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## **AG SAFETY S.T.A.T. – *SAFE TACTICS FOR AG TODAY***

Vol.2 No. 1 January 2009

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### **THOUGHTS from the EDITOR - SHOP SAFETY**

#### **Dee Jepsen, State Safety Leader**

Winter months in Ohio have their way of moving many projects indoors. Farm shops and household garages become the activity hub for a variety of tasks. As you set up shop, consider the nature of these activities and make a plan for safety. See the article below for some safety tips specific for the indoor work area.

### **SAFETY TIPS for the FARM SHOP and the HOUSEHOLD GARAGE WORKSHOP**

Here are the top ten safety factors for a safe workshop:

1. Most important - have a fire extinguisher. The best ones are ABC dry chemical extinguishers. They will handle most of the environments in the farm and family workshop. A 20 lb. size is recommended, however depending on the shop size, you may need more than one. Make sure these extinguishers are charged and ready if needed.
2. Have ample ventilation. Fumes from engines, welding, and painting must be exhausted away from the work area. Also, portable heaters can produce a significant amount of carbon monoxide. See the article in this newsletter to address CO poisoning.
3. Have a first aid kit.
4. Have personal protective equipment for all persons and activities. This includes work boots, safety glasses, face shields, hearing protection, and work gloves. Some activities may require additional protection, like welding shields, chemical-resistant gloves, and protective aprons.
5. Use power tools that are properly grounded or double insulated. The wires should not be nicked or frayed. This holds true for any extension cords that are used in the shop.
6. Have proper storage containers for fuels, oils, lubricants, and other flammables. Store them away from flame or heat sources. The sparks from switches in lights, air compressors, and refrigerators can ignite fumes.
7. Have a designated welding area. This includes proper ventilation of fumes in cutting/torching areas, properly secured and capped gas cylinders, extra cylinders stored 20 ft apart, and hoses in good condition free from cracks. Welding rods should be removed from the electrode holder when not in use.
8. Turn off all equipment when working on it. And replace all factory installed shields or guards when the equipment is back in working order.
9. Have adequate lighting. Lights should be installed in stairwells, storage areas, over workbenches and other work areas. Guards on the light fixture will prevent the bulbs from accidentally breaking and reduce the risk of fire.
10. Have a tidy shop. Floors should be dry and clear of clutter. Combustibles, oily rags, and trashcans should not be near welding areas, heat sources, or other ignition sources. A good distance is 35 feet to ensure sparks or flames can't reach combustibles.

### **GOVERNOR SIGNS BOOSTER SEAT BILL INTO LAW**

Governor Ted Strickland signed Substitute House Bill 320 into law on Tuesday, January 6, 2009. The law will go into effect on April 6. Law enforcement will issue *warnings only* for the first 6 months. Full enforcement, including

citations, will begin on or about November 6. Fines will range from \$25 to a maximum of \$75 per occurrence. The Director of Health is responsible for adapting rules to establish enforcement criteria for determining compliance.

The Boost Ohio Kids Coalition will begin to focus efforts on developing education and awareness outreach to help inform Ohio's parents and caregivers about the new law and how to comply.

## **ATV SAFETY UPDATE**

Happy New Year to everyone! The 4-H ATV Safety program is off to a good start for the year. Below you will see the 5 ATV RiderCourse classes that have been scheduled to-date. It is not too late to schedule yours! As most of you know, this course is for anyone enrolling in the 4-H ATV project, any member interested in participating in the state-level contest or anyone (4-H or non 4-H) interested in ATV riding.

These courses are open to anyone over the age of 6. Youth participants must ride the correct size machine. Some courses may have a small registration fee. It is recommended that participants supply their own machine, but it must be the correct size. If you have a person interested in attending, please have them contact the Course Coordinator for a registration form.

