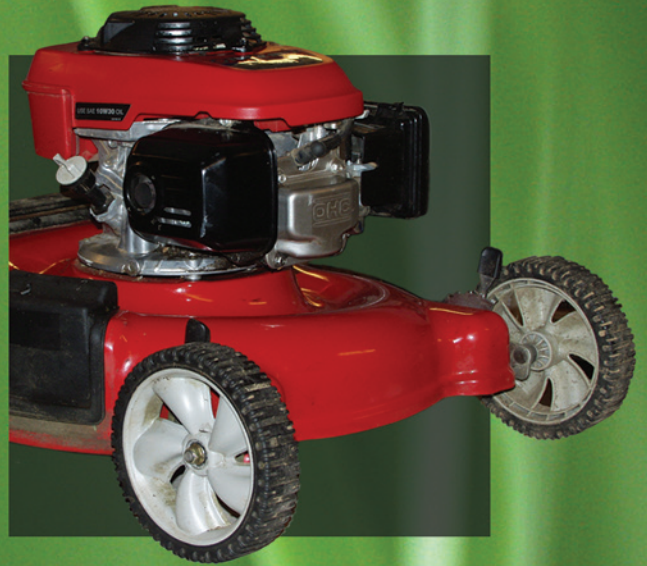


Safety for Hispanic Landscape Workers



Safety for Hispanic Landscape Workers

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Safety for Hispanic Landscape Workers

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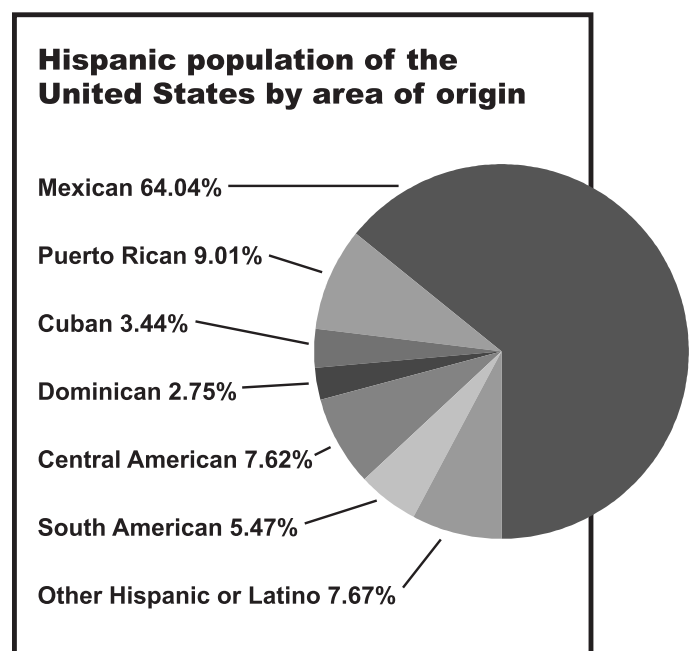
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Chapter 1: Safety Depends on Two-Way Communication

The Hispanic/Latino Worker

Hispanics are the largest minority group in the United States at 42.7 million (U.S. Census Bureau, 2006). They are also the fastest-growing group, with a 3.3 percent increase in population from July 1, 2004, to July 1, 2005 (Bernstein, 2006). Hispanic workers predominate in Georgia's urban agriculture industry, comprising almost three-fourths of the workforce. Urban agriculture industries include businesses involved in golf, turfgrass installation and maintenance, landscape construction and maintenance, ornamental plant production, and garden supplies. In Georgia, this sector contains approximately 6,888 firms, employing just fewer than 80,000 employees and generating \$8.1 billion in revenue.



Predominately Spanish-speaking countries of the western hemisphere



Hispanics are people of mixed races and traditions. The current definition of the term “Hispanic” generally refers to a person who speaks Spanish. Hispanics come from many countries and have different customs. Mexicans represent the largest group. The majority of Hispanic workers are male, young, reliable, hardworking and productive with widely varying education levels and life experiences.

Strategies for Overcoming Safety and Communication Challenges

Learn Key Safety Words

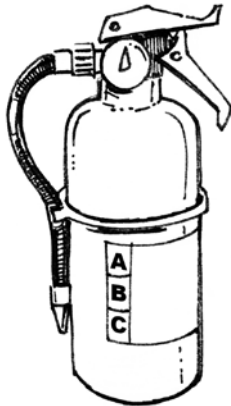
Employers must ensure comprehension and safety compliance. Address language barriers to create a safe workplace. Use physical demonstrations, diagrams, bilingual materials and, if available, an interpreter.

Thorough Orientations

New workers need to learn about the company's safety procedures, health insurance, disability insurance and life insurance. These benefits and policies are not common in Central and South America and may require more than a casual explanation.



