Struck-by Incidents (Construction) Meeting Kit

With all of the moving equipment, flying debris, and falling objects on a construction site it can be a very dangerous place for an individual on the ground. It is important to understand the specific hazards of the work for that day as well as the job site overall as ground personnel who will be on the job site.

DISTINCTION/ DIFFERENCE

Struck-by injuries are produced by forcible contact or impact between the injured person and an object or piece of equipment. Having said that, it is important to point out that in construction, struck-by hazards can resemble **caught–in or –between hazards.**

There is a **distinction** which is best explained by looking at the key factor in making a determination between a **Caught** event and a **Struck** event, ask: Was it the impact of the object alone that caused the injury? When the impact alone creates the injury, the event is considered as **Struck.** On the other hand, when the injury is created more as a result of crushing injuries between objects, the event is considered as **Caught.**

THE HAZARDS

Construction workers are most often struck by heavy equipment and vehicles, falling or flying objects, and masonry or concrete walls under construction. To prevent these injuries, here are a number of tips, including:

- Always wear a seat belt when operating equipment.
- Drive slowly and follow all safe operating procedures.
- Don’t operate vehicles or equipment if you can’t see behind you while backing up. In these situations, make sure the vehicle or equipment has a reverse alarm that other workers can hear, as well as another worker to signal that all is clear before moving.
- Inspect all vehicles and equipment before work begins. Be sure brakes are in good condition, and chock all vehicle wheels when not in use or parked on an incline.
- Wear proper personal protective equipment, including high-visibility vests.

Falling or flying objects are another struck-by hazard found on construction sites. Workers are at risk from falling objects from beneath cranes, scaffolds or overhead work. To avoid injuries, wear personal protective equipment, employ protective measures such as toe boards and debris nets, secure all items when working at height, and never work underneath suspended loads.

To avoid being injured or killed by flying objects or when flying particle hazards are present, wear hard hats and appropriate eye and face protection; never use hand tools with loose or cracked handles.

PREVENTION

Prevention is the key to not having injuries on the job site. Things to do to prevent struck-by injuries include:

- Wear personal protective equipment such as steel-toe shoes and hard hats.
- Workers should only use equipment that they are properly trained to use.
- Workers should make sure all safety devices on equipment are in good working order before they use them.
- Never obstruct views by overloading equipment.
- Use extra caution with machinery around corners and doorways.
- Secure and neatly store loose materials in our head locations.
- Store heavy objects close to the floor.
- Secure all loads and lift them evenly.
- Never throw materials or tools.
- Use debris nets, catch platforms, or canopies to catch or deflect falling objects.
- Do not work under loads that have been lifted and always keep a safe distance.
- Do not exceed the lifting capacity of cranes and hoists.
- Inspect all tools to ensure the protective guards are in good condition.

STRUCK – BY INCIDENTS TAKE AWAYS

- Eliminate as many struck-by hazards due to equipment as possible. For example, does a piece of equipment or vehicle need to be operating in an area where there are pedestrians? Can unnecessary backing be eliminated? Can the worker on the ground wait to complete the task they were assigned to do or complete it somewhere else away from moving equipment?
- Eliminate the potential for falling objects. Remove materials or tools that are located on an elevated level when possible. If elimination is not possible then make sure there is proper toe boards located on any elevated surfaces to prevent objects from sliding off. Another option is to tie off tools and materials to ensure they do not fall to a lower level.
- Barricade work zones to prevent entry where equipment is operating or there is work overhead being completed. Substantial barricades such as fences will help prevent ground personnel from entering an area where they could be injured.
- Barricade or separate any work tasks that create flying debris. For example, workers should not be exposed to grinding operations or operations that create excessive dust, like cutting concrete, if they are not the ones completing the task.

FINAL WORD

It is difficult to fully eliminate the hazards that result in struck-by incidents, but proper planning and work zone delineation can help to eliminate exposure to these risks. Evaluate your work tasks to see if there are any unnecessary risks to ground personnel due to the mentioned hazards above.