



Chapter 6: Health Hazards

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AGC Tool Box Safety Talk

COLD WEATHER

INTRODUCTION

1. Review any accidents or “near accidents” from the past week.
2. Describe the hazards of the work as they relate to your project. Explain or show the SAFE way of doing the job.
3. Give the TOOL BOX SAFETY TALK

Exposure to cold can cause injury or serious illness such as frostbite or hypothermia. The likelihood of injury or illness depends on factors such as physical activity, clothing, wind, humidity, working conditions, and a person’s age and state of health. Follow these tips to stay safe in cold weather:

- Learn the signs and symptoms of cold-induced illnesses/injuries and what to do in the event of an emergency.
- Select proper clothing for cold, wet, and windy conditions. Layer clothing to adjust to changing environmental temperatures. Wear a hat and gloves and underwear that will keep water away from the skin (polypropylene).
- Take frequent short breaks in warm dry shelters to allow the body to warm up.
- Avoid exhaustion or fatigue because energy is needed to keep muscles warm.
- Use the buddy system (work in pairs).
- Drink warm, sweet beverages (sugar water, sports-type drinks). Avoid drinks with caffeine (coffee, tea, or hot chocolate) or alcohol.
- Eat warm, high-calorie foods like hot pasta dishes.



AGC Tool Box Safety Talk

CUTS AND SCRATCHES

INTRODUCTION

1. Review any accidents or “near accidents” from the past week.
2. Describe the hazards of the work as they relate to your project. Explain or show the SAFE way of doing the job.
3. Give the TOOL BOX SAFETY TALK

Minor cuts and scratches can become major problems if ignored. With any open wound, large or small, there is always the risk of infection. Take these steps to treat minor cuts and scratches:

- Stop the bleeding. Minor cuts and scrapes usually stop bleeding on their own. If they don't, apply gentle pressure with a clean cloth or bandage.
- Clean the wound by washing it with clear water. Clean the skin around the wound with soap and a soft washcloth. Try to keep soap out of the wound itself because soap can cause irritation.
- If debris remains embedded in a wound after cleaning, see your doctor.
- Apply a thin layer of an antibiotic cream or ointment such as Neosporin or Polysporin to help keep the surface moist. The products discourage infection and allow your body's healing process to close the wound.
- Cover the wound with a sterile bandage. Bandages can help keep the wound clean and keep harmful bacteria out. After the wound has healed enough to make infection unlikely, exposure to the air will speed healing.
- Watch for signs of infection. See your doctor if the wound isn't healing or if you notice any redness, drainage, warmth, or swelling.



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FLASHBURN

INTRODUCTION

1. Review any accidents or “near accidents” from the past week.
2. Describe the hazards of the work as they relate to your project. Explain or show the SAFE way of doing the job.
3. Give the TOOL BOX SAFETY TALK

Flashburn to the eye can result when ultraviolet rays emitted by an arc welder are absorbed into the eye’s cornea. Your cornea can repair itself in one to two days and usually heals without leaving a scar. However, if the flash burn is not treated, an infection may start. This can be serious and may lead to some loss of vision. Follow these safe work practices to prevent flashburn:

- Be alert to the risks of flashburn. Even brief exposure to UV radiation can cause flashburn.
- Keep in mind that you do not have to be looking at the arc to get flash burns. If the UV light can reach your eye, even from the side, you will get burned; it often happens to people working near the welder.
- Wear appropriate eye protection. Helmet-type shields offer the most complete shading against arc radiation. Also use safety glasses with side shields to protect eyes when the helmet is lifted up.
- Make sure welder’s helpers or bystanders wear appropriate eye protection. Anyone within 20 feet of a welding arc should be wearing the appropriate type of safety glasses or shielded by an opaque barrier.
- Use screens, if available, to protect people from the welding arc.
- If you experience pain, swelling of your eye or if your vision is blurred, see a physician. Your caregiver may put an antibiotic eye ointment in your eye and cover it with a patch. You may need medicine to lessen the pain and swelling.



