



In this Metal and Nonmetal Quarterly

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# Metal and Nonmetal Quarterly

## Watch Your Step!

In the mining industry, many injuries and deaths are reported each year that could have been avoided if miners just watched their step. In 2006, there were 379 fall related fatalities (MSHA). Paying a bit more attention to your surroundings can significantly help reduce your risk of injury due to falls, automotive accidents, and falling material.

Elevated platforms and elevated walk ways pose a serious threat to miners if their attention is divided. Oftentimes a distracted miner can find themselves on the edge of the platform or very close to the sides of an elevated walkway. It takes quick thinking to regain your balance in time as to not fall off. Remember to always use fall protection when on elevated surfaces and always keep a watchful eye out for obstructions. Also remember to be aware of slippery surfaces which can be deadly when not on solid ground.

Keeping an eye on the path you intend to travel is vital information that we all should remember.

Be mindful of large vehicles and heavy machinery. Oftentimes drivers of these massive machines have blind spots.

They may not see you in their mirrors and could potentially cause you harm. Be alert when around front loaders, dump trucks and pick up trucks— material may fall out, striking whoever and whatever is in its path. Keep on your guard— the first signs that danger is near should be the first sign for you to remove yourself from the situation and help avoid accidents.

When you are carrying materials, make sure that your vision is not obstructed by the object(s) you are carrying. Your attention may be completely dedicated to the items you are holding but the materials nor you are safe if you are struck by an object, a vehicle or if you slip or fall from an elevated location. When you are carrying materials, make sure they are not getting in your line of sight so that you can keep your eyes on your walkway.



### Nuggets



**SLAM:**

**S**top what you are doing

**L**ook for hazards

**A**nalyze and assess if you have the tools/skills to fix it

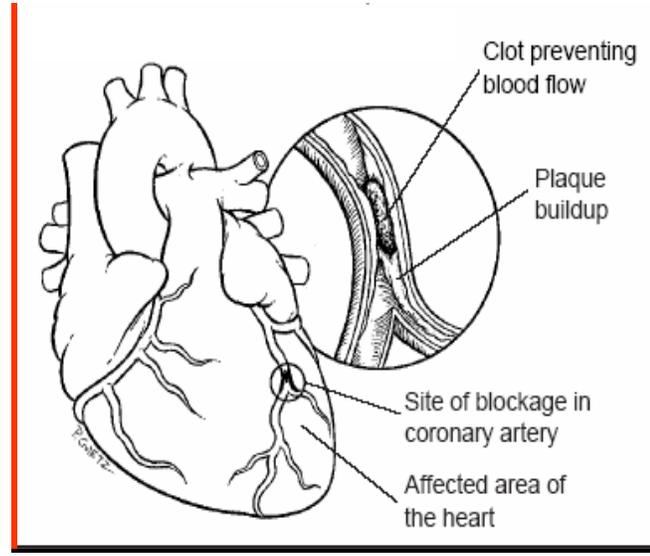
**M**anage it! - Remove/control the situation or find someone who can

**Editor:** Laura McMullen

# What YOU Can Do

## To Prevent Heart Attack & Stroke

According to the American Heart Association, every 34 seconds someone dies from heart or blood vessel diseases—the number one killer for Americans. Strokes account for the third largest number of deaths in America today. A few changes to our daily routine can help prevent heart attacks and strokes from happening to us. Very few Americans think about the effect their diets and exercise routine play in their overall health. Being alert to the warnings signs of strokes and heart attacks and modifying routines according to some of the guidelines below will reduce your risk of heart disease



### Signs Of A Heart Attack:

- Uncomfortable pressure, squeezing, fullness or pain in the center of your chest. It lasts more than a few minutes, or goes away and comes back.
- Pain or discomfort in one or both arms, your back, neck, jaw or stomach.
- Shortness of breath with or without chest discomfort.
- Other signs such as breaking out in a cold sweat, nausea or lightheadedness.

If you or someone you're with has chest discomfort, especially with one or more of the other signs,

**Call for help within or soon after 5 minutes**

Call 9-1-1 or the emergency medical services (EMS) in your area (fire department or ambulance).

