

Elevated Work Platforms: Scissor Lifts, Boom Lifts and Platform Hazards Fatality File

FACTS

- **Tip-Over Hazard:** Scissor and boom lifts can roll over on uneven ground, slopes, or soft soil – small defects like potholes or drains can cause catastrophic rollover when the platform is extended.
- **Falls from the Platform:** Workers fall when climbing guardrails for reach, when struck by another vehicle, or when the platform is jolted; standing on rails is a leading contributor.
- **Contact with Power Lines:** Boom lifts near energized lines can electrocute operators and ground crew; OSHA requires a 10-foot minimum clearance from lines up to 50 kV.
- **Crushing and Caught-Between:** Operators can be pinned between the top rail and overhead beams, joists, or piping when raising the platform without looking up.
- **Driving While Elevated:** Repositioning a lift with the platform raised shifts the center of gravity and is a common cause of tip-over fatalities.
- **Wind Exposure:** Operating a boom lift above manufacturer wind limits (often 28 mph / 45 km/h) destabilizes the unit and can cause loss of control.
- **Untrained Operators:** Using a MEWP without task-specific training, model familiarization, and a pre-shift inspection sharply increases the risk of serious incident.

STATS

- The U.S. Bureau of Labor Statistics reports an average of roughly 26 worker deaths per year involving aerial lifts, driven mainly by falls, tip-overs, and electrocutions.

- OSHA's Top 10 Most Cited Standards listed Fall Protection (29 CFR 1926.501) as the #1 most violated standard every year from FY 2020 through FY 2024.
- The IPAF Global Safety Report identified falls from the platform as the leading cause of fatal MEWP incidents in North America between 2020 and 2023.
- CPWR data shows scissor lifts alone were involved in at least 21 U.S. construction worker deaths, with tip-overs and falls accounting for roughly two-thirds of those fatalities.
- NIOSH FACE reviews indicate about one-third of aerial lift deaths involve tip-overs, most caused by uneven ground, overloading, or operating on excessive slopes.
- AWCBC data shows falls from elevation – including aerial work platforms – remain among the top three causes of accepted lost-time claims in Canadian construction, with tens of thousands of claims annually from 2019–2023.