Struck-By Hazards in Construction Meeting Kit



WHAT’S AT STAKE

In construction, one of the most common and deadly dangers is being struck by moving equipment, falling tools, or flying debris. Struck-by incidents can happen in a split second, but the injuries they cause can last a lifetime: broken bones, head trauma, internal injuries, or worse. Whether you’re on the ground, working overhead, or just passing by, one unsecured load, one swinging boom, or one inattentive driver can change everything.

WHAT’S THE DANGER

Struck-by incidents are one of the “Fatal Four” causes of death in construction — and they happen more often than many workers realize. Unlike falls or caught-in hazards, struck-by injuries usually involve sudden impact from tools, materials, or equipment. That impact might be from above, from the side, or even head-on. Whether it’s a flying nail, a swinging pipe, or a reversing truck, struck-by hazards move fast and hit hard.

Moving Equipment and Vehicles

Heavy machinery like excavators, skid steers, forklifts, and trucks can strike workers if operators have limited visibility or workers enter blind spots.

- Backing accidents are a major cause of struck-by injuries when spotters aren’t used.
- Even slow-moving equipment can crush or pin someone against a fixed object.

Falling or Flying Objects

Hand tools, fasteners, and building materials can fall from scaffolding or higher levels and strike workers below. Grinding or cutting can also send debris flying.

- A dropped wrench from just 20 feet can generate over 200 lbs of force on impact.
- Improperly secured loads on cranes or lifts can shift or fall unexpectedly.

Swinging or Shifting Loads

Materials carried by cranes, booms, or hoists can swing or shift with wind or movement, striking workers in their path.

HOW TO PROTECT YOURSELF

Preventing struck-by incidents in construction starts with staying alert, staying visible, and staying out of the line of fire. Many of these incidents are 100% preventable when you take time to assess your surroundings and follow site protocols.

Stay Out of Danger Zones

One of the most effective ways to prevent struck-by injuries is to avoid being where things are likely to move, fall, or swing.

- Never walk or stand under suspended loads even for “just a second.”
- Stay clear of moving equipment, especially around blind spots or during reversing.
- Keep a buffer zone between yourself and operating machinery.
- If you’re working near traffic, use barriers and warning signs to create safe zones.

Wear High-Visibility PPE

Being seen is critical, especially when working around moving vehicles.

- Always wear high-visibility vests or clothing that meets CSA or ANSI standards.
- Use hard hats to protect against falling tools or materials.
- Wear safety glasses to shield against flying debris from tools or materials.

Secure Tools and Materials

Falling and flying objects are a common source of struck-by injuries, especially when tools or loads aren’t properly secured.

- Use tool lanyards when working at heights.
- Store materials away from edges and use toe boards on elevated platforms.
- Inspect rigging, slings, and hoists before every lift.
- Use debris nets or catch platforms where falling objects are possible.

Use Spotters and Communication

Good communication saves lives.

- Operators should never move equipment unless they have visual contact or clear signals from a spotter.
- Workers on foot should never assume a driver sees them, make eye contact, or stay clear.
- Use radios or hand signals consistently across the crew.

Example:

If you’re guiding a crane lift and the wind suddenly picks up, pause the operation. Communicate with the operator, reassess the load’s stability, and resume only when it’s safe. A swinging beam in high wind is a major hazard, and it’s your job to stop it before it becomes one.

FINAL WORD

Struck-by hazards are everywhere on construction sites. The difference between a close call and a serious injury often comes down to awareness and action. Don’t take shortcuts. Don’t assume others see you. Stay visible, stay alert, and stay out of the line of fire.