Workplan: Struck-by and Caught-between



Your role as a supervisor is to identify and correct unsafe work practices and help to create and enforce safe work practices so your workers can avoid struck-by and caught-between injuries and incidents.

Let’s start by defining our terms.

- A struck-by incident is when the impact alone creates an injury. For example, a worker is hit and injured by a tool or equipment.
    - Struck-by incidents are often related to improper material handling and unsafe practices around heavy equipment, tools, and machinery.
    - Struck-by injuries can result in blindness, concussions, permanent brain damage, and other serious injuries.
- A caught-in or -between incident is when an injury is a result of the crushing force between two objects.
    - This includes getting caught or crushed in operating equipment, between a moving and stationary object, or between two or more moving objects.
    - Caught-in injuries result in serious and often fatal crushing injuries and hundreds of amputations each year.

These incidents can happen in every type of job but are most common, and most deadly, in construction and road work, oil and gas work, any work involving material handling, machines, and heavy equipment.

The prevention of struck-by and caught-between related hazards and injuries is a primary focus of OHS/OSHA inspectors. Here’s how you can help your organization protect workers and keep them safe on the job.

Hazard ID

Start by determining what struck-by/caught-between (SBCB) hazards are present at your work site. You’ll be looking for the following types of hazards:

1. Flying objects
2. Falling objects
3. Swinging/moving objects
4. Rolling objects

Struck-by hazards originate from many sources. The most common include:

- Accidental hits by cranes, heavy equipment and loader trucks.
- Poorly stacked heavy materials that may fall, slip and slide – this can also be a caught-between hazard.
- Poor housekeeping, such as a tools or equipment left on edges or shelves.
- Missing guards or screens on tools and equipment that grind, abrade, or polish.
- Unusual work such as demolition of buildings, tree trimming, pruning and felling etc.

Caught-between hazard sources include:

- Crane booms that aren't supported during dismantling.
- Improper construction and use of scaffolds – i.e. unstable footing, overload of materials.
- Concrete walls being constructed.
- Demolition work.
- Unsafe maintenance and repair work on equipment – i.e. working between the frame and bed of a dump truck.

Safe Work Practices

The safe work practices you create and enforce will be dependent on the types of hazards you identify in the assessment. The following are universal safe work practices. Some are specifically related to your role as a supervisor and others are employee-centric. Follow safety instructions and standard operating procedures recommended by the manufacturer.

- Only trained personnel should operate equipment and machines.
- Provide and enforce the use of required PPE.
- Protect employees from being injured by falling objects by using appropriate toe boards, identifying and barricading the areas below work zones, and requiring PPE such as hard hats to be used.
- Mark all hazardous areas and instruct employees to obey warning signs.
- Enforce good housekeeping practices.
- Setup and enforce machine and equipment maintenance protocol and schedules.
- Provide protection during trench and excavation work.

Once these safe work practices have been established it is your job to train your workers on these and site- and equipment-specific practices. Here are a few examples.

- Train workers on safe lifting procedures.
    - No lifting equipment or loads beyond an equipment's designed capacity.
    - All lifting equipment must be tested and inspected before use.
- Train workers to:
    - Stay away from moving equipment.
    - Wear clothing that does not catch in machinery.
    - Keep clear of lifted loads.
    - Secure tools and equipment with lanyards to the workers to prevent them from falling.
    - Maintain eye contact with equipment operators.
    - Lower or block bulldozer and scraper blades, end-loader buckets, dump-truck beds when not in use.
    - Disengage equipment controls (i.e. don't leave equipment in drive or reverse) and set the parking brake, wheel chocks, and use LOTO when

required.
    - Avoid distraction (no smartphones, tablets) and maintain awareness and recognize that as work progresses the hazards may change.

Inspections

Lastly, you need to perform regular inspections to keep workers safe. Regular inspections have the following benefits:

- Allows you to observe if safe work practices are being followed.
- Helps you identify hazards you missed in your initial assessment or any new hazards that have developed.
- Gives you a chance to get employee feedback and ideas on safety issues and safety fixes.
- Let’s you correct unsafe conditions and unsafe acts as they are occurring.
- Identify workers who need additional training.