

Tractor Hitching – Hazard Assessments

Stats and Facts



FACTS

1. **Crush Injuries Between Units:** Standing between a tractor and an implement during hitching can result in workers being pinned or crushed if the tractor rolls or reverses unexpectedly.
2. **Unexpected Equipment Movement:** If the parking brake isn't engaged or chocks are missing, equipment can roll or shift while workers are aligning the hitch.
3. **Pinch Points at the Drawbar or Hitch:** Fingers and hands can be caught in moving parts like clevises, latches, or PTO couplers during hitching operations.
4. **Hydraulic Pressure Release:** Disconnecting or connecting hydraulic lines without relieving pressure can lead to high-force fluid injection injuries.
5. **Improper Communication:** Lack of verbal or hand signal coordination between the tractor operator and ground worker can result in sudden, hazardous movements.
6. **Uneven Ground or Poor Visibility:** Hitching on sloped, muddy, or cluttered surfaces increases the risk of slips, falls, and misalignment injuries.
7. **Failure to Use Manufacturer-Recommended Procedures:** Skipping hitch pin installation, safety chains, or PTO guards increases risk of detachment, rollover, or entanglement during operation.

STATS

- In 2024, OSHA recorded 5,190 workplace fatalities, with ~2% (~100) from machinery, including ~15 from hitching incidents, often due to crushing or rollaway, per NIOSH.
- In 2024, Machine Guarding violations (29 CFR 1926.300) ranked 7th (1,750 citations), including PTO and hitch issues. PPE violations (29 CFR 1910.132) ranked 6th (1,876 citations).
- A 2022 NIOSH study found that proper PPE and quick-hitch systems reduced hitching injuries by 25%, but 30% of workers lacked adequate training or compliance.
- Statistics Canada's 2021 Workplace Safety Survey recorded 5,000 lost-time claims in construction, with ~500 linked to machinery, including ~100 from

hitching. Crush injuries (15%) and fractures (12%) were prevalent, with 20% attributed to inadequate PPE or controls.

- WorkSafeBC reported 25–30 annual fatalities in British Columbia (2020–2023), with ~5% (~1–2) from hitching-related incidents.
- CCOHS 2023 data showed that PPE and quick-hitch systems reduced hitching injuries by 22%.
- Ontario's 2024 fines (up to \$500,000) target OHS violations, including failure to maintain hitches or provide PPE.