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HIGH PRESSURE AIR

INTRODUCTION

1. Review any accidents or “near accidents” from the past week.
2. Describe the hazards of the work as they relate to your project. Explain or show the SAFE way of doing the job.
3. Give the TOOL BOX SAFETY TALK

High-pressure air is used so commonly in industry that it is often taken for granted. But that can be a deadly mistake. A stream of compressed air can blind you if it strikes your eye, or it can cause deafness if it goes into your ear. If compressed air enters the body through the nose, mouth, or a break in the skin, it can cause fatal injuries. Follow these safety guidelines when using high-pressure air:

- Before use, check all air hoses, couplings and connections to determine if leakage or other damage exists.
- To prevent injuries from the hose whipping around, always attach the tool securely to the hose before turning on the air.
- Avoid stringing hoses across floors or aisles where they could cause tripping hazards. When possible, air supply hoses should be suspended overhead, or otherwise located to allow efficient access and protection against damage.
- Wear suitable personal protective equipment. Wear hearing and eye protection when operating a compressor.
- Use air pressure only high enough for the task you are doing. Never exceed the recommended air pressure for any equipment.
- Do not lift air tools by the hose.
- Never point the hose at another person. Wait until other people are out of the line of the air-flow. Make sure no one is near the point of operation of the air tool.
- Do not use compressed air to remove dirt or dust from clothing or bare skin.



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HOT WEATHER

INTRODUCTION

1. Review any accidents or “near accidents” from the past week.
2. Describe the hazards of the work as they relate to your project. Explain or show the SAFE way of doing the job.
3. Give the TOOL BOX SAFETY TALK

Working in high temperatures and/or humidity can lead to heat-induced illnesses such as heat stress, heat exhaustion, or the more severe heat stroke, which can result in death. When working in hot weather take these precautions:

- Know the signs/symptoms of heat-related illnesses; monitor yourself and coworkers.
- Block out direct sun or other heat sources.
- Use cooling fans/air-conditioning; rest regularly.
- Drink lots of water; about 1 cup every 15 minutes.
- Wear lightweight, light colored, loose-fitting clothes.
- Avoid alcohol, caffeinated drinks, or heavy meals.
- If someone exhibits symptoms of heat stress move them to a cool, shaded area; loosen or remove heavy clothing; provide cool drinking water: and fan and mist the person with water.



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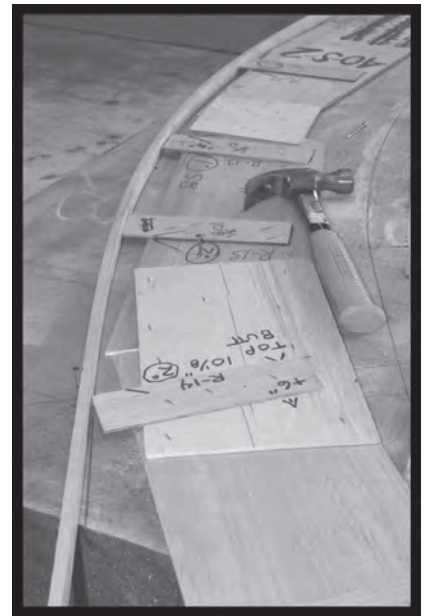
HOUSEKEEPING

INTRODUCTION

1. Review any accidents or “near accidents” from the past week.
2. Describe the hazards of the work as they relate to your project. Explain or show the SAFE way of doing the job.
3. Give the TOOL BOX SAFETY TALK

A safe workplace begins with good housekeeping. Routine housekeeping in the workplace can prevent accidents as fires and slips, trips, and falls. Follow these suggestions to help keep your workspace safe:

- Keep floors clear of debris and spilled liquids. Place warning signs or cones on wet floors.
- Put away tools and materials when you are through with them.
- Pick up all trash and scrap materials and dispose of them in correct containers. Place oily rags in an approved container, which is emptied on a daily basis or as warranted.
- Clean up dust. It can be flammable and explosive.
- Store materials properly. Do not place heavy items overhead. Secure materials so that they cannot fall or roll.
- Keep traffic areas clear of clutter, which can cause falls. This can include boxes of materials, cords, or cables.
- Make sure emergency exits and emergency equipment are not blocked. Never put equipment or furniture in front of an emergency exit - even for just a moment. Fire alarms, fire extinguishers and first aid kits should always be readily accessible.