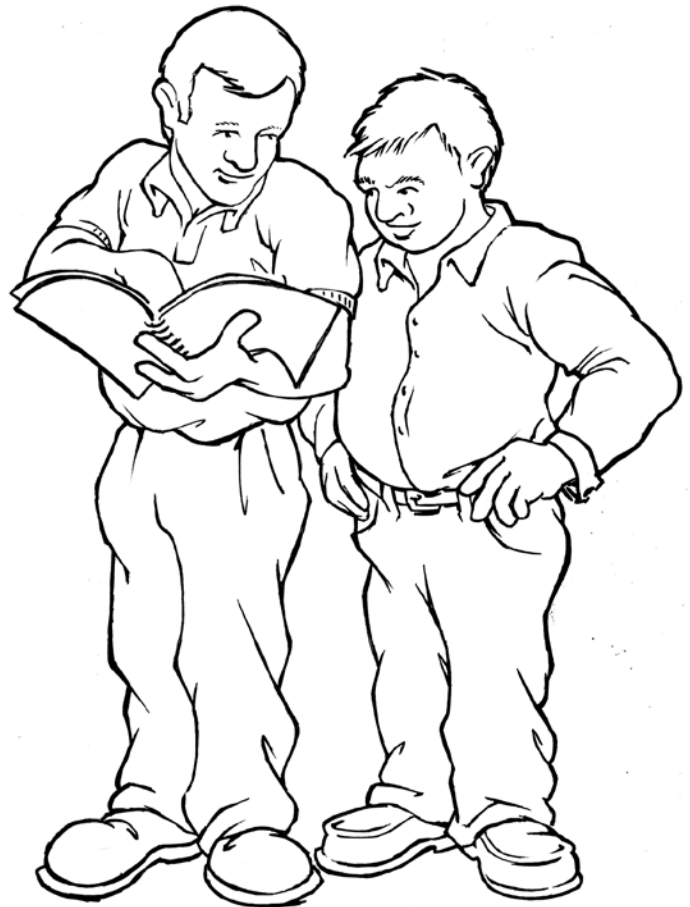
First Aid Box
BOTIQUIN



Fire Extinguisher
EXTINGUIDOR



Poisonous
VENENOSO



Personal Protective Equipment
EQUIPO DE PROTECCION PERSONAL

Clearly Defined Safety Procedures

Define safety procedures accurately with bilingual written explanations complemented by pictures and reinforced with physical demonstrations. Practice new procedures and ask questions to ensure comprehension. Safety procedures should be consistent and divided into easy-to-do steps. Proper safety measures are reinforced when employees understand the importance of their actions and know where to seek help when they need it.



Recognition and Monitoring

Monitor work assignments. Recognize good performance to reinforce safe work behaviors.



Communication is Critical

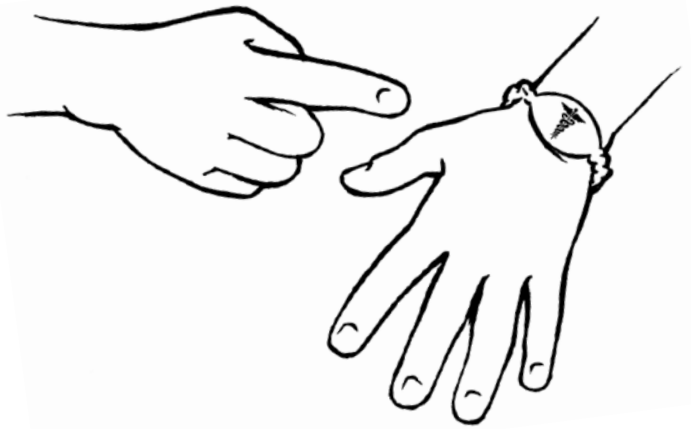
The law requires your employer to guarantee a safe workplace. If you do not understand:

- ask questions
- ask for an interpreter
- ask for a demonstration
- ask for training

Chapter 2:

General Precautions

Tell your supervisor about your medical history. If you have medical problems such as diabetes, allergies, heart problems or asthma, the appropriate person at work needs to know. Having this information on file could save your life if you were unable to speak. For any known medical history, wear a medical I.D. tag and carry an emergency medical kit.



Your senses and responses must be sharp at all times. Never work under the influence of alcohol or drugs. You should not operate motorized equipment if you do not feel well. Your work with equipment and pesticides is dangerous.

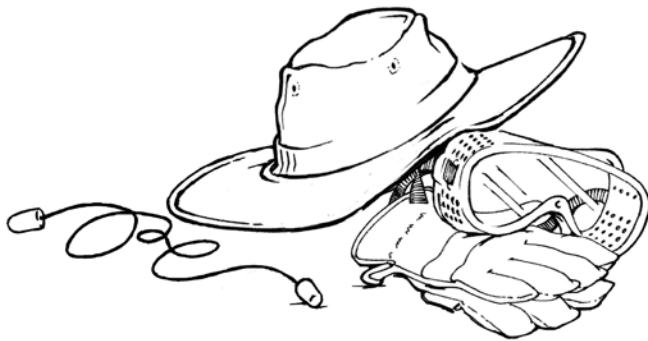


Clothing

Many firms insist that their employees wear uniforms that are safe and appropriate for the work to be done. During the warm months, wear light-weight, light-colored cotton clothing. In winter, wear warm items, like wind-breakers or fleece-lined jackets. Your clothes should allow you to move comfortably; they should not be so tight that they restrict movement or so loose that they could get caught in equipment or machinery.

Wear clothing that the job requires.

- Weather-resistant work boots with steel toes are essential for most landscape jobs.
- Long pants are necessary when operating power equipment.
- Shorts are appropriate for jobs like planting or fertilizing, since no motorized equipment is needed.
- A long-sleeved shirt is appropriate for activities like clearing brush.
- Goggles, ear protection and gloves are needed for many jobs. Make certain they are appropriate for the type of work performed.



Do not wear dangling jewelry or clothing with straps or chains. These items may become tangled in equipment. Long hair can be a real hazard and should be tied back.



Dangerous Plants & Animals

Watch out for dangerous plants and animals. Avoid contact with poisonous plants, insects, and snakes by inspecting the work area for their presence. Wear a long-sleeved shirt, long pants and gloves when clearing brush. After contact with questionable plants or if bitten by an insect, wash the area thoroughly as soon as possible. If bitten by a snake, remain calm and seek medical attention immediately.

- **Do NOT try to capture or kill dangerous animals or insects.** Instead, move away quickly. These creatures should be avoided. Most bites occur when people try to kill them.
- **Treat all insects and snakes like they are dangerous.** Field identification is difficult.
- **See the color plate** (page 27) for photos and descriptions of some dangerous plants and animals.

Lifting

Proper lifting techniques are important. Although you may be in good shape, repetitive and sustained activities can cause bodily damage, especially to the back.

Keep your back straight, bend at the knees, place your hands under the object to be lifted, and then straighten your knees to lift. This technique allows your legs to do the work rather than your back.



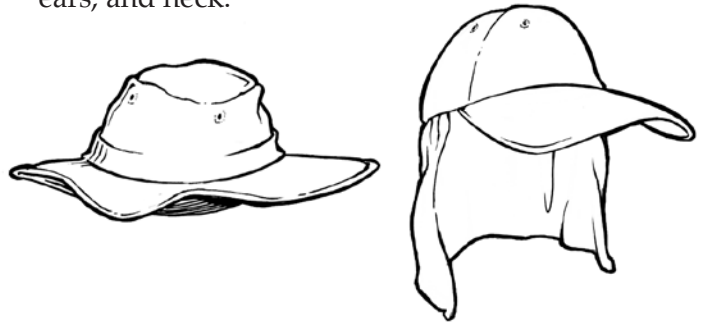
When lifting, remember to:

- Warm up.
- Use devices to lift heavy equipment.
- Get help from co-workers.
- Carry smaller loads.
- Rest periodically.
- Alternate work activities to avoid injuries to the lower back muscles.

