

Lifting operations dangerous occurrences and injuries

May 2026

Lifting operations in the offshore industry continue to result in significant incidents and serious injuries, despite the hazards and controls involved being well known across the offshore industry.

For the purposes of this bulletin, “lifting operations” refers to the mechanical lifting or lowering of loads using lifting equipment.

Observed recurring themes

Over the past five years NOPSEMA has received a consistent pattern of notifications of injuries and dangerous occurrences during lifting operations in the offshore industry. While each event has its own specific set of circumstances, NOPSEMA has undertaken analysis of the investigation findings from which a number of recurring themes have emerged, including:

- generic practical application and verification of Control of Work systems
- failure to recognise the materiality of changes to risks, both prior to and during execution
- failure to adequately consider manufacturer instructions and guidance in relation to plant and equipment
- failure to recognise or control personnel being in the Line of Fire or Drop Zone during operations and
- inadequate training, competence and experience.

These themes are by no means novel to lifting operations or the offshore industry and are frequently highlighted by NOPSEMA and other Occupational Health and Safety (OHS) regulators as

common risk control failures. Despite this, they remain highly relevant in lifting event causation.

Key lessons

Taken together, these themes highlight underlying weaknesses in how lifting operations are planned, managed and executed, and the following lessons are highlighted:

Change management

While change is overwhelmingly a generic factor in most events, there were a significant number of events in the dataset that might have been avoided if formal change management processes had been known or complied with. This includes those managed via task based risk management where appropriate.

Change should be considered and managed appropriately for all lifting tasks, whether formally or informally. It should be recognised that a routine lift can easily drift into a non-routine lift, and that original planning processes can become wholly inadequate for the task.

Training, competence and experience

A number of events attributed failure to the inability of persons to recognise plant, equipment and task hazards, or even due to inexperience or lack of specific training.

All persons involved in lifting operations have specific responsibilities. Planners, supervisors and lifting team members should be competent to supervise and/or undertake the lifting operation, trained and familiar with the plant and equipment being used and sufficiently experienced for their designated role within the lifting team.

Training should directly support both the broader tasks being performed as well as the specific equipment being used – particularly where equipment appears inherently versatile.

OEM instructions / equipment fit for purpose

All parties involved in a lift must be aware of and give due consideration to the requirements and guidance of the Original Equipment Manufacturers (OEMs), to ensure that relevant plant and equipment is fit for purpose and used and maintained within its intended safe operating parameters.

Drop Zones / Line of Fire

Controls should be implemented to keep personnel, including those involved in the lifting operations, out of the Line of Fire and Drop Zones. This may include exclusion zones and barricading, but also the rigorous requirement to utilise hands-free tools (tag lines, push sticks etc) during lifting operations.

Identification of the boundaries of Drop Zones and Line of Fire locations both in planning and execution is critical, with consideration given to the possible failure of rigging and lifting equipment and the forces acting on them besides gravity.

Other Control of Work

In addition to the factors outlined above, NOPSEMA observed that failures frequently occurred at the interface between planning, authorisation, supervision and execution of lifting activities, despite the existence of otherwise comprehensive systems and procedures.

Planning and execution of lifting activities should be supported by safe systems of work including task specific risk assessments (including Lift Plans), work instructions, Permit to Work, clear roles and responsibilities, supervisor checks and appropriate communications.

These systems should be rigorously applied to both non-routine and routine lifts. The temptation to

treat these systems as generic or meaningless paperwork, particularly for routine lifts, should be actively discouraged. Routine lifts are often underestimated, and short cutting the planning systems can prevent opportunities to adequately control the risks.

What next

Despite the fact that most organisations have formal systems and procedures related to the above controls, these failures continue to occur on a regular basis.

Routine probing of system robustness is paramount, and NOPSEMA recommends that for each of your organisation's key risk controls for lifting operations, consider:

- Are these controls effective in practice, or are they becoming strained, complacent or assumed?
- How might the control fail during planning or execution?
- What safeguards are in place to prevent those failures?
- What safeguards are in place to prevent harm should a failure occur?
- Is there effective oversight and assurance to monitor the ongoing health, availability and performance of each control?

Over the coming months, NOPSEMA intends to expand on a number of the key lessons highlighted in this bulletin, in separate publications.

Related documents

- [Safety Alert 59](#)
- [Safety Alert 73](#)
- [Safety Bulletin 8 June 2023](#)

Legislation

Operators of a facility, people who control parts of a facility or specific work at a facility and employers of workers at a facility should refer to their general and specific duties under Part 2, Division 1 of Schedule 3 to the *OPGGs Act*. These duties are intended to:

- secure the health, safety and welfare of people at or near facilities; and
- protect people at or near facilities from health and safety risks arising from activities carried out at those facilities.

Contact

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