

Preventing Injuries in Landscaping

HIGHLIGHTS:

- Covers precautions for various landscaping activities
- Includes OSHA's general guidance for landscaping.

There are approximately one million workers in the landscaping and horticulture industry who are at risk of injury from a variety of potential hazards. These hazards include exposure to chemicals, noise, machinery, lifting, vehicle accidents and weather-related hazards, among others.

The Bureau of Labor Statistics estimates that on average, 197 workers die from on-the-job injuries each year. Although landscaping workers make up less than 1% of the U.S. workforce, they experience 3.5% of the total occupational fatalities. The OSHA lost time injury rate is approximately 3.5 injuries per 100 full time workers, which is higher than the general injury rate.

Most of these injuries can be controlled by following these precautions during landscaping activities.



Soil Preparation and Grading

- Wear ankle-supporting work boots to prevent falls on uneven terrain.
- Wear gloves when using shovels or grub hoes.
- Select the proper shovel for the task to reduce bending and extra heavy loads.
- Keep clear of all powered equipment.
- Follow underground utilities markings when trenching.
- Follow OSHA trenching rules when digging more than 4 feet deep.

Lawn and Landscape Maintenance

- Wear gloves to protect hands against scrapes and contusions.
- Read and follow all material safety data sheets when applying chemicals.
- Wear the Personal Protective Equipment (PPE) as recommended.
- Wear safety glasses and or goggles when using blowers.
- Use safe lifting techniques when lifting.

Irrigation System Installation

- Contact the underground utilities service before digging.
- Wear protective gloves when handling glues to connect piping.
- Stay clear of trencher blades and disconnect the spark plug when working on them.

Outdoor Work Hazards

- Monitor all workers during periods of high heat and humidity.
- Provide a quart of water per worker per hour water.
- Provide rest periods for cooling down in hot weather.
- Monitor weather forecasts for electrical storms and vacate the jobsite when storms are imminent.
- Identify poisonous plants such as poison ivy, poison oak and poison sumac which can cause allergic reactions if they come in contact with workers' skin. These plants can also be dangerous if they are burned and their toxins are inhaled by workers. Protect workers with gloves and full-body clothing.

Driving Company Vehicles

- Monitor drivers' annual Motor Vehicle Reports to identify at-risk drivers.
- Train and certify all vehicle operators in proper driving methods.
- Periodically observe driving habits to identify at risk-methods and correct them.

Power Equipment Hazards

- Train and certify all workers on the operation of powered equipment such as backhoes, graders and bobcats.
- Allow only one worker on riding equipment for each seat provided.
- Wear ear protection when operating powered equipment.
- Stay clear of edger, weed trimmer and mower blades and disconnect the sparkplug whenever working on them.

The Top 10 OSHA Violations Cited

1. Powered platforms, man lifts, vehicle-mounted work (platforms)
2. General Duty Clause. This section may be used to cite hazards for which there are no specific standards, such as ergonomics.
3. Eye and face protection
4. Portable metal ladders
5. Personal protective equipment
6. Head protection
7. Hazard communication
8. Aerial lifts
9. General recording criteria
10. Flammable liquids

OSHA's General Guidance

- Understand and comply with all OSHA regulations that apply to the landscape services operations and tasks.
- Develop, implement and enforce a comprehensive safety program that includes written rules and safe work procedures.
- Consider a joint health and safety committee with employees and supervisors.
- Conduct an initial and daily jobsite survey before beginning work to identify all hazards and implement appropriate controls.

- Provide specific training for hazards such as:
 - Power lines and other sources of electricity
 - Tree trimming and felling
 - Falls from heights
 - Roadway vehicle operations
 - Ground fault circuit interrupters for all electrical cords
 - Hand and portable power tools use
- Train workers who operate off-road machinery and other specialized equipment to follow manufacturers' recommended procedures for safe operation, service and maintenance.
- Monitor workers during periods of high heat stress/strain and remind workers of the signs of heat-related illness and the need to consume sufficient water during hot conditions.

References

OSHA Landscaping and Horticultural Services

<https://www.osha.gov/SLTC/landscaping/index.html>

Bureau of Labor Statistics Data Sheet, *Occupational Injuries among Groundskeepers*, 1992-2002

<http://www.bls.gov/opub/cwc/sh20051216ar01p1.htm>

Ohio State Univ. College of Food, Agricultural Environmental Sciences, Landscape Worker Training.

California State Compensation Insurance Fund Bi-lingual Training

www.scif.com/safety/safetymeeting/SafetyMtgTopics.aspx

Kansas State University Research and Extension and College of Agriculture.

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