

SAFETY WAVE

Gardening Safety

Many people are gardening enthusiasts who enjoy lots of fresh air and sunshine working in their gardens. This can also be an enjoyable way to get out of the house and get in a fair amount of exercise during the summer months and even year round. However, you can also be exposed to environmental risks from gardening chemicals, excess sunshine, insects, and garden equipment. For example, in 2004 alone, 67,000 people went to emergency rooms due to injuries from push mowers, and over 14,000 people experienced injuries from riding lawnmowers and garden tractors.



What are some of the common sense things you can do to protect yourself while gardening? The Centers for Disease Control (www.cdc.gov) offers a number of precautions to take. The CDC recommends wearing safety glasses, sturdy shoes, and long pants when using a lawnmower. Also, consider wearing hearing protection when using loud machinery. Use gloves to protect the skin from cuts and contamination. Insect repellents containing DEET can protect you from mosquitoes and ticks. Sunscreen with SPF 15 or higher, long sleeved shirts, and a hat with a wide brim can help protect against sunburn. Always carefully follow instructions on garden chemicals and garden equipment, and make sure equipment is properly maintained and in good working order before using it.

High temperatures and humidity can cause serious health problems and care should be taken to safely work outdoors. Drink plenty of water throughout the day to replace lost fluids and don't wait until you experience thirst. Drinking alcohol and drinks with lots of sugar can make the situation worse because they tend to cause the body to lose more fluids. Take frequent breaks in the shade and watch for heat-related symptoms, such as headache, rapid pulse, dizziness, nausea, and confusion.

When working outdoors, particularly in heat and sun, know your limits and listen to your body. Gardening is a very good way to get moderate exercise and, with a few good safety precautions, can be an excellent way to broaden your interests, stay active, and help maintain a positive outlook on your life.

Gloves Made From a New Type of Latex

The Food and Drug Administration has approved the Yulex Patient Examination Glove for marketing. The material for this glove is derived from the guayule bush, a desert plant native to the Southwest United States. Traditional latex gloves made from the milky sap of the *Hevea brasiliensis* tree, contain a protein that may trigger allergic reactions after prolonged or repeated contact. Available data on the new guayule latex show that even people who are highly allergic to traditional latex do not react on first exposure to the guayule proteins. Because there is no data yet on long term exposure, the new gloves will carry a warning about the potential for allergic reactions, however, it is hoped that these gloves will prove a safer alternative for some people with sensitivity to traditional latex.

Do You Supervise Contract or Temporary Employees On a Day-to-Day Basis?

Any Tulane employee who has an occupational injury or illness is required to complete a First Report of Occupational Injury/Illness (FROI) and submit the FROI to the OEHS for processing. (Processing includes OSHA recordkeeping and may also include workers compensation authorization and injury investigation.) But did you know that OSHA recordkeeping regulations also affect contract or temporary employees who are not on Tulane's payroll? According to OSHA (29 CFR 1904.31): *You must record on the OSHA 300 Log the recordable injuries and illnesses of all employees on your payroll... You also must record the recordable injuries and illnesses that occur to employees who are not on your payroll if you supervise these employees on a day-to-day basis.* The key to this requirement is the direct supervision of the contract employees on a day-to-day basis. If you directly supervise employees who are not on Tulane's payroll and one of those employees has a work-related injury or illness, please notify the OEHS Worker's Compensation Program Manager at 988-2869.

The Safe Use of Portable Ladders

Summer is a time of much activity including plenty of maintenance tasks and repair jobs around the home. Portable ladders often play a large part in some of these jobs (such as cleaning gutters, painting, and cleaning closets). The safe use of ladders is a prime consideration, and many injuries can be avoided by following a few guidelines and precautions when using a ladder. In a recent year, over 547,000 people were treated for cuts, bruises, and broken bones incurred while working with ladders. The American Academy of Orthopaedic Surgeons gives some helpful advice for safe ladder use (see www.orthoinfo.org).