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MOLD

INTRODUCTION

1. Review any accidents or “near accidents” from the past week.
2. Describe the hazards of the work as they relate to your project. Explain or show the SAFE way of doing the job.
3. Give the TOOL BOX SAFETY TALK

Molds are microscopic organisms found everywhere in the environment, indoors and outdoors. When present in large quantities, molds have the potential to cause adverse health effects, such as sneezing, cough and congestion, runny nose, aggravation of asthma, eye irritation, and dermatitis (skin rash). Take these steps to help prevent mold growth in your workplace:

- Always use proper mold remediation techniques.
- Learn to recognize mold. Mold usually appears as colored, wooly mats and often produces a foul, musty, earthy smell.
- Remove excess moisture with a wet-dry vacuum and dry out the building as quickly as possible.
- Use fans to assist in the drying process.
- Clean wet materials and surfaces with detergent and water.
- Discard all water damaged materials.
- Discard all porous materials that have been wet for more than 48 hours.
- If cleaning up mold, make sure the work area is well-ventilated. Use appropriate respiratory protection and hand and eye protection.



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PESTICIDES

INTRODUCTION

1. Review any accidents or “near accidents” from the past week.
2. Describe the hazards of the work as they relate to your project. Explain or show the SAFE way of doing the job.
3. Give the TOOL BOX SAFETY TALK

Pesticides can cause harm to humans because they are designed to kill or otherwise adversely affect living organisms. Pesticides can enter the body in three ways--by mouth, through the skin and eyes, and through inhalation (breathing into the lungs). Take these precautions when working with pesticides:

- Read labels carefully to determine hazards and methods of protection against the hazards. Follow precautions that appear on the label.
- Choose the correct pesticide for the job. Minimize use when possible.
- Inspect pesticide containers for leaks before handling.
- Wear appropriate personal protective equipment and clothing when handling and spraying pesticide products.
- Wash hands and other exposed areas of the skin after removing personal protective equipment, prior to eating, drinking or smoking, and before leaving the work area (or as soon as feasible).
- Learn to recognize the typical signs of poisoning and the correct first aid procedures.
- Stop work and seek medical attention immediately if you feel ill during pesticide operations.



AGC Tool Box Safety Talk

PROPER LIFTING AND STRETCHING

INTRODUCTION

1. Review any accidents or “near accidents” from the past week.
2. Describe the hazards of the work as they relate to your project. Explain or show the SAFE way of doing the job.
3. Give the TOOL BOX SAFETY TALK

Repeated lifting can result in a variety of injuries. Back strain is the most common type of injury and can result from overstretching muscles. To avoid injury, stretch your muscles before starting your workday and use safe lifting techniques with every lift.

- Size up the load. Use mechanical assistance if necessary.
- Get a firm footing. Keep your feet a shoulders’ width apart for a stable base.
- Bend at your knees, not your waist. Let your leg muscles do the work. Lift with your legs not with your back.
- Keep the load close to your body. For greater strength and stability, lift and carry the object near your waist.
- Move your feet when you change directions; do not twist your upper body while carrying your load.
- Set the load down properly. Bend at your knees and not your back.
- Take mini-breaks throughout the day to stretch and reduce muscle tension that has built up.
- Use lifting equipment such as dolly’s and pallet jacks when available.



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SANDBLASTING

INTRODUCTION

1. Review any accidents or “near accidents” from the past week.
2. Describe the hazards of the work as they relate to your project. Explain or show the SAFE way of doing the job.
3. Give the TOOL BOX SAFETY TALK

Abrasive blasting involves forcefully projecting a stream of abrasive particles onto a surface, usually with compressed air. Because silica sand is commonly used in this process, workers who perform abrasive blasting may be exposed to silicosis, an untreatable, irreversible, and often fatal illness. Take these precautions to prevent exposure to silica and other contaminants such as lead during abrasive blasting operations:

- Make sure you have received training that includes information about health effects, safe work practices, and protective equipment for crystalline silica.
- Use containment methods such as blast-cleaning machines and cabinets to control hazards and protect adjacent workers from exposure.
- Wear respiratory protection when source controls cannot keep silica exposures at safe levels. Wear the most protective respirator that is feasible and consistent with the tasks to be performed.
- Ensure that dusty clothes do not contaminate cars, homes, or worksites other than the blasting area. Change into disposable or washable work clothes at the worksite and change into clean clothes before leaving the worksite.
- Practice good personal hygiene to avoid unnecessary exposure to silica dust. Wash hands and faces before eating, drinking, or smoking; avoid eating, drinking or using tobacco products in the blasting area; and shower before leaving the worksite.
- Park cars where they will not be contaminated with silica and other substances such as lead.