Protect Yourself from the Summer Heat

These simple measures will help prevent heat exhaustion, heat stroke and sunburn.

- **Protect your head and face from the sun with a hat.** Wear a hat with a bill that will shade all areas of your head, including the sides of face, ears, and neck.



- **Wear sunscreen with a high Sun Protection Factor (SPF), every day.** The SPF number can be found on the bottle of sunscreen and should be 30 or higher. Sun rays can be harmful, even on a cloudy day or in the winter, so wear sun screen throughout the year.
- **Drink plenty of liquids.** Water or water with electrolytes helps prevent dehydration.



- **Take short rest breaks throughout the day.**



Heat Dangers and First Aid

	HEATSTROKE SYMPTOMS	HEAT EXHAUSTION SYMPTOMS
Face	red, dry, hot	pale, moist, cool
Skin	hot, dry	cool, clammy
Temperature	very high	below 100 degrees
Pulse	rapid, strong	fast, weak
Breathing	fast, noisy	shallow, quiet
Eyes	dilated pupils	normal pupils
Mental	confusion, loss of consciousness	mood swings, irritability, confusion
Physical	convulsions, seizures	nausea, vomiting, weakness headache, vertigo, fainting



Recommended aid for heat related conditions:

- Move the person to a shady, cool area.
- Loosen any heavy, tight-fitting clothing.
- Offer water.
- Fan and mist the individual.
- If you suspect heatstroke, **CALL 911 IMMEDIATELY.**

Chapter 3: Equipment Safety

Before Operating Equipment:

■ Watch the weather.

Weather is very important in deciding what work you can do each day. Do not operate power equipment if there are strong winds, thunderstorms, or fog in the area.



■ Know your equipment.

Study the instructions for the piece of equipment you are going to use. Learn about the controls and how they work. Look over the equipment and make any needed adjustments or repairs. Report any problems to your supervisor. Turn off any machinery that is not working properly, and give it to the shop repairman.

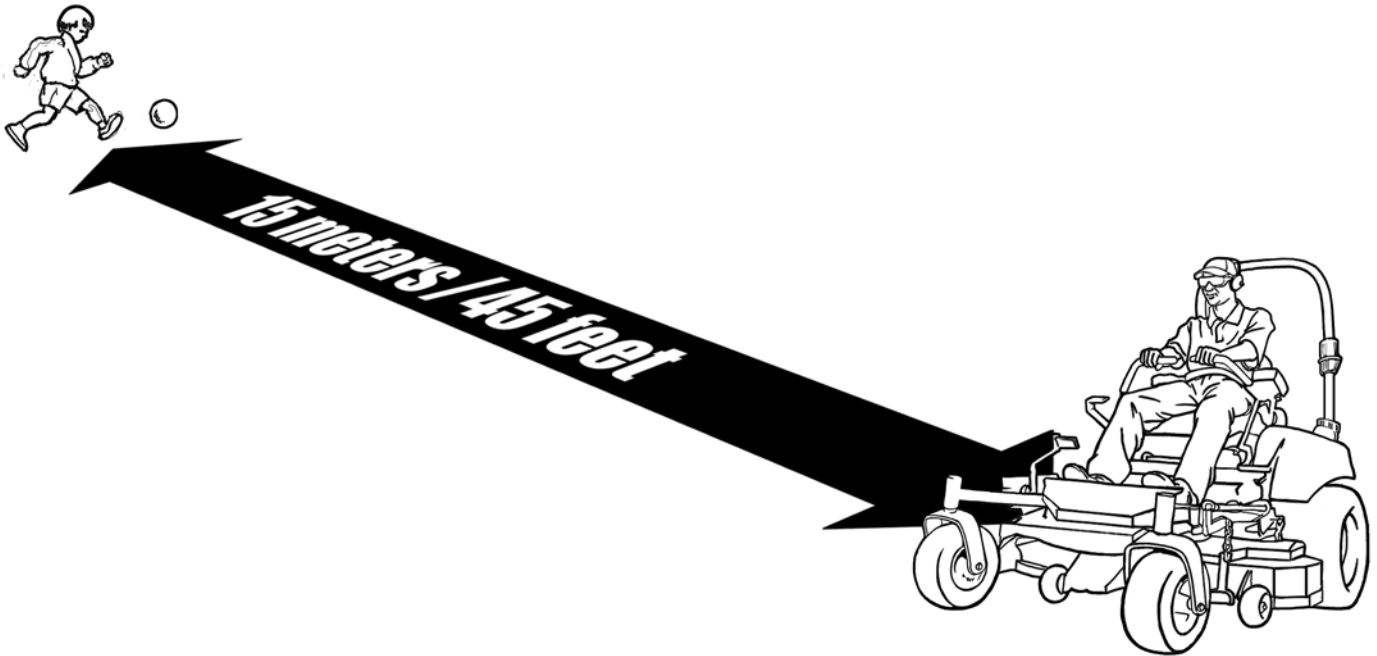
■ **Gather all the personal protection equipment (PPE) you will need that day.**
You may have to use eye and ear protection, long pants, steel-toed boots, hat, or a hardhat if you are doing hazardous work.



■ **Examine the work area.**
Clean the work area of all objects such as stones, bottles, pine cones and sticks. These objects can be thrown by machinery and injure you or others.



