



*Environmental Health  
Safety*

# Guardian

Florida State University

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*Before You Start Be Safety Smart*

A Newsletter of the  
FSU

**EHS**

Department

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## Vehicle Accidents – What to do if it happens to you

When an accident occurs in an FSU vehicle, you must immediately notify Law Enforcement. A law enforcement officer will prepare a police report and provide you with a drivers Information Exchange Form.

Next you must notify your Supervisor following the accident. The vehicle will need to be evaluated by your Department to determine if it is safe to drive.

Finally you must notify Environmental Health and Safety to initiate the claims process even if you are in a rental vehicle.

All FSU vehicles must have a laminated insurance card in the glove box of the vehicle.

Remember: FSU Vehicles are only to be used for official state business. If you are involved in an accident while not in the course and scope of your job duties you will be responsible for any damages.

## Reducing the Risk of Rollover Crashes in 15 Passenger Vans

### *What increases the risk of rollover crashes?*

The National Highway Traffic Safety Administration (NHTSA) has found that the risk of a rollover crash is greatly increased when 10 or more people ride in a 15-passenger van. This

## Hand Safety

How many activities can you imagine, either at work or home that do not involve using your hands? They provide us with the utility and dexterity needed to perform almost all our daily activities. In fact, hands, as tools, can perform more intricate functions than any single known tool developed by man. Your hands are one of the most complex parts of your body with nerves, tendons, and bone all working

together. A hand injury can be devastating by adversely affecting daily routines such as buttoning a shirt, opening a door and lifting a fork. Hand injuries account for 80 percent of all occupational injuries and

1,080,000 emergency room visits by workers per year in the United States. More than 110,000 days-away-from-work are estimated from hand and finger lacerations. Hand injuries are second only to back strain and sprain injuries.

There are many dangerous conditions on the job to which the hand is always exposed: sharp edges, pinch points, protruding objects, splinters, exposed blades on unguarded machinery. These conditions may not always be obvious.

Gloves are often relied upon to prevent cuts, abrasions, and burns. Gloves can also protect the skin from contact with chemicals that are capable of causing local or systemic adverse effects. No glove will provide protection



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## Hand Safety from page 1

against all hand hazards and commonly available glove materials provide only limited protection against many chemicals. Therefore, it is important to select the most appropriate glove for a particular application and to determine how long it can be worn and if it can be reused. You can contact EHS for assistance in selecting an appropriate glove for the task being performed.

### Glove Use Considerations

Do not wear gloves around devices with exposed machine gears or machinery with moving parts, such as drill presses, mills, lathes, and grinders in which the



Glove Type	Use and Hazard
Disposable Gloves	Usually light-weight plastic, help guard against mild irritants.
Fabric Gloves	Improve grip when handling slippery objects. Insulates hands from mild heat or cold.
Leather Gloves	Guards against injuries from sparks or scraping against rough surfaces. Used in combination with an insulated liner when working with electricity.
Metal Mesh Gloves	Protects hands from accidental cuts and scratches. Used with cutting tools or other sharp instruments.
Chemical Resistive Gloves	Made of rubber, neoprene, polyvinyl alcohol, etc. These gloves protect your hands from corrosives, oils, and solvents.

glove could get caught.

Some glove materials may cause reactions in some people such as allergies to latex. Offer alternatives. Ensure the gloves fit properly.

Ensure all exposed skin is covered by the glove. Gloves should be long enough so that there is no gap between the glove and sleeve.

Do not wear gloves with metal parts near electrical equipment.

Dispose of worn or torn gloves.

Clean and replace gloves as instructed by the manufacturer.

Do not use gloves or clothing contaminated with flammable or combustible materials around hot work operations or while working near an ignition source.

References: Occupational Safety & Health Administration, Centers for Disease Control and Prevention, Bureau of Labor Statistics

## FSU ALERT Emergency Notification System Continues to Evolve: Stay Connected

Despite having twenty-eight (28) methods for delivering emergency information, FSU is continuously seeking new ways to expand and improve on our nationally-recognized system.

If you have not heard, you can receive *FSU ALERT* emergency information from MySpace™, Facebook™, and Twitter™. Thousands already have signed up on these popular social networking websites. Those who are tech-savvy can also import the *FSU ALERT* RSS feeds directly into the reader of their choice.