**April 18th-** Lancaster Sport Cycles, Lancaster OH  
Course Coordinator: Kathy Henwood  
(614-292-0622)

**May 2nd-**Williams Co.  
Course Coordinator: Jeff Dick  
(419-636-5608)

**May 9th-**OSU Campus- Waterman Farm  
Course Coordinator: Kathy Henwood  
(614-292-0622)

**May 16th-** Fulton County  
Course Coordinator: Jill Stechschulte  
(419-337-9210)

**Aug 15th-** Williams County  
Course Coordinator: Jeff Dick  
(419-636-5608)

MORE TO COME! -Watch the Ohio 4-H Engineering website & Ag S.T.A.T newsletter! If you want to host an ATV RiderCourse in your county, please contact Kathy Henwood at [henwood.13@osu.edu](mailto:henwood.13@osu.edu) or 614-292-0622. It only takes 5 riders to convene a course!

## **ARTICLE of the MONTH: What is the impact of Carbon Monoxide?**

### **Tim Butcher, OSHA Program Coordinator**

According to the Centers for Disease Control and Prevention, in the US each year, nearly 500 people die while as many as 20,000 visit emergency rooms for exposure primarily from poorly-maintained heating systems or gas stoves and gas-powered generators used for heat or power during storms.

### **What is Carbon Monoxide?**

Carbon Monoxide is a toxic, colorless, odorless, and tasteless gas. It is produced by the incomplete combustion of fossil fuels like kerosene, gas, oil, coal and wood. Anytime these fuels are used some carbon monoxide will be produced. There are safe levels of carbon monoxide, but as the levels increase mild symptoms can worsen and lead to unconsciousness and death.

### **Why is it a problem?**

Homes today are better insulated and sealed against cold weather. When there is inadequate ventilation carbon monoxide can accumulate to unsafe levels. Also furnaces and portable heaters are used more often during cold winter months so more carbon monoxide will be created. If the equipment is not installed or used correctly, or has not had adequate maintenance, there is a greater risk of dangerous levels of carbon monoxide accumulating in the home.

Shops, garages and outbuildings usually have much more ventilation than homes. These types of buildings may not even be entirely enclosed. However more ventilation does not necessarily mean adequate ventilation. When using tools like generators or gas powered power washers, it is best to locate the equipment away from where exhausts can collect and where people are working. Use extension cords or longer hoses to keep the carbon monoxide source far enough away to allow for more ventilation. It is important to consider wind direction when deciding where to locate equipment that generates carbon monoxide so that the exhausts do not drift into areas where they can collect.

Vehicles are another common source of carbon monoxide poisoning. Idling a vehicle in a garage for even a few minutes can lead to dangerous levels of carbon monoxide outside as well as inside the vehicle. If it is an attached garage, exhaust gases can quickly enter the home. If a vehicle is stuck in snow and the engine is allowed to run in order to provide heat, it is much safer to first make sure the exhaust pipe is not blocked and that the engine is only idled for short periods.

### **What are the signs of exposure?**

Often initial symptoms of carbon monoxide poisoning are dismissed as the flu, because flu symptoms like fatigue, muscle aches and nausea are so similar to those from carbon monoxide poisoning. Carbon monoxide enters the body by way of the lungs where it displaces oxygen and interrupts the normal functions of the heart, brain and other vital organs. While flu symptoms will lessen over time, carbon monoxide poisoning can increase to deadly levels.

### **What can be done to avoid the danger?**

All equipment, including heaters, furnaces, and generators have a service life and require regular maintenance to keep them working efficiently and safely. All appliances in the home or shop that are potential sources of carbon monoxide should be serviced every year by a qualified technician.

Every home, garage, and farm shop should have a battery operated carbon monoxide detector and the battery should be replaced at the same time as the smoke detectors. Because carbon monoxide is slightly lighter than air it will collect near the ceiling. Avoid placing the detector too near a known source of carbon monoxide like a fireplace or fuel-fired appliance because that will not take into account the natural and safe dissipation of carbon monoxide gas. If only one carbon monoxide detector is used in the home, place it near the bedrooms and make sure it is loud enough to wake the occupants. If the carbon monoxide detector sounds, evacuate the building and call 911. Seek medical help if carbon monoxide poisoning is suspected.

Certain fuel-fired equipment such as some gas grills and generators are not designed for use in the home. Make certain the equipment can be used safely in the location intended. Open windows can allow the entry of unsafe levels of carbon monoxide if equipment is placed nearby and exhausts are blown indoors. Even open sided buildings can allow the accumulation of unsafe levels of carbon monoxide if the weather conditions are correct and adequate ventilation is not provided.