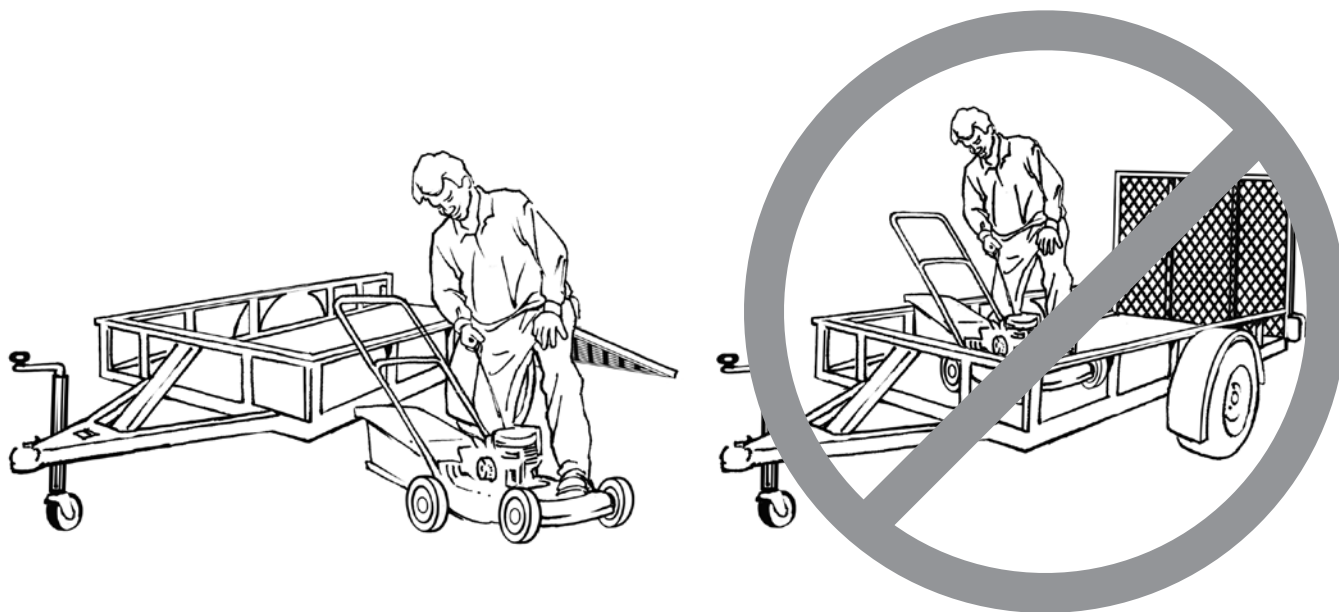
■ **Maintain a safe working distance.**
Items such as lawnmowers, blowers, trimmers, pruners and edgers can throw objects a long distance. Keep people, animals or property at least 45 feet away from where you are working with equipment. Find and avoid electrical wires. Holes, depressions and standing water can cause falls.



Operating Power Equipment

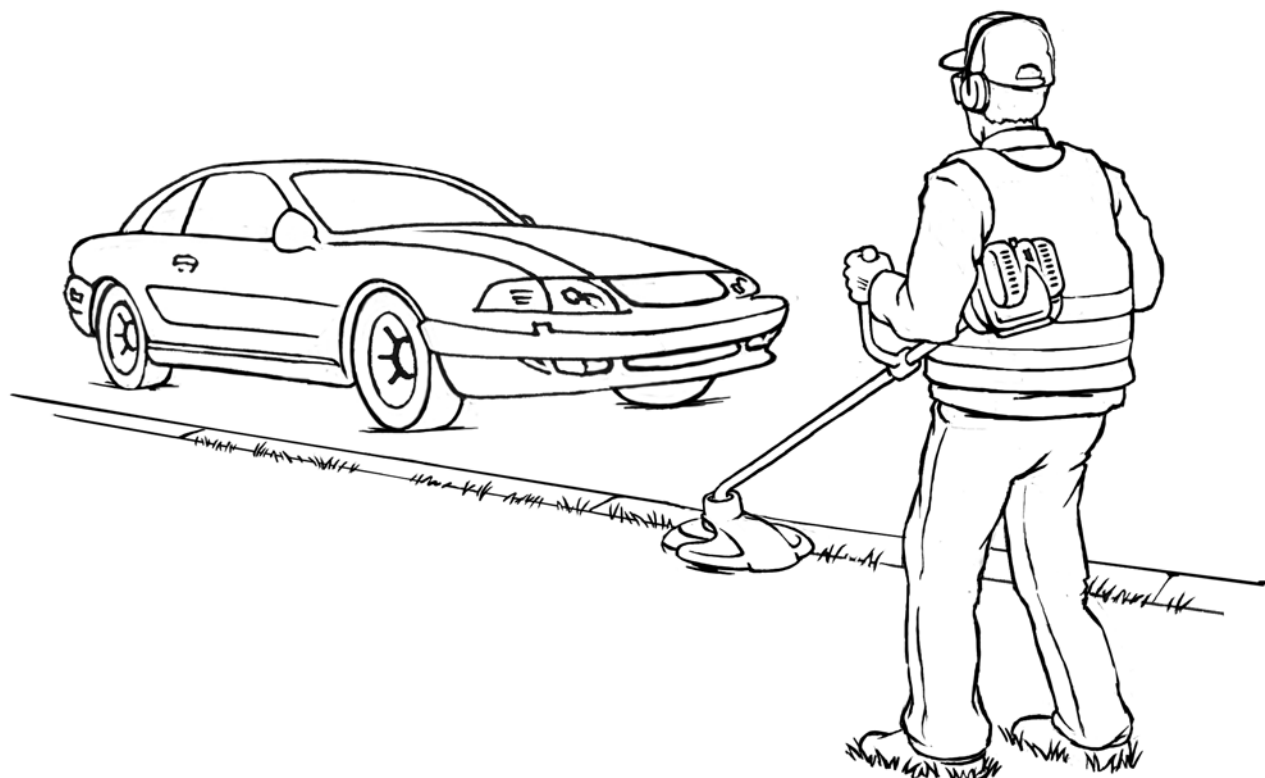
■ Start all power equipment on level ground.

Do not start equipment on truck beds, ramps or inclines. Use your arm, not your back, to pull starter cords.