In late 2009, we introduced our new Indoor Warning Sirens in six buildings on campus. Eight more are being installed and twenty-three are due by mid-summer. The sirens allow warning messages to be played clearly indoors over the fire alarm system or public address system.

By mid-summer 2009, Innovation Park and Southwest Campus, including Alumni Village, will see the installation of Outdoor Warning Sirens.

Soon, FSU will unveil its *FSU Mobile* application for iPhones, Blackberries, and other internet capable phones. This application will include a module for receiving and viewing *FSU ALERT* emergency information.

The *FSU ALERT* emergency notification system is designed to provide an initial warning notification in the least amount of time possible. Sometimes this means that a text message, E-mail, or Tweet may not contain all the information you need. Always seek more information by going to the *FSU ALERT* Page (<http://alerts.fsu.edu>), by calling (850) 644-INFO (4636), or tuning to 530 AM on the radio. The *FSU ALERT* Page is continuously updated year-round with information about current hazards, safety tips, and more.

An *FSU ALERT* emergency notification message does not automatically mean that classes are cancelled or that the University is closed. Take the actions you need to protect yourself from the threat at hand. Once the threat has passed, the warning time expires, or the conditions become safe, resume your normal course of business. Refer to your professor or supervisor for details about tardiness or absence policies.



## Disposing of Unwanted Medications

In recent years, studies have shown that pharmaceuticals and personal care products are present in lakes, streams and even in our tap water. These chemicals are generally shown to be present in very low levels, but it is not known what effects chronic exposures to trace amounts of most drugs or chemicals may have on human health. Nor is it known how combinations of chemical contaminants might affect human health or the environment. Some studies have shown that aquatic



animals, exposed to the highest levels of chemicals present in water bodies, have been adversely affected from chemicals once used by humans, including prescription and over-the-counter therapeutic drugs, veterinary drugs, fragrances, lotions and cosmetics, as well as a myriad of other chemicals used in residential and industrial activities. Drugs in our waterways and drinking water are of particular concern, as they are comprised of chemicals that are used in very low concentrations to obtain specific biological effects in the body.

Drugs that are not broken down and processed in the body are generally excreted into domestic sewer systems. Current methods of waste water treatment are not effective in removing most drugs, resulting in contamination of waterways and the aquifer from medicines and other bioactive chemicals used for therapeutic benefit of humans and animals. Thus, drugs excreted or disposed of by pouring into sewer systems or down the drain have

contributed to contamination of waterways, soils and drinking water sources.

Awareness of this problem should compel concerned individuals to evaluate the ways that they are contributing to the contamination of the environment through the use of personal care products, cleaning products, pesticides and other chemicals that are washed into the sewer systems, as well as the use and disposal of unwanted chemicals or pharmaceuticals, vitamins and other bioactive substances. A reduction in the use of these products is the first step in safeguarding the environment. Additionally, proper drug disposal, as described below, is one important method of reducing the amount of unwanted drugs that are contaminants in the environment.

- Keep medicine in its original container so it may be identified if accidentally ingested.
- Mark out personal information like your name, address and prescription number.
- For pills, add water or other liquid to the bottle.
- Add kitty litter, cayenne pepper, dirt or other unpalatable material.
- Close lid and secure with duct tape or packing tape.
- Place bottle inside opaque container like a coffee can and tape that container closed.
- Discard into regular household trash (not into recycle bin).

## Energy Conservation in Laboratories

In the modern research laboratory, energy use for ventilation, equipment and lighting is high and the costs to the University are often thousands of dollars each month, even for a small building with few labs. The total utilities cost in 2008 of just seven of our research buildings combined (BRF, HTL, DLC, NRB, KEN, KLB, BIO) was over 4 million dollars, with an average cost of almost \$600,000 per building.

The primary utilities costs include



Fume Hood with sash fully closed

electric, water, chilled water, steam/heat, and sewage. While newer buildings may have been engineered for more efficient energy use, many of our research buildings were constructed during an era when conservation of resources was not a great consideration. The buildings themselves may not be readily made more efficient, but there are a number of activities within the control of individuals that, when efforts are combined, are likely to make a positive impact on energy use.

