# Carpentry Work – Tool Safety Stats and Facts

## FACTS

1. **Cuts, Lacerations & Puncture Hazards:** Use of sharp hand and power tools (e.g., chisels, saws, nail guns) can cause severe cuts or punctures; guards and gloves are essential.
2. **Amputations & Entanglement:** Rotating tools like table saws and routers pose risks for amputations and entanglement—guards, push sticks, and lockout/tagout procedures are critical.
3. **Musculoskeletal Strain & Repetitive Stress:** Prolonged use of heavy or vibrating tools can lead to tendonitis, carpal tunnel syndrome, and chronic pain—ergonomic tools and periodic rest mitigate these risks.
4. **Eye Injuries from Flying Debris:** Cutting, sanding, or routing sends wood chips and particles into the air—ANSI-rated eye protection is a must.
5. **Hearing Damage from Power Tools:** Tools often exceed 85 dB—without hearing protection, users risk permanent hearing loss.
6. Respiratory Hazards from Dust: Operations generate sawdust and fine particulates (some carcinogenic); respirators or dust-extraction systems are required.
7. **Tool Kickback & Projectiles:** Power tools (e.g., saws, routers) can kick back or eject materials—using guards and maintaining proper posture prevents injury.

## STATS

- Statistics Canada’s 2021 Workplace Safety Survey recorded 5,432 lost-time claims in construction, with 15% linked to inadequate PPE during tool use (e.g., saws, nail guns). Eye injuries from sawdust (10%) and hand injuries from blades (12%) were prevalent.

- CCOHS 2023 data showed that workplaces enforcing PPE (e.g., safety glasses, hearing protection) reduced tool-related injuries by 22%, particularly for tasks like cutting or sanding.
- In 2024, Ontario introduced fines up to $500,000 for repeat OHS violations, including PPE non-compliance, impacting carpentry firms failing to provide proper safety gear for tool use.
- BLS 2023 data recorded 174,100 non-fatal injuries in construction, with carpenters facing high risks of cuts (30%), eye injuries (15%), and hand injuries (25%) from tools like saws, drills, and nail guns. Inadequate or improper PPE contributed to 20% of these incidents.
- In 2024, Eye and Face Protection (29 CFR 1926.102) was the 9th most cited OSHA violation in construction (2,123 citations), often due to missing safety glasses during sawing or drilling. Hand protection violations were noted in 15% of tool-related injury cases.
- A 2022 NIOSH study found that 40% of carpentry injuries involved power tools, with 25% linked to inadequate PPE, such as not wearing safety glasses during drilling or gloves during material handling.