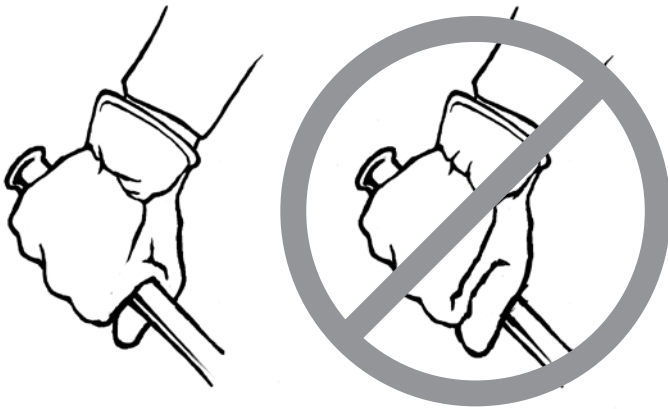
■ Wear a fluorescent security vest.

Be alert to nearby traffic. Work facing the traffic flow so you can see the vehicles, even if they do not see you.

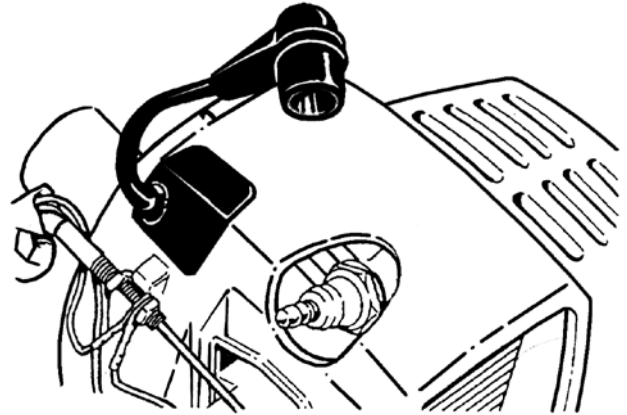


■ **Use two hands to hold all equipment.**

Wrap your thumbs and index fingers around the grips. If equipment slips, falls or moves unexpectedly, you can have an accident.



■ **Disconnect the spark plug wire before changing blades or doing any types of repairs or services to power equipment.**



■ **Be aware of standing water.**

Water can cause you to slip or fall. This is very dangerous when operating power equipment. Water plants as needed, but do not create puddles of water or mud.



Fueling Equipment

- **Never smoke or have an open flame around equipment.** The fuel for power equipment is very flammable. Do not start equipment near combustible materials or inside areas with poor ventilation. An explosion, fire and severe injury to you and others can result.
- **Let equipment cool down before refueling.** Clean any spills immediately, and never store machinery with a full tank.
- **Never over-fill the tank.**
- **Remove the fuel cap carefully.** Turn it slowly to release the pressure, and then remove it completely. Set the cap nearby to keep it clean while fueling the engine.

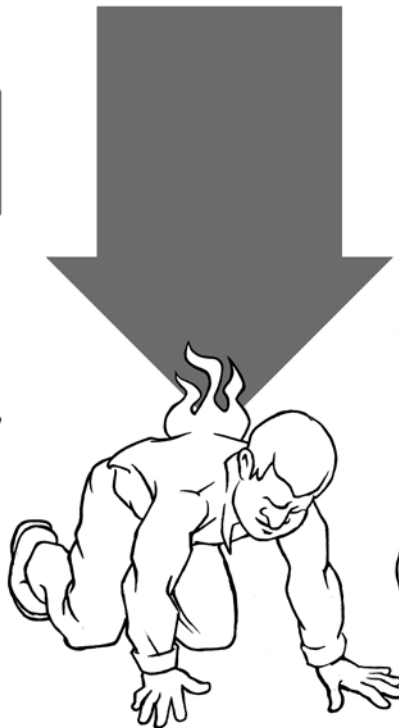


- **Stop, drop and roll if your clothes catch fire.**

Do not run. Then use a blanket or fire extinguisher to put out the fire.



STOP!
¡ALTO!



DROP!
¡TIRESE AL PISO!



ROLL!
¡GIRE!

Lawn Mower Safety

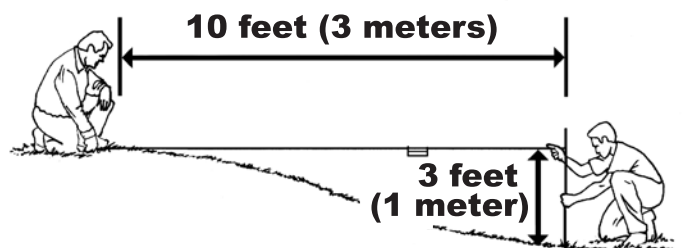
- **Keep your hands and feet away from the blades and discharge chute of operating mowers.**
- **Never attempt to unclog the discharge chute while the mower is running.** Always turn off the mower and disconnect the spark plug wire before unclogging the discharge chute or examining the blade area. Do not pull the mower toward you. If you slip, your feet would go under the mower.



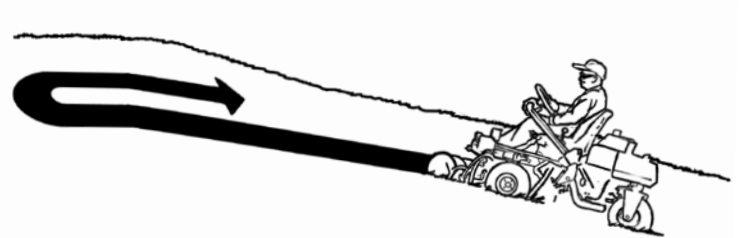
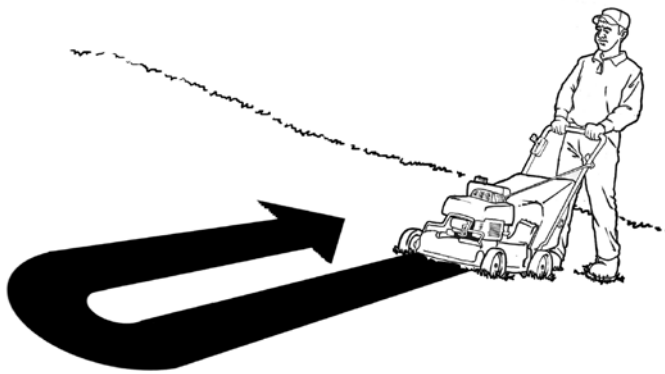
- **Do not run with the mower.** You may lose your balance and fall.
- **Move the mower from one area to another carefully.** Lower the engine speed and disengage the blade before moving the mower from one turfgrass area to another. Damage to the turfgrass and blade could occur if you do not.
- **Tall grass presents hidden hazards.** Rocks, bottles, and other objects can be hard to see in tall grass. Long clippings may clog the mower's discharge chute. When the grass is too long, follow the "one-third rule." Cut no more than one-third of the leaf blades each time you mow. You may have to mow several times to cut the grass to its recommended height. The grass will look better if you cut a little off each time; you will work less, and the discharge chute will not get clogged.



