or alterations.
- > Presence-sensing safeguarding systems are monitored, and thorough records are kept of testing, inspection, maintenance and alterations.
- Additional design and operational requirements for plant that lifts or suspends loads, and for lasers.



## Working with mobile plant

Mobile plant includes vehicles and other equipment that is mobile and is powered, for example bulldozers, quad bikes, mobile cranes, forklifts, elevating work platforms, tractors, and vehicles like cars, vans and trucks used for work.

More than half of all injury fatalities at work involve mobile plant. Mobile plant also causes significant injury harm in WorkSafe's priority sectors, with mobile plant each year involved in 41% of injury deaths in construction, 23% of injury deaths in manufacturing and 73% of injury deaths in agriculture.

**Relevant sectors:** agriculture, forestry, transport, construction, fisheries, transport, warehousing.

#### **Overview of changes:**

These changes will modernise and replace the current requirements for roll-over protection and seatbelts. They provide a flexible, fit-for-purpose approach that protects operators, passengers and bystanders.

- > The Prescribed Risk Management Process must be applied to specific risks, such as overturning, collision, or being thrown off.
- > Operators must be protected and passengers are only allowed when they have protections at least the same as the operator, so far as is reasonably practicable.
- A suitable combination of devices should protect the operator such as roll-over or crush protection, seatbelts and helmets.
- > The risk from collisions must be managed through an adequate field of vision and suitable warning devices, so far as is reasonably practicable.
- Additional design and operational controls will be required, to manage the specific risks from forklifts.



## Working with high-risk plant

High risk plant includes equipment or machinery that is associated with the highest risk, like cranes and pressure equipment.

**Relevant sectors:** manufacturing, construction, forestry, amusement activities (including snow sports), vehicle repair.

## **Overview of changes:**

Current requirements for work with high-risk plant have been modernised by revising and consolidating them into a single set of obligations. The requirements will also be extended to additional types of plant such as steep-slope forestry harvesting equipment, hoists, and concrete-placing equipment.

- Suppliers and operators of some plant must ensure it is a registered design. The design must be verified by a qualified engineer and recorded on a central register, operated by WorkSafe. This will help businesses use only high-risk plant that is fit for purpose and meets the appropriate standards.
- > Operators will register specified items of high-risk plant after they have been checked by an equipment inspector. This register will make it clearer which plant has been inspected, and when.



#### **Amusement devices**

The new high-risk plant regulations will apply to amusement devices. As with the Australian Model Regulations, qualifying devices will be determined from a risk-based definition and will include some gravity-operated equipment, certain fairground rides, and larger inflatable devices such as large scale blow up slides, which can seriously injure when they deflate.

**Relevant sectors:** tourism, recreation.

- > We will adopt the risk-based definition of "amusement device" from the Australian Model Regulations, which incorporates a broader range of activities, but we will modify it for New Zealand.
- > Territorial authorities will issue permits for higher-risk portable amusement devices only.
- > The existing model engineering (model trains) inspection regime will be kept. The Model Engineering Association of NZ will be audited by International Accreditation NZ to be recognised as an inspection body.
- > There will be new requirements for operator training, inspection and maintenance of amusement devices.



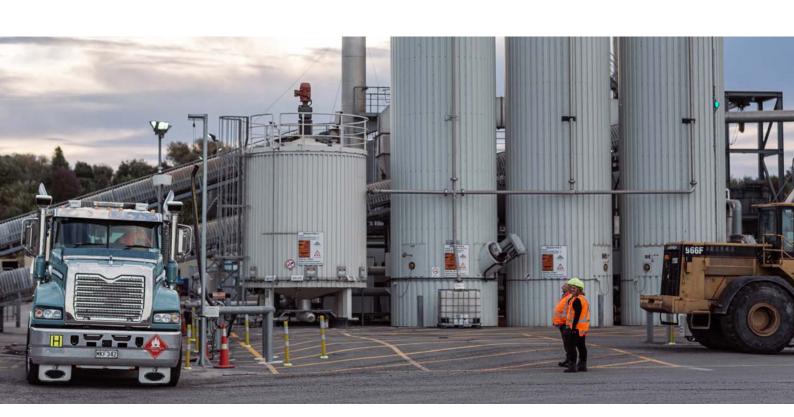
#### **Upstream businesses**

Designers, suppliers, importers and manufacturers will be required to take steps to make plant entering New Zealand workplaces safer, and therefore reduce harm to workers. These requirements clarify what these duty holders must to do meet their existing responsibilities under the Health and Safety at Work Act. They complement the duties introduced in the 'plant' section above, and ensure that responsibility for safety sits across the whole supply chain.