**Get to a hospital right away**

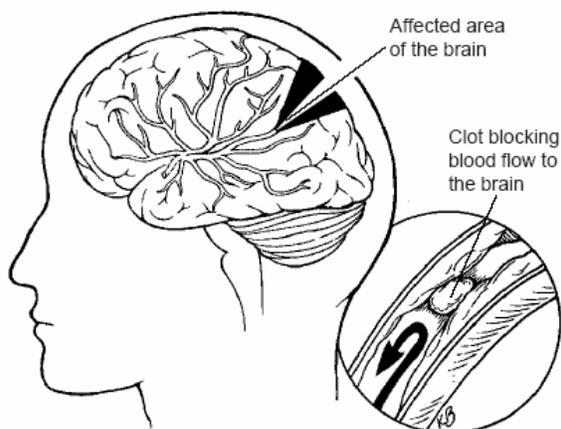
### Warning Signs Of A Stroke:

- Suddenly feel numb or weak in the face, arm or leg, especially on one side of the body.
- Suddenly have trouble seeing with one eye or both of them.
- Suddenly have a hard time talking or understanding what someone is saying.
- Suddenly feel dizzy or lose balance.
- Have a sudden, very bad headache with no known cause.

You may have some or all of the above symptoms. If so, **Call 9-1-1 or the emergency medical services (EMS)** in your area

(fire department or ambulance) immediately.

**Get to a hospital right away**



Brain cells need blood, oxygen and nutrients to work. When blood flow is blocked, you may have a stroke or TIA.

### How Do We Prevent Hearts Attack and Strokes?

- Don't smoke, and avoid other people's tobacco smoke.
  - Treat high blood pressure, if you have it.
- Eat a healthy diet that is low in saturated fat, cholesterol and salt.
  - Exercise at least 30 minutes on most or all days of the week.
  - Keep your weight in the normal range.
  - See your doctor for regular check-ups.

# The Buildup:

## WHAT LEADS TO HEART DISEASE

Your heart is arguably the most vital organ - pumping blood through your body to give life to other vital organs that keep you going. Keeping your heart healthy is important to maintaining overall health. Sometimes, other health factors and habits affect the way our hearts function—making us more susceptible to cardiovascular disease. High blood pressure, obesity, smoking, lack of physical activity and diabetes all play a role in heart health. It is important to keep these in mind when evaluating your total health. Having one or more of the following health problems increases your risk of cardiovascular disease and even premature death.

High blood pressure plagues nearly one in three United States adults according to recent estimates by the American Heart Association. Nearly one third of these people suffering from high blood pressure do not know they have it because there are no symptoms of the disorder. When high blood pressure goes unmonitored and uncontrolled stroke, heart attack, kidney failure and heart failure can all occur. For this reason, high blood pressure is referred to as the “silent killer”. Checking your blood pressure regularly can help you track trends and diagnose high blood pressure.

The most important preventable cause of premature death in the US is cigarette smoking. Nearly 440,000 deaths each year occur because of smoking, of which more than 135,000 are due to smoking related cardiovascular diseases. Cigarette smokers are two-to-three times more likely to die from coronary heart disease than nonsmokers.

Obesity is a major risk factor for cardiovascular disease and has been strongly associated with insulin resistance. Weight loss has been shown to reduce cardiovascular risk, decrease insulin concentration and increase insulin sensitivity. Obesity and insulin resistance also have been shown to be associated with other risk factors, such as high blood pressure. Lack of physical activity is another modifiable major risk factor for insulin resistance and cardiovascular disease. Exercising and losing weight have been shown to prevent or delay the onset of type 2 diabetes, reduce blood pressure and help to reduce the risk for heart attack and stroke. It's likely that any type of physical activity—household work, gardening, or work-related physical activity—is similarly beneficial. Cardiovascular disease is the leading cause of diabetes-related death. People with diabetes are two to four times more likely to develop cardiovascular disease due to a variety of risk factors such as high cholesterol, high blood pressure, and inactivity.

Because of the nature of the above risk factors, having one can often lead to a development of other symptoms. To avoid cardiovascular disease, it is important to stay healthy to avoid contracting these symptoms. It is up to us to intervene and make positive life changes that can increase the length and quality of our lives. Don't be another victim of cardiovascular disease. Prevent heart disease NOW!

# IMPORTANCE OF USING YOUR PERSONAL PROTECTIVE EQUIPMENT

The workplace for miners can be very dangerous and hazardous if correct precautions are not taken. Injuries and fatalities that occur in the mining industry can be caused by a lack of proper personal protective equipment. Just how important are these safety features? Take for instance seatbelts. According to the NHTSA's National Center for Statistics and Analysis' Safety Facts, if all vehicle occupants ages 4 and up wore their seatbelts when in a passenger vehicle 20,960 lives can be saved as opposed to the 15,632 that were saved in 2005. That is 5,328 people who could be still alive today if they only wore their seatbelt.