- **Driving a riding lawnmower requires special care and attention.** Do not drive over depressions, holes or obstacles that may cause the mower to tip or flip. Always keep both hands on the steering mechanism. Do not change directions or release the clutch quickly because you may be thrown off the mower. Disengage the blade when backing up, and never cut grass while in reverse. Do not allow passengers to ride on mowers. Turn the motor off and remove the keys when you leave the mower.
- **Slopes and hills may be dangerous when mowing.** Never use a riding mower on slopes greater than 15 degrees or 27 percent. This is the same as a drop of approximately 3 feet (1 meter) over a distance of 10 feet (3 meters). On steep slopes, the wheels may lose traction and spin, and you could lose control and tip the mower.



- When mowing a slope with a push mower, start at the bottom of the hill and mow back and forth across the hill, from the bottom up to the top.
- When mowing a slope with a riding mower, mow up and down the slope. Turn around on level ground at the top or bottom of the hill.



Weed Eater Safety

- Operate the weed eater with the protective shield in place. The strings need to be long enough to cut without touching the guard. Adjust the harness properly. When you turn off the equipment, look to see that the blades or strings have stopped before handling.

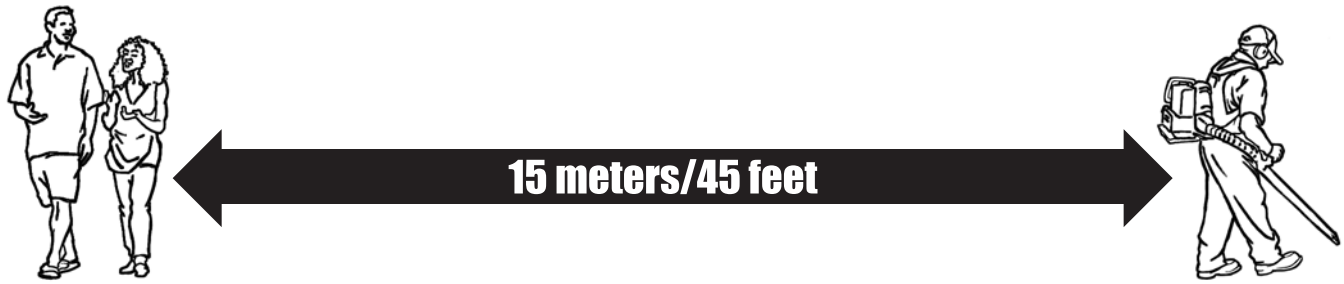


- Start the weed eater on level ground. Never start a weed eater up in the air. One hand should pull the starting cord while the other hand holds the trimmer against the ground.
- Keep the weed eater close to the ground. Do not hold the weedeater strings above your knees to cut plants. Use the weed eater with a slow, smooth, sweeping motion.



Blower Safety

- **When in use, point the blower down.** Make sure the tubing is in place, and blow debris away from people, pets or property. Blow debris to a collection place.



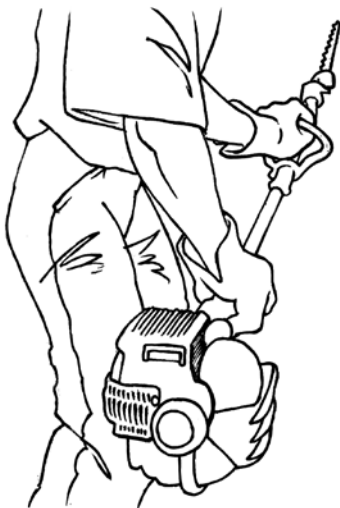
- **Do not stand on unstable structures when using a blower.** Do not use a blower from trees or roof tops. The force of the blower may knock you backwards.

Pruner Safety

A power pruner or hedge trimmer is a very powerful tool that requires special safety measures.

Prune weak or damaged limbs that can fall and injure people or property. Prune trees or shrubs that block the view of traffic at entrances, exits or across medians. Identify and avoid branches that are under tension. They could snap back and cause an accident. Stay a safe distance away from the limb being cut and from electrical lines.

- **Use a hard hat when working under trees.**
- **Use a back support belt to help you avoid muscle strain.**
- **Use both hands to operate motorized pruners.** Use your stronger hand to hold the back of the machine. Your other hand balances and steers the front.



- **Wrap your fingers tightly around the handles.**
- **Make sure the unit is pointed away from your body.**
- **Do not stand on unstable structures.** Maintain good footing
- **Never operate a tool from an out-of-balance position.**



Other Hand Tools

Select the right tool for the job and your height.

Keep all tools sharp. This will reduce hazard and injury to you, the plant and the tool.

Chapter 4:

Pesticide Safety

Pesticides are chemicals we use to control plant pests. Plant pests may be insects, bacteria, fungi, weeds, mites, snails, slugs or rodents. Use pesticides carefully. They can cause serious injury to people, animals and plants if used incorrectly.

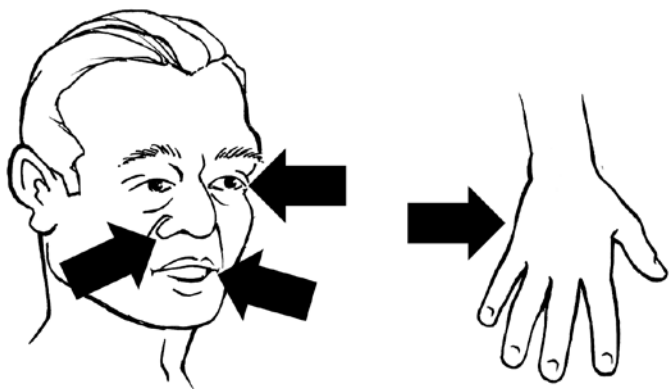
Before Applying Pesticides

- 1) Identify the plant before applying a pesticide.** Never apply a pesticide without identifying the plant you want to use it on. You may harm or kill the plant. More importantly, the label lists the plants that can be treated with the pesticide. It is illegal to treat a plant not listed on the pesticide label.
- 2) Identify the pest before applying a pesticide.** Pesticides can be very specific in their pest-control. A pesticide that controls a plant disease will not control insects.
- 3) Determine if a pesticide should be applied.** Pest control measures can be expensive. Pesticides may harm useful plants or animals and pollute the soil, water or air. They may promote the buildup of other pests previously controlled by their natural enemies. It might be more effective to remove the pest with your hand. Talk to your supervisor to determine if the pesticide is needed.