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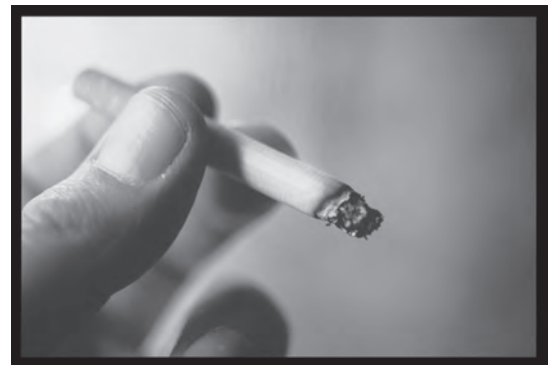
SMOKING

INTRODUCTION

1. Review any accidents or “near accidents” from the past week.
2. Describe the hazards of the work as they relate to your project. Explain or show the SAFE way of doing the job.
3. Give the TOOL BOX SAFETY TALK

The adverse health effects from cigarette smoking account for 440,000 deaths, or nearly 1 of every 5 deaths, each year in the United States. More deaths are caused each year by tobacco use than by all deaths from human immunodeficiency virus (HIV), illegal drug use, alcohol use, motor vehicle injuries, suicides, and murders combined. Consider these facts:

- Cigarette smoking increases the risk for many types of cancer, including cancers of the lip, oral cavity, and lungs.
- The risk of dying from lung cancer is more than 22 times higher among men who smoke cigarettes, and about 12 times higher among women who smoke cigarettes compared with never smokers.
- Cigarette smoking damages the heart and circulatory system. Cigarette smokers are 2–4 times more likely to develop coronary heart disease than nonsmokers. Cigarette smoking approximately doubles a person’s risk for stroke.
- Cigarette smoking contributes to respiratory disease. Cigarette smoking is associated with a ten-fold increase in the risk of dying from chronic obstructive lung disease. About 90% of all deaths from chronic obstructive lung diseases are attributable to cigarette smoking.
- Secondhand smoke exposure causes heart disease and lung cancer in nonsmoking adults. Nonsmokers who are exposed to secondhand smoke at home or work increase their heart disease risk by 25–30 percent and their lung cancer risk by 20–30 percent. Secondhand smoke exposure has immediate adverse effects on the cardiovascular system.
- If you are a smoker, you can help prolong your life and the quality of your life by quitting.
- Sign up for a smoking cessation program. Smoking cessation treatments have been found to be safe and effective. Treatments include counseling and medications, or a combination of both.



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SUN EXPOSURE/SKIN CANCER

INTRODUCTION

1. Review any accidents or “near accidents” from the past week.
2. Describe the hazards of the work as they relate to your project. Explain or show the SAFE way of doing the job.
3. Give the TOOL BOX SAFETY TALK

Sunlight contains ultraviolet (UV) radiation, which causes premature aging of the skin, wrinkles, cataracts, and skin cancer. The amount of damage from UV exposure depends on the strength of the light, the length of exposure, and whether the skin is protected. There are no safe UV rays or safe suntans. Take these precautions protect against overexposure to sunlight:

- Cover up. Wear tightly woven clothing that blocks out light.
- Use sunscreen. A sun protection factor (SPF) of at least 15 blocks 93 percent of UV rays. Block both UVA and UVB rays to guard against skin cancer. Be sure to follow application directions on the bottle.
- Wear a hat. A wide brim hat (not a baseball cap) is ideal because it protects the neck, ears, eyes, forehead, nose, and scalp.
- Wear UV-absorbent shades. Sunglasses don't have to be expensive, but they should block 99 to 100 percent of UVA and UVB radiation.
- Limit exposure. UV rays are most intense between 10 a.m. and 4 p.m.
- Examine your body monthly to look for signs of skin cancer. The most important warning sign is a spot on the skin that changes in size, shape, or color during a period of one month to one or two years. Skin cancers detected early can almost always be cured.



AGC Tool Box Safety Talk

WORKING AND DRINKING ALCOHOL

INTRODUCTION

1. Review any accidents or “near accidents” from the past week.
2. Describe the hazards of the work as they relate to your project. Explain or show the SAFE way of doing the job.
3. Give the TOOL BOX SAFETY TALK

Drinking alcohol on the job is not permitted. In many workplaces, 20 to 25% of accidents involve intoxicated people injuring themselves and innocent victims. Consider these facts:

- Those who drink on the job are at risk not only to themselves but to every employee on the site.
- Drinking on the job could lead to disciplinary action and ultimately, job loss.
- Drinking during off-duty hours can affect a person’s ability to perform at work. If a worker drinks heavily close to the time he or she is scheduled to report to work judgment and reaction times may become compromised.
- Signs of a drinking problem include habitual drinking to calm nerves or alter mood; irritable, resentful, or unreasonable behavior when not drinking; increased tardiness and absenteeism; missing work without notifying management in advance; excessive sick leave due to alleged illness; and increasing errors and a drop in work performance.
- Alcohol abuse not only impairs one’s ability to work, it can also affect a person’s health and relationships with family and friends.
- Help is available for employees with drinking problems, either through company Employee Assistance Plans or family physicians.



