

Construction Demolition: Hidden Hazards Behind Every Wall

Stats and Facts



FACTS

1. **Structural Instability:** Removing walls, floors, or supports can trigger unexpected collapses when load paths are altered without warning.
2. **Hidden Utilities:** Live electrical lines, gas pipes, steam lines, or water mains may remain energized or pressurized behind walls, creating shock, explosion, or flooding hazards.
3. **Falling Debris:** Demolition releases uncontrolled debris from overhead, exposing workers below to struck-by injuries and head trauma.
4. **Silica & Dust Exposure:** Cutting, breaking, or crushing concrete and masonry releases respirable silica dust that damages lungs and causes long-term disease.
5. **Asbestos & Lead Disturbance:** Older buildings may contain asbestos insulation or lead-based materials that become airborne when disturbed during demolition.
6. **Confined Space Creation:** Partial demolition can create temporary enclosed spaces where oxygen levels drop or hazardous gases accumulate.

STATS

- Falls, struck-by, and caught-in/between hazards account for over 60% of construction fatalities in the United States, with demolition work heavily represented (BLS).
- The U.S. construction industry recorded nearly 1,000 worker deaths in 2022, many involving structural collapse, falls, and heavy equipment (BLS).
- Silica exposure contributes to over 100 U.S. worker deaths annually, with construction demolition being a primary source (CDC/NIOSH).
- OSHA reports that more than 25% of demolition-related fatalities involve structural collapse or falling materials.
- In Canada, construction fatalities (including demolition-related) reached approximately 872 in 2024, with falls from height as a leading cause, exacerbated by hidden structural issues in older buildings during partial demolitions.
- Canadian construction injuries from slips, falls, and structural failures (common in demolition) numbered around 35,000 in 2024, with hidden hazards

like unstable walls contributing to lost-time claims in high-risk sectors.