Spring is a time when everything seems to renew itself. It’s also the time we start to think more about sprucing up our campuses. But as you begin spending more time outside remember there are safety issues you may not have thought about for some time. 

**Noise hazards** - Machines such as mowers, grass trimmers, and blowers all have potential to exceed the allowable noise levels set by OSHA. Make sure that your employees wear proper hearing protection devices. You may want to have your EHS Specialist to perform noise monitoring of the machinery. If you have individuals that spend a majority of their time around this equipment you may also want to have personnel monitoring performed.

**Cutting hazards** - Yard maintenance machinery may impose a substantial cutting hazard. Individuals should be wearing the appropriate ANSI approved safety shoes. Wearing appropriate gloves will also help prevent cuts and abrasions to your hands. 

**Flying particle/projectile hazards** - Grass trimmers and mowers create a lot of flying dust and debris. All employees should have ANSI approved safety glasses and wear them at all applicable times.

**Biological hazards** - The warmth of the spring also brings out other life forms that may impose danger. Be vigilant about bees, hornets, wasps, ticks, mosquitoes, spiders and snakes. Before entering an overgrown area or area that has not been regularly traveled in some time be sure to look before you step. Wear clothing that covers your entire body and safety shoes. Wearing a repellent that contains DEET is also a good idea.

**Heat hazards** - Employees should monitor themselves and others for heat stress. Take regular breaks and drink plenty of fluids.

Spring may also be a good time to reassess your work place. Your EHS Specialists are more than happy to do a general safety walk through and suggest possible areas that may need more focus. A fresh eye may spot hazards that you have not thought about.

The Spring will bring with it other challenges in the form of budget shortfalls. As with all community colleges, the budget is foremost on our minds as well but it is necessary that we remain steadfast in our commitment to safety. As a result of budgets and travel restrictions EHSI has scheduled a steady stream of training courses offered in the form of video conferencing throughout this spring. For a listing of dates and times please go to ehsi.blueridge.edu.

As a final note, I would say remember that we must all set a good example for safety. As safety officers you set the tone for your campus. Reminding individuals to wear their PPE, to be ever vigilant of hazards, and to follow safety procedures is more than half the fight. And it doesn’t cost anything. Here’s hoping you have a safe Spring.
Best Practices for Dental Waste Management

Many of the community colleges in North Carolina offer degree programs in Dental Hygiene and Dental Laboratory Technology. It is important for each college that maintains this type of facility to follow a waste disposal and recycling program that eliminates the possibility of any hazardous materials entering the natural environment. Dental labs, particularly those that have x-ray machines, need to make sure they are utilizing the best possible methods when getting rid of waste created in dental procedures. Fortunately, many of the materials used in dentistry can be recycled instead of being deemed “hazardous waste”. Following are some best practices:

**Mercury Containing Amalgam** should not be disposed of in the garbage or down the drain. Instead, try using a device especially designed to contain mercury and suppress the vapors such as the Mercontainer™ available from lab supply distributors. Another option is to use your own tightly sealed, unbreakable container with a mercury vapor suppressant such as Merconvap Liquid ™ (don’t forget to label the bottle “Waste Amalgam in Merconvap”). When it is full, the whole container can be sent off for recycling or disposal with a licensed hazardous waste transport and disposal contractor. Empty amalgam capsules, on the other hand, can be disposed of with normal garbage.

**Used X-Ray Fixer** contains silver which is considered hazardous to the environment. Many dentists now use digital x-ray systems so that no X-ray film or developers are needed. If you still utilize X-ray film and developing chemicals, the best method for getting rid of these materials is to utilize a silver recovery system. By pouring the used fixer through a silver recovery system or cartridge, the silver is removed, and the liquid can be diluted with water and discharged into the regular sewer or septic system. The silver can then be sent to a recycler or back to the supplier. Contact the supplier of your X-ray film to see if they have a silver recovery program.

**Developer,** as long as it has a pH between 5.5 and 10.5, can be disposed of down the drain.

**Undeveloped Film** contains large amounts of silver which can’t go in the regular garbage. In most cases the manufacturer would be happy to get it back. Contact your supplier and see if they have a takeback program you can take advantage of.

**Lead Foil Packets** from each X-ray have the potential to contaminate soil and water if they end up in the landfill. Contact your film supplier to see if they have a lead recycling program. Typically the lead packets are accumulated in a container that can hold between 7 and 9 pounds of them and then sent back to the manufacturer for recycling. If you are unable to find a recycler, the lead foil will need to be handled by a licensed hazardous waste disposal contractor.