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ASBESTOS

INTRODUCTION

1. Review any accidents or “near accidents” from the past week.
2. Describe the hazards of the work as they relate to your project. Explain or show the SAFE way of doing the job.
3. Give the TOOL BOX SAFETY TALK

Asbestos is the name given to a group of naturally occurring minerals used in certain products to resist heat and corrosion. The inhalation of asbestos fibers by workers can cause serious diseases of the lungs and other organs that may not appear until years after the exposure has occurred. When there is risk of exposure to asbestos, take these precautions:

- Become familiar with the types of materials that could contain asbestos.
- Treat any suspicious material as if it contains asbestos. You cannot tell if floor or ceiling tiles contain asbestos just by looking at them. Always advise your supervisor so proper identification can be made.
- Do not disturb any material that may contain asbestos. Asbestos fibers can be released when the material is disturbed.
- If you need to do work that might involve asbestos (lifting ceiling tiles, repairing insulated pipelines, etc.), check with your supervisor to learn requirements for safety.
- Always wear a National Institute for Occupational Safety and Health (NIOSH) approved respirator and protective clothing which includes coveralls, gloves, hats, boots, and a mask when there is risk of exposure to asbestos. Seek approval prior to wearing any respirator.
- In construction, follow special regulated-area requirements for asbestos removal, renovation, and demolition operations.



AGC Tool Box Safety Talk

BLOODBORNE PATHOGENS

INTRODUCTION

1. Review any accidents or “near accidents” from the past week.
2. Describe the hazards of the work as they relate to your project. Explain or show the SAFE way of doing the job.
3. Give the TOOL BOX SAFETY TALK

Bloodborne pathogens are infectious materials in blood that can cause disease in humans, including hepatitis B and C and human immunodeficiency virus, or HIV. Workers exposed to these pathogens risk serious illness or death. Workers other than health professionals are likely to risk exposure to bloodborne pathogens while giving first aid. Although the risk of giving or getting HIV or other serious diseases when administering first aid is very small, it's best to take precautions.

- Bloodborne diseases are spread through direct contact of the blood of an infected person with blood or of a non-infected person through open cuts or sores on the skin or in the mouth or eyes.
- To reduce contact with blood when you are trying to control bleeding, use a barrier—gloves, several dressings, plastic wrap – between you and the victim's blood whenever possible.
- Try to avoid direct contact with other bodily fluids such as saliva, vomit, feces, and urine.
- Try to avoid touching surfaces or objects that have been contaminated with the blood or bodily fluids.
- Always wash your hands immediately with disinfectant soap after giving first aid, even if you wore gloves.
- If you come into contact with a victim's body fluids, seek advice from your physician and report the incident to your supervisor.
- Keep in mind that Good Samaritan Laws in the United States protect from liability for those who choose to aid others who are injured or ill. The law is intended to reduce bystander's hesitation to assist, for fear of being prosecuted for unintentional injury or wrongful death. Obtain first aid training where practical.



AGC Tool Box Safety Talk

PREVENTING CONCRETE BURNS AND CONTACT DERMATITIS

INTRODUCTION

1. Review any accidents or “near accidents” from the past week.
2. Describe the hazards of the work as they relate to your project. Explain or show the SAFE way of doing the job.
3. Give the TOOL BOX SAFETY TALK

Cement and concrete are so common on a construction site that workers often don't think much about them. They're just part of the job. But skin contact with cement dust or wet cement can cause burns, rashes, and other kinds of skin irritation. Cement dust and wet cement can also irritate your eyes. When working with concrete, take these precautions:

- Wear goggles or safety glasses with side shields to protect yourself from splashes.
- Wear boots and other protective clothing if necessary. Make sure boots are high enough to prevent concrete from flowing into them.
- Wear gloves that are impermeable — the cement can't get through them. Leather or cloth work gloves won't protect you.
- Use waterproof pads between fresh concrete surfaces and knees, elbows, and hands when finishing concrete.
- If you get wet or dry cement on your skin or in your eyes, wash or rinse it off immediately with lots of water.
- Rinse clothing saturated with fresh concrete with clean water.
- Use protective barrier creams when practical.