It is important to select the correct ladder for each job according to the proposed use, height requirements and the working weight load. Ladders should be at least 3 feet longer than the maximum work height. The “working load” is the combined weight of the worker plus the load (paint, tools, etc.) being carried. The following chart is given to determine the correctly rated ladder to be used:

| Ladder Type | Duty Rating | Working Load |
|-------------|-------------|--------------------------|
| IA | Industrial | Extra Heavy: 300 lbs max |
| I | Industrial | Heavy: 250 lbs max |
| II | Commercial | Medium: 225 lbs max |
| III | Household | Light: 200 lbs max |



Even though a ladder has the correct working load, it may still be unsuitable for other reasons. Metal ladders should never be used for electrical work or work near energized electrical equipment or power lines. The user should always inspect it first, looking for dents, breaks, and other damage that could severely weaken the ladder. It must also be free from substances that could cause it to be slippery such as grease, oil, mud, spilled wet paint, or water on the steps of the ladder. Never use a defective ladder.

Ladder Set Up: A critical step in using any ladder is setting it up properly.

- All Ladders: Never set up the feet of a ladder on boxes or unstable objects in an effort to extend the working height of the ladder. Set the ladder up in a location where it is not in contact or near power lines, tree limbs, or other obstructions.
- Extension Ladders: For every 4 feet that the extension ladder rises, the bottom should be 1 foot away from the wall. The feet must be on firm, even ground. Extension ladders should extend 3 feet above the working or access level. Also, when using an extension ladder, the upper and lower sections of the ladder should overlap for proper load bearing and stability.
- Step Ladders: Make sure step ladders are fully extended with the braces between two sections in a locked position. Do not lean over the ladder or stand on or above the paint shelf.



Ladder Use: Once the correct ladder is selected and set up properly, the ladder must be used correctly. The soles of your shoes must be dry and free of substances that could cause you to slip. Use of shoes with built-in heels is recommended. Always face the ladder and grip both sides when climbing. Only one person should be on a ladder at a time.

For other information on ladder safety, see section 24 of the OEHS Policies and Procedures Manual (<http://www2.som.tulane.edu/oehs/safety/24facilities.pdf>, pages 16-17).

Young Worker Safety

Young workers (ages 14-24) are at risk of workplace injury because of their inexperience at work, and because they often hesitate to ask questions and may fail to recognize workplace dangers. On April 21, Secretary of Labor Elaine L. Chao launched OSHA’s 2008 Teen Summer Job Safety Campaign. The campaign is part of OSHA’s Young Worker Initiative, which provides information and resources to teenagers, parents, educators, and employers to ensure safe and rewarding work experiences for these young employees. More information about workplace safety for teens is available at <http://www.osha.gov/SLTC/teenworkers/>. Here you can find details about workers’ rights and responsibilities, links to training and other educational tools, fact sheets on potential hazards, and info on youth employment laws.

Choosing the Right Workstation Task Chair

Before buying any chair consider its use. Lounge chairs are for lounging, dining chairs for dining, and workstation task chairs are for multi-tasking at the office. Workstation task chairs should be:

- * Ergonomically correct for the task.
- * Economical to fit any budget.
- * Comfortable throughout an average work day.
- * Fully adjustable from a seated position.
- * Fitted with a fully adjustable arm rest.

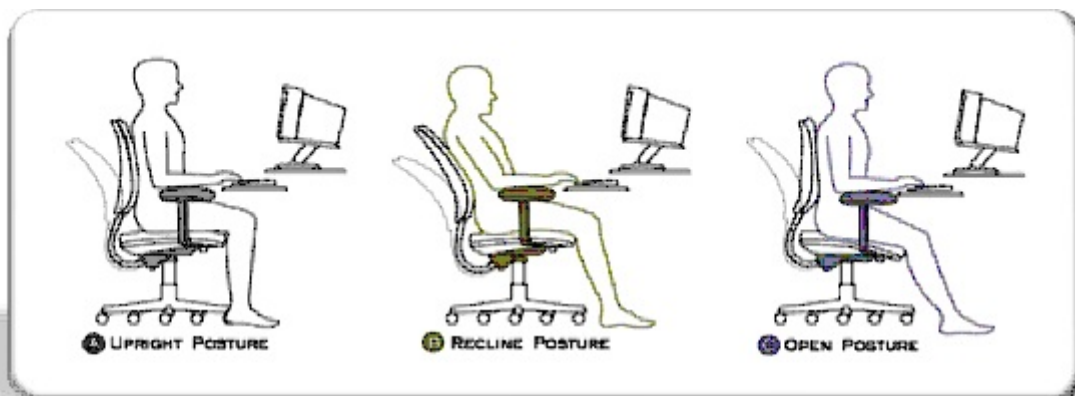
Do's:

1. When purchasing a task chair have the vendor provide instructions on operating the controls from a seated position. Save the instructions under the chair so the information is passed on. Some manufacturers provide online instructions.
2. When sitting, keep your feet firmly on the floor or use a footrest.
3. Distribute your weight evenly in the chair seat pan, and rest your back against the backrest to support your body. Don't add pillows for lumbar support – this is an indication that the chair is not providing back support. If necessary, adjust the chair or replace it with one with better lumbar support.
4. Use arm rest supports. They help relax your shoulders and keep your wrists free to move while typing.
5. Visit the OEHS website for more information at www.som.tulane.edu/oehs/Ergo.htm.

Don'ts:

1. As your mother would say, “Don't slouch, sit straight and don't dangle your feet.”
2. Don't assume your chair is correct. Assess your chair and workstation according to OEHS/OSHA's recommendations and make adjustments if needed.
3. Don't place items under the desk; remove clutter. Obstructions can restrict the legs from natural movements. You should be able to pull yourself all the way to your desk without interference.

Pictures provided by www.details-worktools.com/ergo_tips_by_week.php



Purchasing Biological Safety Cabinets

Biological Safety Cabinets (BSCs), found in labs throughout the university, are units designed to provide personnel, environmental, and product protection when appropriate practices and procedures are followed. These units are the primary means of containment developed for working safely with infectious microorganisms. Protection is provided because BSCs have high efficiency particulate air (HEPA) or ultra-low penetration air (ULPA) filters in the exhaust and supply air systems of the cabinets and because of directional air flow into and inside the cabinet.

The OEHS assists Principle Investigators (PIs) with purchasing BSCs and works closely with the Purchasing Department to provide approval for these units. The procedure for selection, approval, and purchase of a biological safety cabinet is as follows:

- * Units are selected based upon the hazards imposed by the infectious agent(s) utilized in the lab, the designated biosafety level, and the lab procedure(s) that will be conducted.
- * Once a PI forwards a requisition to the Purchasing Department to buy a unit, the requisition is then forwarded from Purchasing to the OEHS for review and approval.
 - The PI provides info to the OEHS on activities that will be conducted inside of the unit and the microorganisms, if any, that will be utilized.
 - The OEHS ensures that the lab facility is adequate for the activities that will be performed and that the BSC will meet the PI's needs (i.e., exhaust ductwork can be provided to the roof, if necessary; there is adequate exhaust air to duct the unit, if necessary; etc.).
- * Written approval is forwarded by the OEHS to Purchasing upon review and determination that the unit will provide the protection needed for the activities that will be conducted.

Also keep in mind that the OEHS is available for consultation on biological safety issues, annual BSC certifications, troubleshooting of units if there is a problem, and unit decontaminations and repairs. For assistance with any of these issues, contact Kim Chapital of the OEHS, kchapit@tulane.edu, 988-2870. (For more information on BSCs, see www.som.tulane.edu/oehs/docs/BSCFactSheet.pdf.)

Chemical Storage

Accidental contact between incompatible chemicals could result in a serious explosion or the formation of substances that are highly flammable or toxic. It is prudent to follow these general guidelines when storing your chemicals:

- * Classify your chemicals as to their hazard class and store like classes together. For example, store mineral acids with other mineral acids; store flammable liquids with other flammable liquids.
- * If there are greater than 10 gallons of flammable liquids in your area, fire codes require that they be stored in a flammable liquid storage cabinet, or in safety cans.
- * Do not store flammable liquids in refrigerators that are not designed for flammable liquid storage.
- * Oxidizing agents are incompatible with concentrated reducing agents, so store these items separately.
- * Acids are incompatible with bases. If these must be stored in the same cabinet, use secondary containment to fully contain the contents of the bottle in the event of a spill or leak.
- * Do not store chemicals on the floor unless secondary containment is provided.
- * Do not store heavy containers or concentrated acids on overhead shelves. Store these on lower shelves or cabinets close to floor level.
- * Do not store chemical containers near or over the edge of shelves, and do not store containers on top of each other where they can easily fall. For a list of incompatible list of chemicals, see <http://www.som.tulane.edu/oehs/incompat.htm>

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