

## SAFETY ALERT

# Risks with dogging and crane operations

This alert reminds workers and others about the dangers of craning goods and other material unsafely. It is in addition to an earlier Safety Alert – *Risks associated with crane operation* (catalogue no. WC02369), which contains more general information.

## Background

WorkCover recently responded to two incidents where doggers were seriously injured during crane operations.

In the first incident, a 1.2 tonne I-beam was lowered into a storage position, where it rested on its flange atop timber packers. The I-beam, however, rolled forward crushing the dogger's lower leg.

In the second incident, a dogger walking a load during a pick-and-carry operation suffered crush injuries to both legs when he was struck by the moving crane.

## Contributing factors

Investigations into both incidents are continuing. However, the following is understood.

- In the first incident:
  - the packers used to support the I-beam may not have been level at one end
  - the I-beam had a narrow flange relative to its height
  - the chain lifting slings had been removed from the I-beam after it was placed atop the packers
- In the second incident:
  - tethers had not been used to secure the load
  - the dogger was walking the load by hand but was not using tag lines
  - the dogger was positioned on the opposite side of the crane to the driver's cabin.

Although not necessarily contributing to these incidents, the factors below may be relevant when conducting similar operations.

- Depending on its dimensions, an I-beam stored upright on its flange may not be as stable as one that is stored on its side. (This was the case in the first incident.). Also, when lifting slings that have been removed from a landed load, be sure to avoid contact with the load (eg 'snagging'), which might cause the landed load to become unstable.
- During the second incident, the crane had to travel with the load over speed bumps and inclined/declined roadways. Such factors can affect the position/movement of a load and the stability of a crane. They may also become trip hazards for doggers and may require a crane to suddenly accelerate or change speed.
- The second incident occurred in the early hours of the morning. The reduced lighting and visibility may mean changes are needed to a daytime system of work.
- Both incidents occurred towards the end of the work shift, when the last lift was being done. Such a situation can potentially limit the availability of competent people to help with a lift.

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## Action required

Persons conducting a business or undertaking (PCBUs) who use plant must ensure that risks to the health and safety of workers and others are minimised as much as is reasonably practicable. When identifying hazards, consider:

- the suitability of the plant for the task
- the training, qualifications and competency necessary for the operators
- the number of operators required to perform the task effectively
- the proximity of the plant to workers and others who may be affected by its operation.

PCBUs must develop safe systems of work in consultation with workers, and these should minimise any risks that arise from the use of plant.

## Specific control measures

Before using cranes, ensure the following.

- Sufficient personnel are available to complete the lifts and that they are competent or, if required, hold an appropriate licence. More personnel are needed where there are multiple pick-up points or drop-off points that are out of sight of the crane operator.
- The loads are slung by competent and appropriately qualified persons.
- The load is slung to allow for removal of the slings at the landing area, unless the slings are to remain with the load.
- The landing area is suitable for landing the load – that is, it is structurally adequate, big enough, cleared of obstructions – if necessary – to receive the load and provides enough access to detach the load from the crane.

When performing lifts with cranes, ensure the following.

- A dogger is available to direct the crane operator whenever the load is out of sight of the operator. This could be at more than one location during the lift.
- Loads are manoeuvred into place by competent persons.
- Once it has been landed, the load is stable and, if appropriate, secured before it is detached from the crane.

For pick-and-carry operations, ensure the following.

- Doggers are positioned so that they are visible to the crane operator at all times. This could mean considering which side of the driver's cabin provides the best vision, as well as the crane's location and any potential problems with pedestrian or vehicular traffic.
- Tethers are used, where possible, when transporting loads. Where tethering may affect the stability of the crane and a dogger is required to walk the load, use tag lines that are long enough for the dogger to remain clear of the crane and the load fall zone.
- Doggers are able to walk at a comfortable pace when required to walk the load. Consider the surface and inclination of the roadway and the presence of trip hazards, and ensure that the crane speed is appropriate.

## Further information

The WHS Act requires persons conducting a business or undertaking at a workplace to ensure, so far as is reasonably practicable, that workers and other persons at a workplace are not exposed to risks arising from the business or undertaking and that all workers are adequately trained and supervised.

Clauses 34 to 36 of the WHS Regulation places specific obligations on duty holders to identify reasonably foreseeable hazards associated with work being undertaken, including hazards associated with any plant used, and then manage these risks accordingly. Also, refer to:

- the *Australian Standard AS2550 Part 1 Safe use of cranes – general*, which is available at [saiglobal.com](http://saiglobal.com)
- the *Industry plant consultative committee safety alert remotely operated tower cranes* (catalogue no. WC02823) and the *How to manage work health and safety risks: Code of practice* (catalogue no. WC03565), which are both available at [workcover.nsw.gov.au](http://workcover.nsw.gov.au)

You can also phone WorkCover on **13 10 50**.

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Information on the latest laws can be checked by visiting the NSW legislation website [legislation.nsw.gov.au](http://legislation.nsw.gov.au)

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