**Biohazard Waste and Sharps** have the potential to carry diseases that can be transmitted to other humans that come in contact with them. For this reason, sharps should be disposed of in durable red containers labeled “Biohazard” and other biohazard waste should be disposed of in durable red bags also labeled “Biohazard”. Once accumulated, these materials should be disposed of with a licensed medical waste disposal contractor.

If you need assistance finding a recycler or waste disposal contractor, or if you have questions about recycling, waste accumulation or disposal, please e-mail Allen McCullough at jamesmc@blueridge.edu.
Confined spaces can be awkward and uncomfortable to work in, and hazards are generally even more severe when they exist inside these spaces. Confined space accidents happen more often than you might think. In most confined space accidents, three essential safety elements are lacking. To avoid a tragedy at your facility, take heed: 1) lack of recognition of the hazards by employees and supervisors; 2) lack of testing and evaluation before entry and monitoring after entry; 3) lack of effective plans and resources for successful rescue of entrants.

Recognition of hazards is a major key to safety. There are nearly 5 million permit-required confined spaces in workplaces across America and another 1 million non-permit spaces. The key to keeping workers safe in those spaces is training. Training must emphasize recognition of what constitutes a confined space, the numerous hazards that may be encountered inside one, and the precautions that must be taken by confined space entrants, attendants, and supervisors to prevent accidents and injuries. Confined space training shouldn’t pull punches either. Trainers should stress that death is a likely outcome in confined space accidents.

Testing, evaluation, and continuous monitoring are essential. More than half of confined space fatalities are due to hazardous atmospheric conditions such as toxic vapors or lack of oxygen. NIOSH says that before entry, all confined spaces should be tested by a qualified person to determine whether the atmosphere is safe. Tests should be made for oxygen level, flammability, and known or suspected toxic substances. Evaluation of the confined space should consider the following: methods for isolating the space from mechanical, hydraulic, or electrical energy sources; implementation of lock-out/tagout procedures; ventilating, cleaning and/or purging; safe work procedures for entrants; required PPE (protective clothing, respirators, boots, gloves, eye protection); special tools (non-sparking tools); communications system to be used between entrants and attendants.

While workers are inside, the space should be continuously monitored to determine whether the atmosphere has changed and become hazardous because of the work being performed or any other circumstances. Trained, equipped, and experienced rescue personnel must be available in case of emergency. Many fatalities involve would-be rescuers who rush in without proper training or equipment. NIOSH says rescue procedures should be established before entry and should be specific to the type of confined space and its hazards. Any time employees enter a confined space, rescue personnel must be ready and able to quickly respond in emergencies. Attendants should only to attempt rescue if they can do so safely from outside the space, using safety lines attached to entrants. NIOSH emphasizes that rescue procedures should be practiced frequently to provide a level of proficiency that eliminates life-threatening rescue attempts and ensures an efficient and calm response to any emergency.

Is First Aid Available?

EHSI is committed to helping make our colleges a safe and healthy environment at which to work. We provide safety training and services that we hope will prevent accidents from occurring. However, in the event of an accident, OSHA regulations provide for the availability of first-aid for the injured.

29CFR1910.151(b) states In the absence of an infirmary, clinic, or hospital in near proximity to the workplace which is used for the treatment of all injured employees, a person or persons shall be adequately trained to render first aid. Adequate first aid supplies shall be readily available.

The standard is written to make certain that the employer will ensure timely first aid treatment is provided. (continued on page 4)
Is First Aid Available?  

(continued from Page 3)

available either by trained providers at the worksite or by responders (EMS) that can arrive in the critical minutes following an injury.

OSHA recommends, but does not require, that every workplace include one or more employees who are trained and certified in first aid, including CPR. If these trained employees are to be relied upon to respond to injury emergencies, they should be identified and there should be a system in place where anyone is able to summon them. However some colleges do not have these resources, have satellite campuses, or they may not be on campus during all hours of college operations. These situations require you to rely on EMS services. The requirement states that emergency medical services must be "reasonably accessible" or "in near proximity to the workplace." OSHA has long interpreted the term "near proximity" to mean that emergency care must be available within no more than 3-4 minutes from the workplace, an interpretation that has been upheld by the Occupational Safety and Health Review Commission and by federal courts. OSHA exercises discretion in enforcing the first aid requirements in particular cases. OSHA recognizes that a somewhat longer response time of up to 15 minutes may be reasonable in workplaces, such as offices, where the possibility of such serious work-related injuries is more remote. But for our maintenance workers and others involved in programs like woodworking, welding, and automotive, etc., where serious accidents such as those involving falls, electrocution, and other life threatening injuries are possible, emergency medical services must be available within 3-4 minutes if there is no employee on the site who is trained to render first aid.

If an employee is trained in first aid and identified by the employer as responsible for rendering medical assistance as part of his or her job duties, that employee is covered by the bloodborne pathogens standard and training requirements.