AGC Tool Box Safety Talk

DIESEL HAZARDS

INTRODUCTION

1. Review any accidents or “near accidents” from the past week.
2. Describe the hazards of the work as they relate to your project. Explain or show the SAFE way of doing the job.
3. Give the TOOL BOX SAFETY TALK

Diesel fuel powers lots of equipment and vehicles, but exposure can be hazardous to your health. Direct contact with diesel fuel can irritate skin and aggravate existing skin problems. Exposure to exhaust from diesel fuel can irritate the respiratory tract and cause chronic health problems. Take these precautions to minimize exposure:

- Maintain and tune-up diesel equipment. Check the exhaust system for leaks.
- Fix cracks in vehicles with weather stripping and repair holes in the floor to prevent exhaust from seeping into the vehicle.
- Control exposure to diesel exhaust in enclosed areas by using both local exhaust ventilation and general ventilation systems. Monitor the air when required.
- Minimize diesel engines operations in garages where there is no exhaust system.
- Avoid direct contact with diesel fuel. Wear protective gloves to reduce exposure.
- If you get diesel fuel on your skin or clothing, thoroughly wash the affected skin and remove and isolate contaminated clothing (in a sealed bag). If symptoms such as redness or irritation develop, see a physician.
- If you are overexposed to diesel vapor, leave the contaminated area immediately and take deep breaths of fresh air. If you experience symptoms such as wheezing, coughing, shortness of breath or burning in the mouth, throat or chest, immediately contact your immediate supervisor for further instructions and if medical intervention is appropriate.



AGC Tool Box Safety Talk

GASOLINE HAZARDS

INTRODUCTION

1. Review any accidents or “near accidents” from the past week.
2. Describe the hazards of the work as they relate to your project. Explain or show the SAFE way of doing the job.
3. Give the TOOL BOX SAFETY TALK

A single gallon of gasoline has the explosive energy of several sticks of dynamite. It is the gasoline vapors, not the liquid that are likely to ignite. The vapors are heavier than air, and can move around in unventilated areas like a fluid. Static electricity will ignite gasoline, and the results can be disastrous. Take these precautions when using gasoline:

- Use gasoline only for its intended purpose - to fuel an engine.
- Do not use gasoline as a solvent, cleaner, barbeque starter, or for any other non-engine use.
- Only use gasoline products outdoors, in well-ventilated areas.
- Avoid smoking, lighting matches, or using lighters around gasoline.
- Do not use or store gasoline near possible ignition sources, such as electrical devices, oil or gas-fired appliances, or any other device that contains a pilot flame or a spark.
- Store gasoline in approved containers and appropriately label the container.
- When emptying gasoline from one container to another make sure the containers are properly grounded.



AGC Tool Box Safety Talk

PROPER LABELS

INTRODUCTION

1. Review any accidents or “near accidents” from the past week.
2. Describe the hazards of the work as they relate to your project. Explain or show the SAFE way of doing the job.
3. Give the TOOL BOX SAFETY TALK

OSHA's Hazard Communication Standard requires that all containers of hazardous chemicals be clearly labeled and that warning signs be posted in the workplace. Labels must contain the identify of the hazardous chemical, appropriate hazard warnings, and the name and address of the manufacturer or distributor. Proper labeling helps ensure safe use of chemicals.

- OSHA's Hazard Communication Standard states that labels must be prominently displayed on all containers of hazardous chemicals in the workplace, and MSDS's are readily available in the work area throughout each work shift.
- Additional labeling information may be required in certain states. A few states require the National Fire Protection Association (NFPA) code on the label. Other states may require the Chemical Abstract Services (CAS) number to be on the label. Check your local requirements.
- Read the labels on the hazardous chemicals in your workplace. Follow the label's instructions for safe handling, use, and storage. Always use required Personal Protective Equipment when handling hazardous materials.
- Do not remove or deface labels.
- Do not use products that are not labeled.

