

Struck-By



Did you know?

One in four "struck by vehicle" deaths involve construction workers, more than any other occupation.

Struck-by objects is another leading cause of construction-related deaths. Approximately 75% of struck-by fatalities involve heavy equipment such as trucks or cranes.

Safety and health programs must take into account the many ways struck-by accidents can occur. The following related hazards cause the most struck-by injuries:

- Vehicles
- Falling/Flying Objects
- Constructing Masonry Walls

FALLING/FLYING OBJECTS



These workers are not protected from being struck by falling objects because they are working around/under other workers and not wearing hardhats.



Falling/Flying Objects

Am I In Danger?

You are at risk from *falling* objects when you are beneath cranes, scaffolds, etc., or where overhead work is being performed. There is a danger from *flying* objects when power tools, or activities like pushing, pulling, or prying, may cause objects to become airborne. Injuries can range from minor abrasions to concussions, blindness, or death.

How Do I Avoid Hazards?

General

- Wear hardhats.
- Stack materials to prevent sliding, falling, or collapse.

- Use protective measures such as toeboards and debris nets.

Power Tools, Machines, etc.

- Use safety glasses, goggles, face shields, etc., where machines or tools may cause flying particles.
- Inspect tools, such as saws and lathes, to insure that protective guards are in good condition.
- Make sure you are trained in the proper operation of powder actuated tools.

Cranes and Hoists

- Avoid working underneath loads being moved.
- Barricade hazard areas and post warning signs.
- Inspect cranes and hoists to see that all components, such as wire rope, lifting hooks, chains, etc., are in good condition.
- Do not exceed lifting capacity of cranes and hoists.

Overhead Work

- Secure tools and materials to prevent them from falling on people below.
- Barricade hazard areas and post warning signs.
- Use toeboards, screens, or guardrails on scaffolds to prevent falling objects, *or*,
- Use debris nets, catch platforms, or canopies to catch or deflect falling objects.

Compressed Air

- Reduce compressed air used for cleaning to 30 psi, and only use with appropriate guarding and protective equipment.
- Never clean clothing with compressed air.

Additional Information:

- **29 CFR 1926 Subpart E**, Personal protective and lifesaving equipment. OSHA Standard.
 - **1926.100**, Head protection
 - **1926.100(a)**
 - **1926.102**, Eye and face protection
 - **1926.102(a)**, General
- **29 CFR 1926 Subpart H**, Materials handling, storage, use, and disposal. OSHA Standard.

- 1926.250, General requirements for storage
 - 1926.250(a), General
- 29 CFR 1926 Subpart L, Scaffolds. OSHA Standard.
 - 1926.451, General requirements
 - 1926.451(h), Falling object protection
- 29 CFR 1926 Subpart CC, Cranes and Derricks in Construction. OSHA Standard.
 - 1926.1431(e)(10), Hoisting personnel

CONSTRUCTING MASONRY WALLS



These workers are constructing a block masonry wall.



Constructing Masonry Walls

Am I In Danger?

Constructing concrete and masonry walls is especially dangerous because of the tremendous loads that need to be supported. There are risks of major accidents, and even death, when jacks or lifting equipment are used to position slabs and walls, or when shoring is required until structures can support themselves.

How Do I Avoid Hazards?

- Do not place construction loads on a concrete structure until a qualified person indicates that it can support the load.
- Adequately shore or brace structures until permanent supporting elements are in place, or concrete has been tested to assure sufficient strength.
- Only allow those who are essential to and actively engaged in construction or lifting operations to enter the work area.
- Take measures to prevent unrolled wire mesh from recoiling, such as securing each end or turning the roll over.

- Do not load lifting devices beyond their capacity.
- Use automatic holding devices to support forms in case a lifting mechanism fails.

Additional Information:

- [29 CFR 1926 Subpart Q](#), Concrete and masonry construction. OSHA Standard.