## Chippers and Shredders — Landscaping Stats and Facts



## **FACTS**

## Primary Hazards Associated with Chippers and Shredders

- 1. **Entanglement and Amputation:** Chippers and shredders have fast-moving blades and mechanisms that can easily entangle clothing, gloves, or body parts.
- 2. Flying Debris: The high-speed operation of these machines can cause pieces of wood or debris to be ejected at high speeds.
- 3. **Noise-Induced Hearing Loss:** Chippers and shredders generate high noise levels, leading to hearing damage.
- 4. **Kickback:** If a branch or piece of debris is fed improperly, it can cause the machine to kick back.
- 5. **Strains and Sprains:** Operating these machines often requires significant physical effort, including lifting heavy branches and standing for extended periods.
- 6. **Vibration-Related Injuries:** Prolonged use of chippers and shredders can lead to vibration-related injuries, which affect circulation and nerve function in the hands and arms.
- 7. **Inhalation of Dust and Fumes:** The process of chipping and shredding can generate dust, mold spores, and fumes from engine exhaust, which can cause respiratory problems if inhaled.
- 8. Carbon Monoxide Poisoning: Gas-powered chippers and shredders produce carbon monoxide.
- 9. **Fire Hazards**: The accumulation of dry wood chips and debris around hot engine parts can pose a fire risk.

## **STATS**

- Types of Injuries: The most common injuries include:
  - 36.5% of injuries involve amputations or severe injuries to fingers and hands while feeding material into the chipper.
  - ∘ 15.8% of injuries occur when individuals clear jammed material while the machine is still running.
  - $\circ$  14.2% involve amputations of hands, arms, legs, and feet due to being pulled into the machine.
- 3 deaths and 200 injuries occur yearly due to woodchipper accidents in landscaping settings.

- Worker Demographics: Certain groups, such as immigrant workers, temporary workers, and those under 25, face higher risks of injury when operating these machines.
- Severe injuries can lead to hospital admissions. In the USA, around 120 ED visits annually result in hospitalizations due to more serious injuries like deep lacerations and amputations. The average age of those admitted is around 50 years.