HEALTH	FLAMMABILITY	REACTIVITY	PERSONAL PROTECTION	EXAM
4 - Severe 3 - Extreme 2 - Hazardous 1 - Slightly Hazardous 0 - Normal Material	Flash Points 4 - Serious— Below 73°F 3 - Serious— Below 100°F 2 - Moderate— Below 200°F 1 - Slight— Above 200°F 0 - Minimal— SHD Not Burn	4 - May Detonate 3 - Shock and Heat May Detonate 2 - May Chemical Change 1 - Unstable 0 - Stable	W/PE W/VE W/NE W/SE W/DE W/TE W/BE W/LE W/RE W/FE W/DE W/TE W/BE W/LE W/RE W/FE	ACROSS E.A.S. Pictos REACTIVITY W/PE W/VE W/NE W/SE W/DE W/TE W/BE W/LE W/RE W/FE
4 - Deadly 3 - Extreme Danger 2 - Hazardous 1 - Slightly Hazardous 0 - Normal Material	Flash Points 4 - Serious— Below 73°F 3 - Serious— Below 100°F 2 - Moderate— Below 200°F 1 - Slight— Above 200°F 0 - Minimal— SHD Not Burn	4 - May Detonate 3 - Shock and Heat May Detonate 2 - May Chemical Change 1 - Unstable 0 - Stable	OX - Oxidizer AC - Acid AL - Alkali CB - Corrosive W - Use W/ WATER W/ - Wash Resist	OX AC AL CB W W/



AGC Tool Box Safety Talk

MATERIAL SAFETY DATA SHEETS

INTRODUCTION

1. Review any accidents or “near accidents” from the past week.
2. Describe the hazards of the work as they relate to your project. Explain or show the SAFE way of doing the job.
3. Give the TOOL BOX SAFETY TALK

The Material Safety Data Sheet (MSDS) is a detailed information bulletin prepared by the manufacturer or importer of a chemical that provides basic safety information on that chemical. Information on an MSDS helps prepare employers and employees to respond effectively to daily exposure situations as well as to emergency situations.

- Material Safety Data Sheets are addressed in OSHA’s Hazard Communication Standard, which requires chemical manufacturers and importers to provide information on the hazards of the chemicals they produce or import.
- According to OSHA’s Hazard Communication Standard, employers are required to make MSDS’s available to employees for all hazardous chemicals used or stored in the workplace.
- Material Safety Data Sheets are divided into sections. At a minimum, OSHA requires that MSDS’s contain at least the following information: Chemical Identity, Hazardous Ingredients, Physical and Chemical Characteristics, Fire and Explosion Hazard Data, Reactivity Data, Health Hazards, Precautions for Safe Handling and Use, and Hazard Control Measures.
- Always read the MSDS on a chemical before using that product. When reading an MSDS, concentrate on the information that is applicable to your situation. Generally, hazard information and protective measures should be the focus of concern.
- Follow instructions for safe use described in the MSDS. If you have questions, ask your supervisor or safety representative.
- Know where the MSDS’s are located. They are to be accessible to all employees.



AGC Tool Box Safety Talk

RESPIRATORS AND PROPER FIT

INTRODUCTION

1. Review any accidents or “near accidents” from the past week.
2. Describe the hazards of the work as they relate to your project. Explain or show the SAFE way of doing the job.
3. Give the TOOL BOX SAFETY TALK

There are many daily jobs that require the use of respirators to protect your lungs from hazardous atmospheres. To receive their full benefit it's important to use respirators correctly. Follow these safe work practices:

- Wear appropriate respirators to protect against adverse health effects caused by breathing air contaminated with harmful dusts, fogs, fumes, mists, gases, smokes, sprays, or vapors.
- Wear a respirator only if you have been trained in its safe use including prior use fit testing and have been cleared by a licensed health care professional.
- Select the right respirator for the job. The appropriate respirator will depend on the contaminant's to which you are exposed and the protection factor (PF) required.
- Make sure the respirator fits properly. Otherwise, the respirator will not be effective. Facial hair will interfere with proper fit of respirators and should be restricted.
- Perform a fit test each time you use a respirator. Check for a tight seal between the face piece and your face.
- Do not use a respirator if it has not been approved for the specific hazard you are protecting yourself against; if it does not accommodate for glasses, or if you have a beard, mustache, long sideburns, a deep facial scar or deformity.
- If you have lung disease, heart trouble or breathing problems, consult a doctor before using a respirator.
- Do not poke holes in filters.



AGC Tool Box Safety Talk

EYE PROTECTION AND SAFETY GLASSES

INTRODUCTION

1. Review any accidents or “near accidents” from the past week.
2. Describe the hazards of the work as they relate to your project. Explain or show the SAFE way of doing the job.
3. Give the TOOL BOX SAFETY TALK

Eye injuries in the workplace are very common. More than 2,000 people injure their eyes at work each day. Of the total amount of work-related injuries, 10-20 % will cause temporary or permanent vision loss. Experts believe that the correct eye protection could have lessened the severity or even prevented 90% of eye injuries in accidents. When there is risk of eye injury, wear appropriate eye protection.

