Top 9 Safety Hazards and OHS Compliance Risks of Construction Sites



Construction remains one of Canada’s highest-risk industries. That’s why roughly 50% of all reported Occupational Health & Safety (OHS) penalties involve construction work. Provincial regulators cite these as the top nine construction hazards that result in injuries, fines, stop-work, and other compliance orders.

1. Falls from Heights

Vertical fall is the leading cause of fatalities and serious injuries in construction. Common violations:

- Lack of or inadequate fall protection equipment or systems.
- Missing tie-offs.
- Improper scaffold access.
- Unsecured ladders.
- Failure to properly inspect elevated work areas.
- Inadequate training.
- Lack of rescue planning.

2. Struck-By Incidents

Construction workers are frequently injured by moving

equipment, falling materials, or swinging loads. Common violations:

- Deficient exclusion zones.
- Uncontrolled suspended loads.
- Inadequate or absence of traffic control plans.
- Problems with signaling and spotting procedures or personnel.

3. Caught-In or Between Hazards

These incidents often involve trench collapses, rotating equipment, or pinch points. Common violations:

- Unguarded moving parts.
- Failure to implement proper lockout tagout procedures.
- Worker entry into unprotected excavations.

4. Electrical Hazards

Contact with energized systems can result in electrocution or arc flash. Common violations:

- Damaged electrical cords.
- Improper grounding.
- Failure to de-energize equipment.
- Working near overhead lines without controls.
- Allowing untrained personnel to work on or near energized equipment.

5. Excavation and Trenching Hazards

Excavation work is among the most dangerous and heavily scrutinized construction operations. Common violations:

- Unsupported or unshored trenches.
- Failure to classify soil.
- Water accumulation.

- Spoil piles too close to edges.
- Lack of safe means of access and exit.
- Improper inspection.

6. Hazardous Materials Exposure

Construction workers may be exposed to asbestos, silica, lead, solvents, and other harmful substances. Common violations:

- Improper or missing Safety Data Sheets or WHMIS labels.
- Deficient or missing exposure control plans.
- Inadequate respiratory protection equipment.
- Lack of respirator fit testing.
- Poor ventilation.
- No exposure monitoring.

7. Powered Mobile Equipment (PME) Mishaps

Construction work often involves use of forklifts and other PME that can endanger both operators and nearby workers. Common violations:

- Operation of PME by uncertified personnel.
- Lack of visibility controls, backup alarms, rollover protective systems, or other safety devices on PME.
- Failure to properly inspect and maintain PME.
- Not implementing safe operating procedures.
- Deficient or inadequate traffic control plans.

8. Scaffold and Temporary Structure Failures

Scaffolds and temporary platforms are a perennial danger and OHS liability risk. Common violations:

- Missing guardrails.
- Incomplete planking.
- Lack of engineer certification.
- Incompetent assembly or disassembly.
- Exceeding the equipment’s load ratings.
- Unauthorized modifications.
- Poor maintenance and inspection.

9. Musculoskeletal Injuries (MSIs)

Construction work involves high risk of MSIs especially when workers lift, move, stack, or handle equipment and materials manually. Common violations:

- Not performing ergonomic assessments.
- Lack of mechanical aids.
- Ergonomically unsound tools or equipment.
- Not implementing procedures for safe lifting and other manual handling tasks.
- Inadequate repetitive motion controls or task rotation.