The following recommendations are provided to help reduce energy consumption in our laboratories:

- Close hood sashes when not in use - This action may be the single most important conservation effort by lab workers. Closing the fume hood sash will greatly reduce the exhausting of conditioned air from the building, reducing both electric and steam (heating) costs.
- Conserve water - Use water only when needed. Avoid using water flow (aspirators) to create a vacuum. Do not leave water running beyond immediate use. If water must be run for rinsing, use a timer to help monitor use. Report water leaks for repair to Facilities.
- Purchase energy efficient equipment and purchase according to size needed - Avoid using large pieces of equipment for small loads or samples if smaller equipment is available; for example, using large autoclaves for sterilization of a small pack of surgical instruments. Avoid purchasing equipment that is expensive to use or maintain.
- Turn off lights - Turn off lights when the lab is empty. Use intense lighting only where it is needed (over work stations).

## Vans Safety from page 1

increased risk occurs because the passenger weight raises the vehicle's center of gravity and causes it to shift rearward. As a result, the van has less resistance to rollover and handles differently from other commonly driven passenger vehicles, making it more difficult to control in an emergency situation. Placing any load on the roof also raises the center of gravity and increases the likelihood of a rollover.

### **What situations can cause a rollover?**

A rollover crash is heavily influenced by driver and road characteristics, and the design of the vehicle. In studies of single-vehicle crashes, NHTSA has found that more than 90 percent of rollovers occur after a driver has lost control of the vehicle and has run off the road. Three major situations can lead to a rollover in a 15-passenger van.

- The van goes off road. If this occurs, the van is likely to overturn when it strikes a ditch or embankment or when it is tripped by an object or runs onto soft soil.
- The driver is fatigued or driving too fast for conditions. A tired driver can doze off and lose control. The driver can also lose control when traveling at a high speed causing the van to slide sideways off the road.
- The driver overcorrects the steering as a panic reaction to an emergency or to a wheel dropping off the pavement.

### **As a driver what can you do to protect your passengers?**

Over the past decade, 80 percent of people killed in rollover crashes in 15-passenger vans were unbelted. Passengers can dramatically reduce their risk of being killed or seriously injured in a rollover crash by simply using their seat belts. Prior to departing, the driver should confirm that all passengers are

wearing their seatbelt. NHTSA estimates that people who wear their seat belts are about 75 percent less likely to be killed in a rollover crash than people who don't.

### **Does an experienced driver make a difference?**

Significant differences in the design and handling characteristics of a 15-passenger van make it drive differently from other passenger vehicles. Therefore, it is highly recommended that only trained and experienced drivers be allowed to drive a 15 passenger van.

### **How can rollover crashes be prevented?**

Never drive while under the influence of alcohol or other drugs. Make sure you are well rested and attentive and always slow down if the roads are wet or icy.

Maintain a safe speed to avoid running off the road. If your wheels drop off the roadway or pavement, gradually reduce speed and steer back onto the roadway when it is safe to do so.

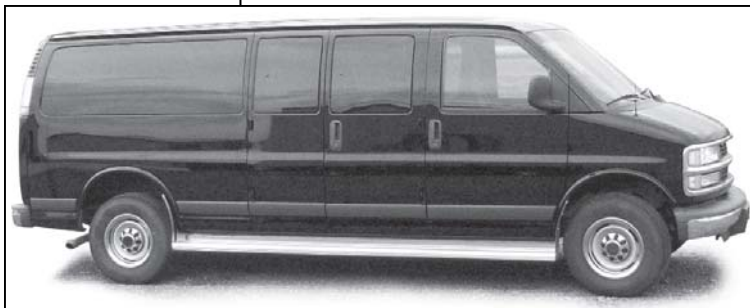
Check tire pressure and tread wear monthly. Worn tires can cause your van to slide sideways on wet or slippery pavement. Improper inflation can cause handling problems and can lead to catastrophic tire failures, such as blowouts.

### **What are other considerations for safe driving?**

When a 15-passenger van is not full, passengers should sit in seats that are in front of the rear axle. More than 15 people should never be allowed to ride in a 15-passenger van. It is recommended when possible not to exceed 12 passengers.

- Because a 15-passenger van is substantially longer and wider than a car, it:
- Requires more space and additional reliance on the side-view mirrors for changing lanes.
  - Does not respond as well to abrupt steering maneuvers.
  - Requires additional braking time.
  - Consult the vehicle owner manual to determine proper loading restrictions, the maximum safe load, as well as proper load distribution.
  - Avoid placing loads on the roof. Any load placed on the roof will be above the vehicle's center of gravity and will increase the vehicle's likelihood of a rollover.

Reference: National Highway Safety and Transportation Agency



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