- Use the appropriate eye protection for the job.
- Each type of protective eyewear is designed to protect against specific hazards.
- Wear safety glasses with side shields to provide protection from the sides for tasks such as sanding, buffing, and drill- press work.
- Wear safety goggles instead of safety glasses or wear a face shield over safety glasses when hazards come from above and below as well as the side, as in lathe work or other high speed cutting and shaping operations.
- If you wear prescription corrective lenses, keep in mind that these will not provide adequate protection against most occupational eye and face hazards. Either wear eye protection that is prescription safety glasses or wear additional eye protection over your prescription lenses.
- If you wear contact lenses, wear eye or face PPE when working in hazardous conditions.



AGC Tool Box Safety Talk

SILICA

INTRODUCTION

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Silicosis is caused by exposure to respirable crystalline silica dust. Crystalline silica is a basic component of soil, sand, granite, and most other types of rock, and is used as an abrasive blasting agent. Silicosis is a progressive, disabling, and often fatal lung disease. Cigarette smoking adds to the lung damage caused by silica. To prevent silicosis, use these safe work practices:

- Use all available engineering controls such as blasting cabinets and local exhaust ventilation.
- Minimize dust by following good work practices, such as removing dust with a water hose or vacuum with a high-efficiency particulate filter rather than blowing it clean with compressed air, or by wet sweeping or by using a compound instead of dry sweeping.
- Substitute with non-crystalline silica blasting material.
- Use respirators approved for protection against silica; if sandblasting, use abrasive blasting respirators.
- Do not eat, drink or smoke near crystalline silica dust.
- Wash hands and face before eating, drinking, or smoking away from exposure area.
- If you believe you are overexposed to silica dust, visit a doctor who knows about lung diseases and report it to your supervisor.



AGC Tool Box Safety Talk

SOFT TISSUE INJURIES

INTRODUCTION

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Soft tissue injuries are a leading cause of injuries in the workplace. Soft tissue injuries include bumps and bruises (contusions) and small tears of muscles (minor strains) or of ligaments and tendons near joints (minor sprains). Most are caused by overexertion and slips, trips, and falls. Take these precautions to help prevent soft tissue injuries:

- Stretch lightly before using your muscles.
- Avoid overexertion. Use ladders to reach overhead objects and mechanical equipment to carry and move heavy materials.
- Use proper techniques. Lift with your legs, not your back.
- Take advantage of breaks to stretch muscles that have become tense from continuous sitting and/or exposure to vibration.
- Use tools properly. Keep most tools between your waist and shoulder height – the “lifting zone” — during use. This gives you the most leverage, and allows the strongest muscles to do the work.
- Keep your work area clean and free of hazards. Pick up loose objects from the floor and clean up spills immediately to eliminate tripping and slipping hazards.
- Maintain a total wellness lifestyle that includes physical conditioning, avoidance of tobacco products, weight management, and healthy eating habits.



AGC Tool Box Safety Talk

USING HAZARDOUS CHEMICALS

INTRODUCTION

1. Review any accidents or “near accidents” from the past week.
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3. Give the TOOL BOX SAFETY TALK

Hazardous chemicals are used routinely in the workplace. Hazardous chemicals may pose physical or health hazards. They may be highly flammable or explosive, corrosive, reactive, dangerous to health, or a combination of these.

- Always use safe work practices when using hazardous chemicals.
- Make sure you are familiar with the hazardous chemicals present in your workplace through your ability to have access to the Material Safety Data Sheet (MSDS) of the product.
- Avoid using chemicals until you receive training on the hazards and protective measures.
- To learn more about a chemical and methods of protection, consult the Material Safety Data Sheet (MSDS) and or the label on the product.
- Always read labels on chemicals before use. Follow directions for safe use.
- When handling chemicals, use personal protective equipment appropriate for the hazards.
- Do not mix products unless directed to do so by label directions. Improper mixing can cause explosive or chemical reactions. Even different brands of the same product can contain incompatible ingredients.
- Be prepared for an emergency. Know how to report a fire, a chemical spill or a chemical release.
- Do not store materials in unmarked containers. Never use materials from unmarked containers.