4) Choose the correct pesticide for the pest problem and the plant. This will reduce the need for repeated applications. It will protect you and the environment.

Pesticides can poison people. Poisoning depends on the dose of the pesticide, the length of exposure, and its ingredients. Workers may be exposed to pesticides either externally — as an irritant causing a rash or burn — or internally, as a poison. Pesticides enter your body four different ways: the skin, mouth, nose and eyes.



Exposure can cause visible symptoms, such as a rash, that can be seen. It can also cause symptoms such as nausea, which are felt by the person but are not noticed by others. If you suspect that a worker has been poisoned, do not leave the individual alone. Look for medical attention, and give the suspected pesticide's label to the medical staff.

Pesticide Exposure Symptoms

Allergic reactions:

- Skin irritations, such as rash, blisters or open sores.
- Eye and nose irritation, such as itchy, watery eyes and sneezing.
- Other effects such as asthma or life-threatening shock.

Pesticide irritation:

- Redness, blisters, rash and/or burns on the skin.
- Swelling, a stinging sensation and/or burning in eyes, nose, mouth and throat.

Pesticide poisoning:

- Nausea, vomiting, diarrhea and/or stomach cramps.
- Headache, dizziness, weakness and/or confusion.
- Excessive sweating, chills and/or thirst.
- Chest pain and/or difficulty breathing.
- Muscle cramps and/or general body aches.



- **Read the pesticide label.** The label will indicate how to handle, mix and apply the pesticide. It also explains medical information you must know in case of an accident.

The information and directions on a label are not advice; they are the law. They tell you everything you need to know about the product. You should always review the information on the label. Do not rely on your memory.

Pesticide labels are available in both English and Spanish. Ask your supervisor for the version you want.

The Parts of a Pesticide Label

Classification:

The Environmental Protection Agency (EPA) classifies pesticides as either “general use” or “restricted use.” A Restricted Use Pesticide is a pesticide that is highly toxic to humans, animals and/or the environment and therefore requires extreme caution. It may only be used by certified applicators or people under their direct supervision.

Signal word:

The signal word explains how toxic the chemical is. Signal words include:

DANGER (PELIGRO) = highly toxic

WARNING (AVISO) = moderate toxicity

CAUTION (PRECAUCION) = low toxicity



Directions for Use:

It is a violation of federal law to use a pesticide in a manner inconsistent with its labeling. The label will provide information about:

- The pests the product controls
- Plants, animals or sites the product protects
- How the product should be applied
- Correct equipment to be used
- Mixing instructions
- Timing and frequency of application
- First Aid

Always use the Personal Protective Equipment (PPE) required by the pesticide label. You may need an apron, mask, safety glasses and gloves. Your employer must provide the necessary clothing and equipment, and you must use them.



Personal Clean Up:

Any clothing worn while working with pesticides should be washed separately from all other clothing. Follow all instructions regarding safe showering.



Mixing Pesticide

- Pesticide mixing is one of the most dangerous aspects of the job. Read and understand all pesticide label instructions before you handle pesticide.
- Select an outdoor area for mixing and loading that is well-ventilated, well-illuminated and away from unprotected people, animals, clothing or food.
- Do not work alone to mix and load pesticides in case of accidents or emergencies.
- Wear all the personal protective equipment (PPE) required by the label.
- Measure pesticides precisely with specially marked utensils, so that you mix only the amount of pesticide required for the job. This will prevent excess pesticide or residue that could damage the plant or the environment.

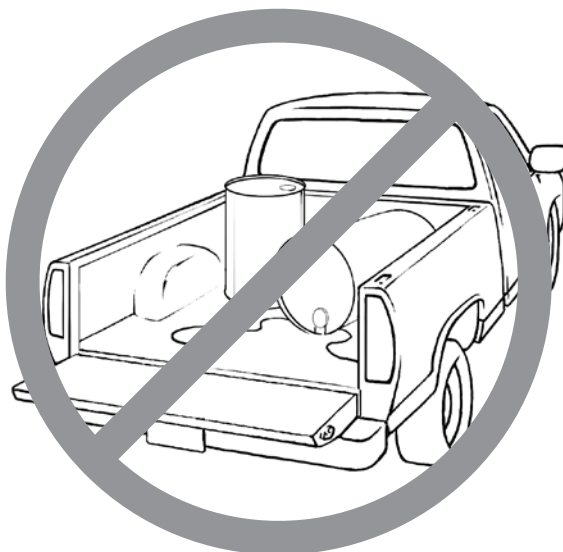
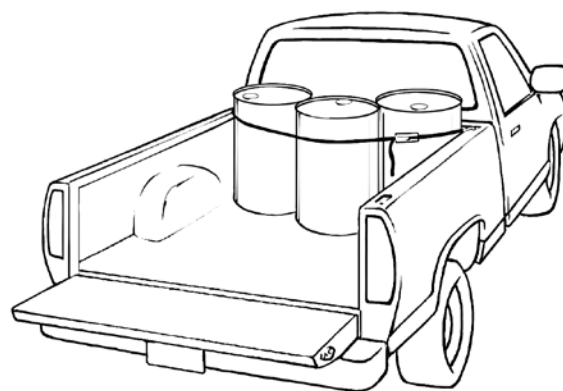


- You must have cleaning and rinsing supplies close by.
- Before the application, inspect all equipment for any breaks, leaks or clogged areas.
- Never smoke, drink or eat while working with chemicals. Only trained and authorized people should work with pesticides.

