

City of Coral Gables
COMMUNITY RECREATION

GOLF & GROUNDS MAINTENANCE
SAFETY MANUAL





GOLF COURSE MAINTENANCE

This part of the manual deals with the hazards and safeguards of performing certain golf course maintenance and landscaping functions. Golf course employees perform a variety of job activities that could cause injury and property damage.

Shop Safety:

A variety of tasks are performed in these shops that create potential injury and property damage exposures. Some of the more common safety hazards and precautions are described below.

1. Material Handling:

Golf course employees may be required to handle a variety of different materials such as boxes, tools and equipment. They may be exposed to back injuries and other musculoskeletal injuries from improper lifting techniques. Material handling equipment, such as carts, hoists, and cranes should be provided to limit manual material handling. Employees should also be trained in **proper lifting techniques** in order to prevent back and similar injuries.

2. Battery Charging:

Battery chargers are usually found in shops for charging batteries in golf carts and other equipment. Hazards include fires from the buildup of hydrogen, acid burns from contact with battery fluid, and electrical shock. Battery charging areas need to be adequately ventilated and ignition sources removed from the area. Eye protection, rubber aprons and rubber gloves need to be worn when handling batteries. Eyewash fountains and safety showers should also be provided in the event of contact with battery acid.

3. Hazardous Chemicals:

Flammable liquids and gases, corrosives, oxidizers, and toxic chemicals may be used in golf course shops and other areas. The following must be followed and/or available:

- An inventory of chemicals used or stored at the golf course.
- Collecting and making available to employees Material Safety Data Sheets for all chemicals.
- Labeling chemical containers.
- Training employees on the hazards and safeguards for applicable chemicals.

In addition, proper disposal practices must be followed to prevent environmental contamination.



City of Coral Gables Community Recreation
GOLF & GROUNDS MAINTENANCE SAFETY MANUAL

4. Electrical Safety:

Electrocution and shock hazards are possible when working with electrical tools and equipment. Equipment and tools need to be inspected to ensure that electrical cords and other components are in good condition. Extension cords need to be kept free of frays and should not be used to power fixed electrical equipment.

5. Tools and Machines:

Hand and portable powered tools such as grinders, drills, saws, sanders, etc. are used in most shops. Lawn mower blade sharpeners, grinders, drill presses, table saws, etc. may also be used. Such equipment poses a risk of electrical shock, cuts, amputations, eye injuries, and other injuries. Basic safety measures that should be followed when using tools and machines include:

- Tools and machines should be inspected prior to use to make sure they are in safe condition.
- Machine guards should always be used when operating the tool or machine.
- Employees should be trained on each piece of equipment or tool they may be required to operate.
- Personal protective equipment should be used to protect employees from inherent hazards.

6. Flammable Liquids and Gases:

Gasoline, flammable paints and solvents, oxygen/acetylene, propane and other flammable materials are commonly used at golf courses. In addition to the potential fire and explosion hazards, some solvents may be toxic and harm the environment. Basic safety precautions to use when handling these materials include:

- Eliminate any ignition sources, such as cigarettes and other open flames that cause fires.
- Ensure there is adequate ventilation.
- Use approved flammable liquid containers for gasoline and other flammable liquids.
- Obtain Material Safety Data Sheets.
- Label all containers as to contents.
- Store flammable liquids in approved flammable liquid safety cabinets.
- Dispose of oily rags in approved containers.
- When dispensing flammable liquids, bond and ground containers to prevent fires from static electricity.
- Wear prescribed personal protective equipment.
- Dispose of waste materials according to environmental laws.



City of Coral Gables Community Recreation
GOLF & GROUNDS MAINTENANCE SAFETY MANUAL



7. Housekeeping:

Disorderly and dirty shops breed accidents. Good housekeeping conditions need to be maintained. Walking/working surfaces should be kept clear of slip/trip/fall hazards. Trash should be emptied at least daily. Storage areas should not be overloaded and tools should be stored in an orderly and safe manner.

8. Personal Protective Equipment:

Golf course employees need to use appropriate personal protective equipment (PPE) to protect them from various job hazards. Items such as hardhats, safety glasses or goggles, hearing protection, respirators, gloves, safety shoes, and other protective equipment that are supplied for use by employees.

Landscaping Safety:

A variety of potential hazards may be present when employees are performing golf course landscaping and maintenance. Each activity needs to be analyzed and safeguards implemented. Some of the more common hazards are discussed below.

1. Weather-Related Hazards:

Weather-related hazards that can harm employees: Hot temperatures may cause heat exhaustion or heat stroke. Landscaping activities may require employees to work under the sun a great part of the day. Skin cancer hazards from exposure to the sun are well documented. To reduce this exposure, employees should be provided and encouraged to apply sun block with a high Sun Protection Factor (SPF). Brimmed hats, long-sleeved shirts and long pants are also recommended. When it is hot and/or humid outside, employees should be encouraged to drink plenty of fluids to prevent dehydration, heat exhaustion, and heat stroke. Frequent breaks may be needed especially when strenuous physical work is being performed.