Personal protective equipment, or PPE, is "designed to protect employees from serious workplace injuries or illnesses resulting from contact with chemical, physical, electrical, mechanical, or other workplace hazards. Besides face shields, safety glasses, hard hats, and safety shoes, PPE includes a variety of devices and garments such as goggles, coveralls, gloves, vests, earplugs, fall protection and respirators"

(OSHA PPE Fact Sheet— [http://www.osha.gov/OshDoc/data\\_General\\_Facts/ppe-factsheet.pdf](http://www.osha.gov/OshDoc/data_General_Facts/ppe-factsheet.pdf)).

Protective devices may be annoying to some, but they prevent serious injury and even death for so many people each day. Goggles can protect you from eye irritants that may cause blindness. Hard hats can protect employees from head impact, penetration injuries, and injuries such as those caused by falling or flying objects and fixed objects. Fall protection prevents death and injuries related to a fall. Because of the serious injuries that they prevent; PPE should be worn by all that would be in danger of personal injury on the job.

It is not enough to just wear PPE—employees must know how to use it correctly in order for the equipment to be used properly. Employees should be required to wear PPE and be educated on how to do the following: use PPE properly; be aware of when PPE is necessary,

know what kind of PPE is necessary; understand the limitations of PPE in protecting employees from injury and adjust, wear, and maintain PPE properly. Equipment such as fall protection could not only save lives but also reduce the likelihood and severity of injury. In 2005, 1,224 construction workers died on the job, with 36 percent of those fatalities resulting from falls (OSHA-Fall Protection).

As of January 1, 1998, Body Harnesses are required by OSHA to be worn by almost all employees to protect them from falls. These body harnesses reduce the severity of injuries encountered when



a worker sustains a fall because it keeps the body in-line and takes the stress of the fall away from the neck and shoulders. These body harnesses are suggested to be worn with shock absorbing lanyards so that the bungee-like effect of the cord absorbs the shock of the fall, preventing the neck from snapping and reducing the stress of the fall on the individual. The chords expand slowly – slowing down the speed

at which the miner falls as well as absorbing some of the force so that the victim does not suffer additional strain as they are hurtled towards the ground. According to the Office of the Assistant Secretary Employee Safety and Health Office Outreach program, "the body harness prevents the loss of life while minimizing the damage sustained by the employee in the fall. A body harness can not be worn improperly" (Office of the Assistant Secretary Employee Safety and Health Office Outreach Program-<http://mshenet.msha.gov/ProgArea/OAS/ESHO/BodyHarness.doc>).

When used properly, protection and other protective equipment can protect miners from injury and death. The importance of these devices cannot be over emphasized. The safety of a mine's most precious commodity – "the miner" is of top concern.

# Sneezes on the Rise: Protect Yourself This Allergy Season

About 26 million Americans suffer from chronic seasonal allergies. Those that suffer from milder allergy symptoms may be as many as 40 million, according to the National Center for Health Statistics. With so many people suffering the tissue blues, it is important to know what steps we should take to help reduce our suffering so we can enjoy the spring weather.

"It's better to get good treatment than to let it go," says William Storms, M.D., an allergist and professor of medicine at the University of Colorado Health Sciences Center in Denver. "Allergies affect a patient's quality of life--productivity, educational performance [, etc. may suffer]". Allergies may also lead to "secondary diseases such as otitis media [ear infections], sinus infections, and asthma" says Storms.

Even though spring is traditionally the main season when allergies blossom because of new growth on trees and weeds, mold, dust mites, pet dander and other indoor allergies can affect us in any season.

Allergies are the body's hypersensitive reaction to substances in the environment. Reactions range from sneezing, watery eyes, itchy skin, and hives to wheezing, shortness of breath, or even anaphylactic shock—when airways in the body swell, shut off flow and blood pressure drops. Anaphylactic shock can end in death. Because of such risks, it is extremely important to track symptoms.

Hay fever is the most common symptom of seasonal allergies. Hay fever can most often be confused with the common cold; however hay fever, in response to an allergic reaction, is often experienced with eye, skin or mouth irritation and can often be associated with a specific trigger.

You can begin to handle chronic allergies by visiting an allergist. The allergist can compile a list of possible allergens by looking at detailed medical history and results from an allergy skin test. Once

the doctor determines what triggers the allergic reactions and to what degree the patients suffers, the doctor can suggest an appropriate treatment plan. In all treatment plans it is strongly suggested the patient stay away from the allergen. Antihistamines, nasal sprays and shots are all treatments that one can consider depending on the severity of your symptoms. Speak to your physician about what treatments are right for you.