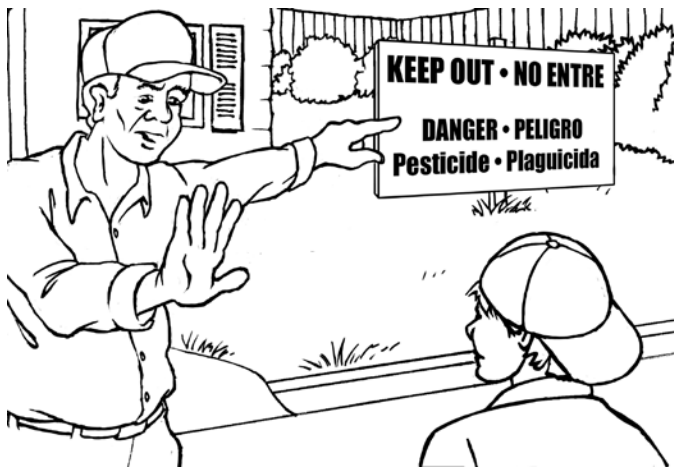


Loading Pesticide

- The applicator is responsible for the safe transport and storage of pesticides used or purchased.
- Check each pesticide container before loading it into the vehicle. Make sure that it is in good condition, well sealed and properly closed. Transport all products securely and never leave them unattended.
- Put all pesticides in the rear section of the truck. Never place any chemicals in the passenger area or cabin. The vapors from any pesticide container could easily contaminate the inside area, passengers or other items, such as food or drink.



Protect pesticide from direct sunlight. High temperatures can affect the product. Remember that the temperature inside a closed vehicle is much higher than the outside temperature. Inspect the container when you arrive to be sure that no spill or damage to the container has occurred.



Pesticide Application

- **Inspect the application area.** Remove tools, toys, and any other objects. Do not allow people or pets near the application area.
- **Consider current weather conditions and the forecast before applying pesticides.** Apply pesticides only during calm weather and not on windy or rainy days. Drought or high temperatures reduce the effectiveness of many pesticides. Avoid those conditions. Rain may wash pesticides away before they take effect. Watch the daily weather forecasts and schedule applications accordingly. Remember to stay upwind of the spray to reduce contact with the pesticide.
- **Always wear proper PPE as specified on the pesticide label.**
- **Stop the application before making repairs or adjustments to spray equipment.** Turn off the equipment, vent or release the pressure, and move to a clean, well lit and ventilated area.
- **Always place the required re-entry signs where you have applied a pesticide.**

Clean Up After Application

You need to think about safety after the job is done, too. After you have finished the application, follow the label's instruction for cleaning, storing and, if necessary, disposing of the container and equipment.

If you have pesticide left in the tank after application, check with your supervisor to see if it can be used in the landscape somewhere else or if it can be stored for later use. Do not pour extra pesticide on the ground or in drains.

- **Continue to wear your PPE when cleaning all equipment.**



- **Rinse the spray tank at least three times.** Clean equipment inside and outside after every use.
- **When filling the spray tank with water, make certain the end of the hose does not fall into the water in the tank.** This prevents the pesticide from being siphoned back into the water hose. Use your rinse water for future mixing/diluting purposes, if possible.
- **Wash equipment at least 100 feet from surface water, well water or storm drains.** This will prevent contamination.



Accidental Spills

Control, contain and clean up accidental spills. Clean-up after spills is required. Each pesticide work site must have clean-up materials for spills that may occur and a decontamination/wash area nearby.

■ **Control**

Wear PPE, remain at the site, and isolate the spill by keeping people and animals away. Inform your supervisor.

■ **Contain**

Prevent its spread, and cover it with an appropriate material.

■ **Clean**

Collect all the spill debris. Then place it in heavy-duty, leak free bags to be discarded correctly.



■ **Never hose down a spill with water.**



The Worker Protection Standard

The law requires your employer to provide pesticide handlers with protection from possible harm from pesticide.

Your employers must:

- Display information about pesticide safety and emergency procedures
- Train workers and pesticide handlers about pesticide safety
- Provide employees with medical assistance in case of a work-related pesticide emergency
- Set up decontamination sites for washing pesticide residues off hands and body
- Enforce strict compliance with restricted entry intervals
- Notify workers in an understandable way (verbal and written warning) about areas where pesticide application are taking place
- Allow only trained and equipped pesticide handlers to be present during pesticide application
- Provide all PPE for handlers and workers who need to enter the pesticide treated area
- Provide training for pesticide handlers on the safety and correct use of PPE during mixing, loading and application of pesticides

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Dangerous Plants & Animals



POISON IVY

Jay B. Bauer, University of Georgia C&ES, Office of Communications



POISON OAK

David J. Moenig, University of Georgia Bugwood.org



POISON SUMAC

Ted Bohner, Southern Weed Science Society, Bugwood.org

Both Poison Ivy and Poison Oak have three leaves and hairy stems. They are greenish during the summer and reddish in the fall. Remember this rhyme: Leaves of three, let it be.

Poison Sumac is shrub-like with 7-13 leaves per branch. It is green in the summer and yellow to orange during the fall. It causes a more painful irritation than poison ivy or poison oak.



BROWN RECLUSE SPIDER

James O. Howell, University of Georgia Bugwood.org



BLACK WIDOW SPIDER

Clemson University, USDA Cooperative Extension Staff Series, Bugwood.org



FIRE ANT MOUND

University of Georgia Archive, University of Georgia Bugwood.org

The brown recluse spider is found in dark places. It has a violin-shaped marking on its back.

The black widow spider is a brilliant, black color. It has a red hourglass on its stomach.

Fire ants can be distinguished from other ants by their copper brown head and body with a darker abdomen. They build a raised mound.



SCORPION

Sturgis McKeever, Georgia Southern University, Bugwood.org



PAPER WASP

David Carpenter, Michigan State University, Bugwood.org



COPPERHEAD

The scorpion measures 3 inches long and has 8 legs, a pair of small pinchers and a long tail. Bees are robust-bodied and very hairy compared with wasps.

Venomous snakes have: • TRIANGULAR HEADS • FANGS • SLANTED PUPILS