

Unguarded Protruding Steel Rebars

Am I In Danger?

Unguarded protruding steel reinforcing bars are hazardous. Even if you just stumble onto an unguarded rebar you can impale yourself, resulting in serious internal injuries or death. View Rebar Accident.



How Do I Avoid Hazards?

- Guard all protruding ends of steel rebar with rebar caps or wooden troughs, or
- Bend rebar so exposed ends are no longer upright.
- When employees are working at any height above exposed rebar, fall protection/prevention is the first line of defense against impalement.
- Construction site with unprotected steel rebar protruding from the ground
- These rebar should be bent over or protected with caps so that a worker would not be injured by falling on them.

Rebar Caps

The OSHA Standard requires that rebar "be guarded to eliminate the hazard of impalement." **Not all guards provide that level of protection.** In some circumstances, the force of a fall can cause rebar to push clear through a plastic cap and still impale a worker, or the worker can be impaled by the rebar and the cap together. Three different sizes of steel rebar with red mushroom-style plastic caps

Only rebar caps designed to provide impalement protection, such as those containing steel reinforcement, should be used. Steel rebar with a red steel enforced square cap

This type of cap positions a 2 x 4 over the exposed rebar, and has been approved by California OSHA. A 2x4 positioned over the top of a row of steel rebar



Mushroomed Cap Alert

**Mushroomed caps cannot be used as
impalement protection.**

Deaths Due to Not Guarding Protruding Steel Rebars

Case Reports

The following Case Reports of falls investigated by OSHA illustrate how seemingly innocent workplace activities can have deadly consequences.

An employee pulling a concrete hose along a form fell two stories and hit his head on steel rebars which punctured his brain.

A laborer fell through a roof opening about 8 feet to a patio foundation that had about 20 half-inch rebars protruding straight up. The laborer was impaled by one of the bars and died.

Additional Information:

- 29 CFR 1926 Subpart Q, Concrete and masonry construction. OSHA Standard.
 - 1926.701, General requirements
 - 1926.701(b), Reinforcing steel

1926.701(b)

Reinforcing steel. All protruding reinforcing steel, onto and into which employees could fall, shall be guarded to eliminate the hazard of impalement.

