

Caught-Between Hazards in Construction

Stats and Facts



FACTS

- Equipment Pinch Points:** Workers can get hands, fingers, or limbs caught in moving parts of machinery such as rollers, gears, or excavators.
- Caught Between Vehicles and Structures:** Workers operating or walking near heavy equipment may be pinned between machines and walls, barriers, or other vehicles.
- Trench or Excavation Collapse:** Improperly shored trenches can collapse, trapping or crushing workers beneath soil or debris.
- Material Shifting or Rolling:** Unsecured pipes, lumber, or heavy materials can roll or shift unexpectedly, pinning workers against fixed objects.
- Improper Lockout/Tagout:** Servicing equipment without isolating power sources may cause sudden movement or activation, trapping workers in mechanical parts.
- Falling Structural Components:** During demolition or framing, unsecured walls or beams can fall onto workers, causing crush injuries.
- Improper Use of Lifting Devices:** Workers caught between suspended loads and fixed surfaces can suffer serious compression injuries if rigging fails or movement is uncontrolled.

STATS

- In 2024, OSHA recorded 5,190 workplace fatalities, with ~5% (~260) from caught-between hazards, including trench collapses (30%), machinery incidents (25%), and vehicle pinning (20%), per NIOSH.
- In 2024, PPE violations (29 CFR 1910.132) ranked 6th (1,876 citations), including inadequate hard hats or HVSA. Excavation violations (29 CFR 1926.652) ranked 8th (1,500 citations), often for missing trench protection.
- A 2022 NIOSH study found that proper PPE and engineering controls (e.g., trench boxes, machine guards) reduced caught-between injuries by 25%, but 30% of workers lacked proper PPE compliance or training.
- WorkSafeBC reported 25–30 annual fatalities in British Columbia (2020–2023), with ~10% (~3) from caught-between hazards, often trench or machinery-related.
- CCOHS 2023 data showed that proper PPE and controls (e.g., shoring, guards) reduced caught-between injuries by 22%.
- Ontario's 2024 fines (up to \$500,000) target OHS violations, including failure to provide PPE or ensure trench safety.