2. Mowing and Other Landscaping Equipment:

Mowers, tractors, weed eaters, and other tools and equipment are used to mow greens, fairways, and maintain other parts of the course. Operators are exposed to hazards from contact with mower blades and other mechanical components. Injuries from flying debris may also occur. Hearing loss from long-term exposure to high noise levels may result. In addition, rollover accidents from operating tractors or other riding equipment may happen when traversing steep grades. The safety precautions in the manufacturer's handbook should be followed when operating any mowing or landscaping equipment. The appropriate PPE should be used when operating landscaping and maintenance equipment. Eye protection, hearing protection, gloves and other PPE may be needed. Hardhats and reflective vests should be worn when working on the course where the potential for being struck by errant golf balls exists.

The fueling of mowing and landscaping equipment can present a fire hazard. Equipment should be shut off before fueling and this should be done outside or where adequate ventilation exists. Smoking should be strictly prohibited and other potential ignition sources removed from the fueling area. Portable gas cans should be UL listed or FM approved. Emergency fuel shutoff switches should be installed and fire extinguishers located nearby.



City of Coral Gables Community Recreation
GOLF & GROUNDS MAINTENANCE SAFETY MANUAL

Some riding mowers, tractors, and other equipment may be equipped with seat belts. Where provided, they should be worn.

Most machines and equipment have guards installed to protect employees from rotating blades, belts, and other hazards. Guards should be inspected prior to use and equipment should never be operated unless guards are in place.

The inspection and maintenance procedures and schedules described in manufacturer manuals should be followed and documented. Any modifications to the equipment should be approved by the manufacturer.

3. Tree Hazard Management:

The trees on the Golf Course need to be managed so they do not create an undue hazard for golfers. Corrective action should be taken as necessary to eliminate or reduce hazards. Employees who perform tree trimming need to wear personal protective equipment such as eye and face protection, gloves, safety shoes, and hearing protection should be provided. Downed trees and branches should be removed from the course promptly to prevent golfers from driving or falling over them.

Liability and Risk Management:

This involves identifying potential risks to not only to the City of Coral Gables assets, but also to ensure a safe environment for employees, residents, visitors and participants. Parks and Recreation staff are to notify the Risk Manager and the Public Works department of any risk pertaining to the Facilities that is not noticed by the Public Works Department and the Risk Manager during their periodic checks of the facilities. If a risk on the premises is identified and the area can't be closed off, warnings should be placed in such areas until such time the area is repaired. Safety training is provided by the Risk Manager to all Parks and Recreation Supervisory staff regarding the identification, minimization and avoidance of safety risks.

In the event of an accident, the Risk Manager and Public Works must be notified. Should the accident be attributable to a condition of the premises that can't be remedied by Parks and Recreation staff, that area where the condition is located needs to be blocked off, if that is not possible warnings need to be placed.

Golf Cart Safety

Golf Cart Accident Statistics

It's easy to view golf carts more as novelties than true motor vehicles. But the fact is they pose similar risks as your car or motorcycle, especially when taken off the golf course.

Here are some golf cart accident statistics to keep in mind as you approach these 4-wheeled favorites:

- Turning at just 11 mph is fast enough to easily throw passengers out of a cart
- Over 10,000 emergency room visits each year result from golf cart accidents, according to the Consumer Product Safety Commission (CPSC)
- About 40 percent of golf cart accidents involve someone falling out of the vehicle; and roughly 10



City of Coral Gables Community Recreation
GOLF & GROUNDS MAINTENANCE SAFETY MANUAL



percent involve a rollover, per CPSC data.

Some safety tips to consider:

1. Never drive recklessly or joy ride. Drive courteously. Obey all vehicle traffic laws and rules of the road.
2. Never drive intoxicated or under the influence of any drug or narcotic.
3. Avoid distractions while operating the golf cart just as you would in an automobile. Be safe and attentive -- avoid talking, texting, or reading while driving, reaching for objects, applying makeup or eating.
4. Only carry the number of passengers for which there are seats.
5. Drivers and all passengers should keep all body parts (arms, legs, feet) inside cart while vehicle is in motion, except when signaling a turn.
6. Do not allow anyone to ride standing in the vehicle or on the back platform of the vehicle. Do not put vehicle in motion until all passengers are safely seated inside vehicle.
7. Operate the vehicle from the driver's side only.
8. Always use hand signals to indicate your intent to turn due to the small size and limited visibility of the turn signals on a golf cart.
9. Check blind spots before turning. When making a left hand turn, yield to the thru traffic lane and merge into that lane before turning left. Never make a left hand turn from the golf cart lane.
10. Carefully turn and look behind golf cart before backing up.

