Caught or Crushed Injuries Meeting Kit

CAUGHT OR CRUSH INJURIES

Each year, workers suffer approximately 125,000 caught or crush injuries t hat occur when body parts get caught between two objects or entangled with machinery. These hazards are also referred to as “pinch points.” The physical forces applied to a body part caught in a pinch point can vary and cause injuries ranging from bruises, cuts, and scalping to mangled and amputated body parts, and even death. Workers in field, industrial, and office settings are all affected by caught or crush hazards to some degree.

CONSTRUCTION, HEAVY MACHINERY AND EQUIPMENT

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.

CAUGHT/CRUSH HAZARDS ARE NOT LIMITED TO MACHINERY/EQUIPMENT

Doors, file drawers, and heavy crates can pinch fingers and toes. Take care where you place your fingers. Test the weight before lifting, carrying, and placing boxes; an awkward or heavy load can slip and pinch your hands or feet. Get help or use material handling devices to move large and/or heavy items.

INJURIES FROM CRUSH ACCIDENTS

When two large objects crush a human body, muscle damage happens instantaneously. Extreme pressure exerted on muscle cells cuts off blood flow and can result in muscle death. The severity of a crush injury will depend upon the force of the objects involved in the accident and the part of the body that was crushed. If the individual was stuck between two objects for an extended period of time, they may not survive the accident.

Working conditions that contribute to caught-in or -between hazards:

- Machinery that has unguarded moving parts or that is not locked out during maintenance
- Unprotected excavations and trenches
- Heavy equipment that tips over
- Collapsing walls during demolition

- Working between moving materials and immovable structures, vehicles, or equipment

Almost all sites use machinery that has moving or rotating parts or require maintenance or repair at some point during construction. If machinery is not adequately guarded or de-energized during maintenance or repair, injuries from caught-in or –between hazards could result, ranging from amputations and fractures to fatality.

Unguarded machines or power tools can get clothing or parts of your body caught in the machines. If devices are not de-energized (locked-out) when they are under repair, they may cycle or otherwise turn on and grab a body part or clothing and cause injury or death.

The primary hazard related to buried in or by is cave-ins of unprotected trenches and excavations. Cave-ins can crush or suffocate you. Trenches may contain hazardous atmospheres; you can drown in water, sewage, or chemicals in the trenches; and if working around underground utilities, you could also face burns, electrocution, or explosions from steam, hot water, gas, or electricity.

CRUSH PREVENTION TRAINING FOR WORKERS

Crushing hazards exist when workers may be caught in or between two hazards. If the impact alone could be deadly, the hazard is considered a “struck-by” hazard—the danger is that a worker will be struck by an object.

A crushing hazard, in contrast, is a “caught-in” hazard—the danger to the worker rests in being caught between two objects, one or both of which may be moving, and injured or killed either by physical crushing or suffocation that results from the compression of the rib cage.

Obtain training and learn about the caught/crush hazards and pinch points specific to your tasks, tools, and equipment so you can take precautions.

Dress appropriately for work with pants and sleeves that are not too long or too loose. Shirts should be fitted or tucked in. Avoid wearing loose and dangling jewelry. Tie back long hair and tuck braids and ponytails behind you or into your clothing. Wear the appropriate, well-fitting gloves for your job.

Look for possible pinch points before you start a task. Take the time to plan out your actions and decide on the necessary steps to work safely. Give your work your full attention. Most accidents occur when workers are distracted, so avoid horseplay, daydreaming, and multi-tasking on the job.

BEST WORK PRACTICES TO PREVENT AND PROTECT AGAINST CAUGHT-IN OR -BETWEEN HAZARDS:

- Use machinery that is properly guarded.
- Belts, gears, shafts, pulleys, sprockets, spindles, drums, flywheels, chains, or other reciprocating, rotating, or moving parts of equipment, must be guarded if you are exposed to contact by such parts.
- Turn off vehicles before you do maintenance or repair work. If possible, lock out the power source to the equipment. The type of power source may be electric, pneumatic, liquid fuel, hydraulic, or powder-actuated. Lower or block the blades of bulldozers, scrapers, and similar equipment before making repairs or when the equipment is not in use.
- Never place yourself between moving materials and an immovable structure, vehicle, or stacked materials.
- Ensure that all loads carried by equipment are stable and secure. Stay out of the swing radius of cranes and other equipment. Wear a seatbelt, if required, to

avoid being thrown from a vehicle and then potentially being crushed by the vehicle if it tips over.
- Protect yourself on excavation sites and do not work in an unprotected trench that is 5 feet deep or more.

FINAL WORD

Caught or crushed and/or “pinch point” injuries are extremely common in the construction world. They are also common in factories and anywhere heavy equipment is utilized. White collar workers are subjected to “pinch points” with doors, file drawers and heavy boxes pinching fingers, hands and toes.