

Fatal Injury Trends in the Construction Industry

Serious injuries and fatalities in construction are **not random** – they are strongly linked to a small set of **high-energy, high-consequence hazards**. STCKY's (Stuff That Can Kill You) are those situations where, if something goes wrong, the outcome is likely lifealtering or fatal, not just a first-aid case. Our goal is to **find and control STCKY's before they find us.**

1. What's Killing Construction Workers?

Most construction fatalities continue to come from a few recurring categories (often called the "Fatal Four"):

- Falls from height roofs, scaffolds, ladders, leading edges
- Struck-by moving equipment, loads, falling tools/materials
- Caught-in / Caught-between trench cave-ins, equipment pinch points, between vehicles and fixed objects
- Electrocution contact with overhead or buried power lines, energized parts

These are STCKY events: when they go wrong, the likelihood of a fatal or life-altering outcome is high.

2. How to Recognize a STCKY Hazard

A task is likely a STCKY when one or more of these are present:

- High energy: gravity (heights, suspended loads), electricity, equipment in motion, stored pressure, high-speed tools
- Loss of control = catastrophic: one mistake can mean a fall, crush, or electrocution
- Limited protection from failure: working outside guardrails, under a suspended load, in an unprotected trench, near live power

On pre-task plans (PTPs/JHAs), specifically ask:

"What here is Stuff That Can Kill You?"

If you find a STCKY, it **must** trigger a higher level of control and supervision.

3. Controlling STCKY Hazards - Go Beyond Compliance

For STCKY hazards, "bare minimum OSHA compliance" is not enough. Use the hierarchy of controls with a SIF mindset:

1. Eliminate / Avoid

- o Use prefab to reduce work at height.
- Change the sequence to avoid exposure near live traffic or energized gear.

2. Substitute / Engineer

- o Use guardrails, perimeter protection, decking, and leading-edge barriers instead of relying only on harnesses.
- o Use trench boxes/shoring for all qualifying excavations, not just "the deep ones."
- o Use equipment-free zones and physical barricades around swing radii, crane work, and overhead lifts.

3. Administrative Controls

- STCKY-specific permits or authorizations (e.g., "Work at Height Permit," "Energized Work Permit," "Excavation Permit").
- o **Pre-lift meetings**, task briefings, and "pause points" built into the plan to reassess risk.
- o Clear exclusion zones with spotters and signage.

4. PPE (Last Line of Defense)

- o Fall protection (full-body harness, inspected and anchored correctly).
- o Arc-rated clothing, gloves, face shields when working near electrical hazards.
- o High-visibility gear around equipment and traffic.

4. Critical Roles & Behaviors

Supervisors & Foremen

- Lead STCKY discussions in daily huddles: "Where can we get killed today?"
- Refuse to start work when critical controls (guardrails, trench protection, lockout/tagout, line clearance) are missing.
- Verify controls in the field don't "plan on paper only."

Workers

• Speak up when something feels like a STCKY. If your gut says "this can kill me," you're probably right.

- Use Stop Work Authority without fear of retaliation.
- Follow life-saving rules every time (tie-off, no working under a suspended load, no entering unprotected trenches, respect exclusion zones).

Safety Managers

- Focus audits and inspections on SIF exposure, not just PPE and paperwork.
- Track leading indicators: number of STCKY hazards identified and fixed, not only injury counts.
- Investigate near misses for SIF potential, even when no one was hurt.

5. Key Takeaways for Your Site

- 1. Name the STCKY's on every project and every shift.
- 2. **Design them out or engineer them down** before work starts.
- 3. Never trade schedule or convenience for life-saving controls.
- 4. **Measure success by exposures reduced,** not just by recordable rates.

If we consistently seek out and control the **Stuff That Can Kill You**, we will prevent serious injuries and send everyone home – **every worker**, **every shift**.