27 March 2024

WSH ADVISORY

Forklift-related Workplace Fatal Injuries in 2H2023

In the second half of 2023, two workers were killed in separate workplace accidents due to the unsafe use of forklifts. The WSH Council would like to call on all companies to review their forklift operations and ensure the correct and safe use of forklifts.

<u>Company director fell from forklift pallet</u>

On 25 July 2023, a company director and his co-worker were dismantling Closed-Circuit Televisions (CCTV) at a warehouse. To reach the CCTV, they used a nearby forklift belonging to another company. The ignition key was left within the switch of the forklift. The director stepped onto a pallet placed on the forks while the co-worker operated the forklift and raised the director to access the CCTV. While working on the raised pallet, the director lost his balance and fell to the ground. He was sent to the hospital where he passed away on 31 July.



Figure 1: Re-enactment of the accident scene.

Worker pinned under toppled forklift load

On 18 September 2023, a team of workers was using a plate-rolling machine to fabricate steel pipes. During the fabrication process, a forklift was used to lift a set of steel moulds, each weighing about 200kg, to press down on each newly rolled plate and hold it in place for welding works. When the forklift operator dismounted and moved to the rolling machine, the steel moulds suddenly toppled on him as the moulds were not secured. The forklift operator was sent to the hospital where he died from his injuries.



Toppled steel moulds

Figure 2: Scene of the accident.

What companies should do

Forklifts are designed for loading and unloading of goods. Companies need to ensure that they have proper control and procedures to ensure the safe use of forklifts:

- Competent forklift operator: Deploy only forklift operators who have completed the Workforce Skills Qualification (WSQ) Operate Forklift Course and are authorised to operate the forklift. Provide forklift operators with refresher training at least once every three years. Additional model-specific training with support from the forklift's manufacturer is strongly recommended.
- Safe use of forklift: Use the forklifts for its intended purpose to lift items or carry pallets on which the goods are placed.

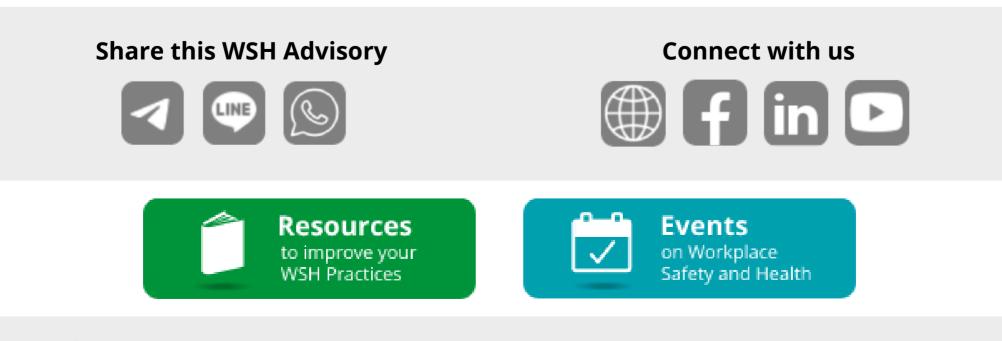
- Forklifts must not be used to carry or transport persons on a pallet;
- The raised items/goods should not be used as "weights" to facilitate manufacturing;
- If extension arms are used, ensure that they are properly design for the forklift.
- Stability of Goods: Check and ensure that the goods/items are stable to prevent unintended toppling. If the goods/items are suspended on the forks or extension arms, ensure that they do not sway excessively during movement as there is a risk of overturning the forklift.
- Safe Work Procedure (SWP): Develop a SWP for the specific work activity covering the use of the correct equipment, tools and work method. Consult the equipment's manufacturer or supplier for advice where necessary. Communicate the SWP to workers and provide supervision to ensure the SWP is closely followed.
- Controlled key access: Restrict access of forklift keys to only authorised operators. The forklift ignition key should never be left in the ignition switch unattended.
- Seatbelts: Ensure that the operator puts on his seatbelt while operating the forklift. In the event that the forklift overturns, the seatbelt will protect the operator from being crushed by the forklift or the goods.

For more information, refer to the Workplace Safety and Health (Work at Heights) Regulations 2013, SS 573: 2012 Code of Practice for the Safe Use of Powered Counterbalanced Forklifts, WSH Guidelines on Safe Operation of Forklifts, as well as the WSH Council's Forklift Safety Pack, Activity Based Checklist on Safe Use of Forklift Trucks, and <u>6 Basic WSH Rules for Safe Forklift Operation</u>.

Companies may wish to share the following <u>animation</u> with workers during toolbox briefings:



Under the WSH Act, first-time corporate offenders may be sentenced to the maximum fine of \$500,000 whilst individuals can either be sentenced to the maximum fine of \$200,000 and/or an imprisonment not exceeding 2 years. Read more on the WSH Act penalties.





We regret that we are unable to reply to emails at this email address. For enquiries or feedback, please email us at <u>contact@wshc.sg.</u> Visit the WSH Council's <u>website</u> now for updates on WSH-related matters, information and events.



This WSH Advisory is available free of charge, may be printed or downloaded onto electronic, optical or similar storage media provided that such activities are for private research, study, or in-house use only. If such material is to be copied or reproduced, users are asked to ensure that the material is reproduced accurately and not in a misleading context, that the status of the material is identified and to acknowledge Workplace Safety and Health Council, Singapore as the source of the material.

Subscribe Privacy Statement