If purchasing a carbon monoxide detector, remember to send in the product registration information. Recalls of defective carbon monoxide detectors manufactured by an Ohio company and sold between June 2007 and February 2008 have occurred. Check the U.S. Consumer Product Safety Commission' web site for product details. (<http://www.cpsc.gov/cpsc/pub/prerel/prhtml08/08267.html>)

With attention to equipment selection and use, as well as regular maintenance, homes and places of work can be made safe from carbon monoxide. Purchasing enough carbon monoxide detectors can help make sure that if all else fails, the hidden killer will be revealed and an unsafe situation will not become a tragedy

## **EMERGENCY MANAGEMENT TIP of the MONTH**

### **Aletha Reshan, Emergency Management Planning and Education Program Coordinator**

"Ice & Snow-Take It Slow" - that is the Ohio Department of Transportation's (ODOT) winter driving safety slogan. Traveling during inclement weather can be stressful for both car and driver.

The following six winter driving preparedness steps can help to minimize this stress.

First, make sure that your car is in good working order by ensuring that tires are inflated to manufacturer's specifications and have more than 1/16 inch of tread; all fluids are full and dispensing properly; and lights, belts, wiper blades, heat and defrost are all functioning properly.

Secondly, equip your vehicle with an emergency roadside kit containing flares, matches, reflective triangles, blankets, flashlight and extra batteries, non-perishable foods, jumper cables, instant tire inflator, windshield deicer, windshield washer fluid, anti-freeze, small shovel, ice scraper, candles, "help" sign, lock lubricant, water-proof cover such as a tarp, and first-aid supplies.

Third, ensure that everyday supplies such as maps, cell phone charger, insurance card, and vehicle registration are also in the car.

Fourth, determine what route you intend to travel and monitor the traffic and weather conditions of those areas. Resources for checking Ohio road and weather conditions include ODOT's website [www.buckeyetraffic.org](http://www.buckeyetraffic.org) and the Ohio State Highway Patrol's telephone hotline 1-888-2OH-ROAD (1-888-264-7623). For travel outside the local area, The National Weather Service's website [www.weather.gov](http://www.weather.gov) offers an interactive map as well as RSS feeds.

Fifth, know how to respond to various types of driving conditions such as ice and black ice. Maintain a minimum distance of three vehicle lengths from the car traveling ahead and do not use cruise control. If your rear wheels slide remove foot from accelerator rather than braking, and steer in the direction you are sliding. If you have anti-lock brakes (ABS) do not pump your brakes but rather apply steady pressure. If you have standard brakes, pump gently. If your front wheels slide, remove foot from accelerator and put transmission in neutral. As you slide sideways your car will slow down and you'll be able to get traction, then you can put your transmission in gear once again.

Sixth, if your car becomes stuck keep safe by clearing the exhaust pipe of snow and debris, run the engine 10 minutes an hour to conserve gas and reduce hazards from toxic fumes, keep a window opened slightly for fresh air and to prevent the car from being frozen completely shut, leave the car only if you are certain of the distance to help, tie a bright colored cloth to your antenna, and to keep your mouth moist eat a hard candy.

Keeping these six driving preparedness strategies in mind can help you reduce the stress associated with winter driving, negotiate wintry roads safely, and help you mitigate the treacherous situations drivers often face in inclement weather. Happy trails this winter season!

For more information on winter driving safety, please visit these sites:

<http://www.dot.state.oh.us/Services/Pages/IceandSnowInformation>  
[http://www.weather.com/activities/driving/drivingsafety/drivingsafetytips/snow.html\\_aspx](http://www.weather.com/activities/driving/drivingsafety/drivingsafetytips/snow.html_aspx)  
[http://www.nsc.org/resources/factsheets/road/winter\\_driving.aspx](http://www.nsc.org/resources/factsheets/road/winter_driving.aspx)  
<http://www.nhtsa.dot.gov/cars/rules/TireSafety/ridesonit/brochure.html>

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