International research shows that the most effective risk control measure (eliminating hazards) is often cheaper, more effective and more practical to achieve at the design or planning stage, rather than managing risks later in the lifecycle, like having to retrofit safety features.

**Relevant sectors:** anyone who designs, manufactures, imports, supplies or modifies plant.

- > Critical safety information must be provided across the supply chain.
- > Upstream businesses manage risks and hazards identified when designing, manufacturing, supplying or importing plant.
- > Any faults in second-hand plant must be shared with the person being supplied the plant (except when the second-hand plant is supplied 'as is'.)
- > Guarding and safety features must meet the equivalent requirements placed on businesses that use the plant.
- PCBUs requesting or ordering new designs of plant must provide designers with any information about reasonably foreseeable risks and hazards at the workplace where the plant or structure will be used.



#### Working at height

Working at height is common to many workplaces, most obviously in commercial and residential construction, but also occurs across agriculture, in logging and forestry, manufacturing, warehousing and many other sectors.

Falls from height are most common in the construction sector - they occur at three times the rate of the manufacturing sector, and caused 18% of the cost of construction sector injuries in 2015.

**Relevant sectors:** most commonly in construction, but also in many other sectors including manufacturing, forestry, agriculture.

#### **Overview of changes:**

The changes will update, clarify and simplify the existing working at height requirements so that they are more flexible to the circumstances and proportionate to the risk.

- Businesses must apply the Prescribed Risk Management Process to all work at height, to ensure that these risks are managed in a consistent, proportionate way. This new approach will remove the current exemptions for work at heights below three metres and in agriculture, to ensure consistent and proportionate protection.
- > Businesses will be required to follow a hierarchy of controls for construction work. This means applying a step by step process in descending order from a higher level of protection to a lower level starting from providing a safe working platform, to a fall prevention system, to finally a fall arrest system. A combination of controls may also be used if appropriate. To accommodate minor work that is of low risk, such as clearing out a gutter or minor repairs, work from a ladder is permitted in specified circumstances.
- The licensing and qualifications for scaffolding construction and inspection will be modernised to reflect current industry practice. The detail of the high risk work licensing process for scaffolders will be consulted on as part of the early draft of the regulations.



#### **Excavation work**

Excavation work can occur anywhere and includes open or pit excavations, like building or road upgrade works, potholing, trenches and retaining wall, and shafts and drives. Between 2008 – 17 excavations were involved in 4 deaths and 27 serious injuries.

The health and safety risks from quarrying are addressed in separate regulations, and quarrying will be outside of the works to be covered.

**Relevant sectors:** most commonly in construction, but also at times in other sectors including agriculture and forestry.

- > The Prescribed Risk Management Process is to be followed for specific risks associated with all excavation work, regardless of depth.
- > The PCBU with management or control of the worksite must check for underground services to address the risks of harm and economic disruption from line strikes.
- > For excavation work greater than 1.5m deep, existing controls for shoring and fencing will be retained and revised, as well as requirements for notifying WorkSafe.
- > Strengthened competency requirements for determining whether shoring is required to prevent ground collapse.



#### **Offences**

Offences and penalties will be proportionate to the potential harm, and consistent with existing offences and penalties in health and safety at work regulations.

- > Where we are modernising requirements, we will also update the offences, penalties and infringements. Where requirements are new, we will introduce new offences, and appropriate penalties and infringements.
- > We will consult on these alongside the early draft of the regulations. Maximum penalties will vary depending on whether the person is an individual or corporate.
- > The Health and Safety at Work Act:
  - Allows for a maximum penalty of \$20,000 for individuals and \$100,000 for non-individuals such as corporates for not having the correct authorisations. These penalties will apply to failure to have a scaffold licence or high-risk plant registration.
  - Provides for fines up to a maximum of \$50,000 for other regulatory offences, (aligning with comparable regimes), and 'on-the-spot' fines of \$300 to \$9,000 for infringement offences relating to minor or less serious matters.





Find out more on the MBIE website and sign up to receive the draft of the regulations when it is released in early 2022:

www.mbie.govt.nz/plant-and-structures

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