

12/99 Young worker manual handling 20 litre paint tins

Incident

An apprentice painter injured his lower back while lifting a 20-litre paint tin. He was moving the painting equipment from one work site to another. This included lifting and carrying 20-litre tin of paint approximately 30-40 metres. In the process of lifting a paint tin he felt a twinge in his back. He continued working that day, however over the next few days he felt the pain increase to the point where he became incapacitated. He has had a slow recovery and still suffers significant pain and discomfort. The apprentice is 19 years old and has a back injury that has the potential to significantly affect his long-term ability to continue manual work.

Factors

1. The weight of the paint tin:
 - weight approximately 30kg.
2. The manual handling techniques involved in lifting and carrying the large paint tins:
 - The design of 20-litre paint tins result in a one handed technique being most often employed to lift/carry them. Asymmetric handling, particularly involving heavy, awkward objects, such as the paint tins, leads to sideways bending of the back. The risk of injury increases with the degree of sideways bending required to handle a load.
 - The load was manually carried 30-40 metres. Carrying a load over long distances increases muscle fatigue and can affect the ability to safely carry out other manual handling tasks afterwards. The risk of injury increases with the distance the load is carried.
3. A young worker was involved in the incident:
 - The painter was an apprentice and therefore had less experience and expertise in safe handling techniques. In addition, young workers are at a greater risk of injury than adult workers because their spine and other joints are still developing and are more easily damaged.

Recommendations

1. The risk of sustaining a manual handling injury increases as the weight of the load increases. The risk is compounded when the load is handled with one hand. Given the weight of the paint tins, and the way in which they are handled, the risk of injury would be significantly reduced if one large paint tin was substituted for two smaller paint tins. The benefit is two fold, the weight of the individual item is reduced and asymmetric lifting/carrying is eliminated. Carrying two lighter tins, one in each hand, is considerably safer than to carry one heavy tin in one hand.
2. Manually carrying heavy objects in one hand over a distance should be avoided. The use of a suitable trolley would modify the system of work such that it would eliminate the need for carrying paint tins thus significantly reducing the risk of injury. Obviously



the suitability of using a trolley would have to be considered before they were utilised, for example assessing the suitability of the terrain to use a trolley.

3. Considering that young workers are at a higher risk of sustaining a manual handling injury* the following are required:
 - General and specific manual handling training and instruction at induction and on an ongoing basis.
 - Direct supervision of manual handling tasks.
 - Assessment of the tasks taking into consideration the special needs of young workers.

Further Information

Further information can be obtained from the WorkSafe internet site www.worksafe.wa.gov.au, or by contacting customer service on 1300 307 877 or email: safety@docep.wa.gov.au.

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