Dont Get Caught in the Crush Meeting Kit

What’s At Stake

Crushing accidents occur when the body or any part of the body is squeezed between two moving objects or caught between one moving and one stationary object. Minor crushing accidents can cost workers in many ways, in pain, disability, and the loss of a job. Major crushing accidents can cost lives.

What’s the Danger

WHERE DO CRUSH INJURIES OCCUR?

Crush injuries are extremely common in the dangerous world of construction. They are among the “fatal four” leading causes of construction worker deaths. The fatal four list includes falls, struck by objects, electrocutions and caught in or caught between accidents. Crush injuries are also common in factories and anywhere heavy machinery is frequently utilized.

SPECIFIC SITE CRUSH INJURIES

Working on machines with moving parts. Crush injury and amputation risks can be high for workers who work with or near machinery requiring a portion of a worker’s body to come in contact with a moving part. Machines like punch presses, brake presses, and power shear equipment are common in industrial settings.

Collapse or fall of construction materials. Accidents where construction materials fall, or collapse can result in crush injuries and related fatalities. For example, a scaffold collapse may cause a worker below to become crushed by the scaffold materials and braces. In addition to this, trench or excavation work can also create a serious crush hazard for workers. While hardhats may protect workers’ heads, they do not protect other

vulnerable areas of the body.

Run over. Workers being run over by large equipment like bobcats or forklifts can also cause crushing injuries.

Contact with moving equipment. Workers may become pinned or struck by power driven vehicles and machines during operations that require the loading or off-loading of materials.

MEDICAL PROBLEMS FROM CRUSH INJURIES

Tissue damage: Crush injuries can disrupt blood flow, depriving delicate tissues of blood that depend on it for oxygen.

Infection: Crush injuries high infection risks, especially when tissue and muscle are damaged. When layers of skin are removed, this exposes deeper tissue to the elements and increases the risk of infection.

Compartment syndrome: Compartment syndrome is a very serious complication that begins with immense pain, and then brings about swelling with blood, which can result in the area becoming paralyzed. This syndrome can lead to tissue and muscle death, and often requires amputation to correct it.

Crush syndrome: Also known as Bywater's Syndrome, crush syndrome is a medical condition that causes major shock to the organs and renal failure. Symptoms of crush syndrome show within an hour following the incident.

HOW TO PROTECT YOURSELF

CONTROL CRUSH HAZARDS BY TRAINING AND RETRAINING – STRATEGIES

- **Guarding:** Ensuring that machinery is properly guarded will prevent many crushing injuries, deaths, and amputations.
    - Prohibit workers from removing guards while machinery is in use.
    - Make sure that guards don't create an additional hazard. In some cases, workers have been injured when they became caught between the equipment and the

guard.

- **Blocking and securing objects:** Machinery, substances, or objects that may shift, cycle, or move unexpectedly must be secured.
    - An effective lockout/tagout program will help to ensure that workers can identify all sources of potentially hazardous energy and control them effectively.
    - Raised equipment should be well supported so it cannot fall.
    - Equipment should not be parked or stored in a raised position. Make sure excavator buckets, forklift forks, and other elevating equipment are lowered when not in use.
    - Stored materials must be stacked and secured in a way that prevents collapse.
- **Increasing awareness of pinning hazards:** Workers must be aware of mobile equipment in their work area, and ensure that they are never between moving equipment, such as forklifts, and immovable structures, other vehicles, or stacked materials.
    - Restrict traffic in the work area so only essential personnel are present.
    - Separate pedestrian and vehicle traffic as much as possible.
    - Train workers to identify areas where crushing hazards exist, so they can stay out of the zone of danger.

WORKER BOLO (BE ON THE LOOKOUT) OVERVIEW

There are simple things workers can do to lessen their chance of experiencing crushing injuries. The first, and most important thing, is for workers to know when they are placing themselves or any of their body parts in a situation of possible injury.

Workers must always be aware of where they are in relation to moving equipment around them.

When in these situations, workers must allow enough room to compensate for equipment failure or operator error. Workers should

stay within the equipment operators’ vision at all times.

Workers should make it their business to stay out from under any load to avoid the possibility of being crushed from above. “If it’s in the air, it’s dangerous.” Employers should never permit a load to be raised, lowered, or swung over a worker’s head. It’s also the worker’s responsibility to shut-off, lock-out, or tag-out all energy sources, and to test to assure that they are dead, before attempting to work on or clear equipment capable of any movement or activation.

FINAL WORD

Accidents that result in crush injuries are the result of lax safety standards and practices. When employers and workers comply and enforce safety standards crush injuries are less likely to occur.