Caught in Motion: Pinch-Points, Moving Parts and Machinery Safety Stats and Facts

FACTS

1. **Pinch-Point Entrapment:** Areas where two parts move together—gears, rollers, chains, pulleys—can trap fingers, hands, or clothing in seconds.
2. **Shear and Cutting Zones:** Moving blades, shears, and augers can slice or amputate rapidly when guards are removed or workers reach into operating equipment.
3. **In-Running Nip Hazards:** Rotating shafts and belt drives can pull in gloves, jewelry, sleeves, or hair before workers have time to react.
4. **Unexpected Machine Start-Up:** Equipment restarting after jams, maintenance, or power interruptions can instantly catch workers who are still inside the danger zone.
5. **Guarding Gaps:** Missing, loose, or bypassed machine guards expose moving parts and allow direct contact with dangerous motion.
6. **Loose Clothing & Accessories:** Baggy sleeves, hood strings, aprons, and jewelry increase the risk of getting pulled into rotating parts or conveyors.

STATS

- In the US, workers suffer approximately 125,000 caught or crushed injuries annually from pinch points and moving parts in machinery, leading to bruises, cuts, amputations, and fatalities.
- In Canada, caught-in/between incidents from moving machinery contributed to 13% of workplace fatalities in Ontario from 2020-2024, particularly in construction and manufacturing.
- In Canada, exposure to moving machinery pinch points led to 10-15% of lost-time claims in high-risk sectors like manufacturing from 2020-2024, with over 348,000 total claims in 2022.
- In British Columbia, Canada, traumatic fatalities from being caught in equipment or machinery rose since 2020, with 38 total traumatic deaths in 2023 including several pinch-point related incidents.
- Machinery contact caused over 11,000 nonfatal workplace injuries in the U.S. in 2022, many involving pinch-points and moving parts (BLS).
- More than 700 amputations were reported in U.S. workplaces in 2022, with the majority caused by machinery hazards such as rollers, conveyors, and press equipment (OSHA).