Life-threatening allergies are a reality for some people, but for most, they are merely annoying symptoms that accompany the change of seasons. Watery eyes and itching are just part of the deal. Many get accustomed to stocking up on tissues, eye drops and nasal spray. If your symptoms are more than an occasional sneeze and cough, consulting your doctor just might be the best way to combat allergies.

Information provided by the U.S Food and Drug Administration's *FDA Consumer* "Watery Eyes? Runny Nose?..." (March-April 1998)



# Poison Prevention

Accidental poisoning is the second-leading cause of death in the home according to the Home Safety Council. Despite this startling fact, many caregivers are not taking the proper steps to keep family members safe from poisoning in the home. Each year Poison Control Centers receive over two million reports of poisonings, many of which can be avoided if caregivers take the proper steps to protect their families.

Those at the greatest risk are older adults and children under five years of age. In the home, children under the age of five have the highest record of reportable nonfatal poison exposures compared to any other age group. In more than 80 percent of the homes with young children, caregivers admit leaving medicines in unsecured locations and more than 50 percent report leaving dangerous household chemicals accessible to children.

Nearly one in ten caregivers of an older adult age 60 or older recently reported that their loved one had experienced a poisoning incident at home, most frequently from taking the wrong type of medications.

## Poison Prevention Tips:

1. Know what things in and around your home could poison you.
2. Put child safety locks on cabinets to safely store cleaners, medicines, cosmetics, chemicals and other poisons.
3. Keep all of these products in their original packaging with the labels on them.
4. Look at product labels for the words “Caution”, “Warning”, “Danger” or “Poison” on the box or bottle. Follow directions carefully when using these products.
5. Be aware that fuels (such as gasoline), car fluids (such as anti-freeze), pesticides (such as bug killers), and lawn and garden products (such as fertilizer) are poison.
6. Do not mix household products together because their contents could react with dangerous results.
7. Install a carbon monoxide (CO) detector near the bedrooms and the furnace (at least 15 feet away) to warn you of high levels of CO, a deadly gas you cannot see or smell. The gas collects when fuels are burned. Too much collected gas can harm you.
8. Have a service person check heaters, stoves and fireplaces every year to see that they work well.
9. Keep the Poison Control Hotline number by every phone or on the refrigerator: 1-800-222-1222.
10. Know to call 1-800-222-1222 if someone takes poison. This number will connect you to emergency help in your area. You can also call the hotline if you have a question about poisons. It's free, private, and can save you a trip to the emergency room.

Nationwide, every Poison Control Center can be reached by calling the American Association of Poison Control Centers' (AAPCC) hotline, 1-800-222-1222. In the event of a possible poisoning, do not hesitate to call the hotline immediately. It also provides local poison control information.

For more information, visit:  
[www.homesafetycouncil.org](http://www.homesafetycouncil.org) or  
[www.1-800-222-1222.info](http://www.1-800-222-1222.info).

Information provided by:  
Home Safety Council



**POISON**  
**Help**  
**1-800-222-1222**

# Spring Word Jumble

## Spring 2007 Metal Nonmetal Quarterly

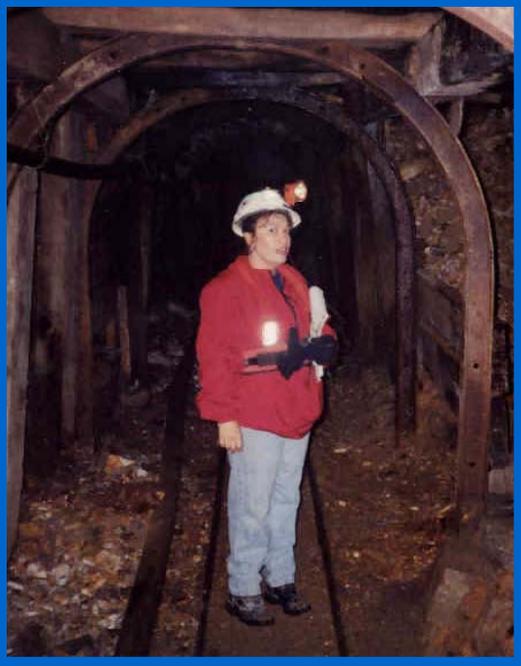
Arrange the letters in proper order to reveal the word used in this month's  
Metal Nonmetal Quarterly.

|                        |  |
|------------------------|--|
| lhHyt                  |  |
| laar Crvdsuocsiidaseea |  |
| Oyiebst                |  |
| iSnkgmo                |  |
| atCtereig              |  |
| ruoiogrhsHeel pb ds    |  |
| onIeptcrs              |  |
| awalkyW                |  |
| roneor Fdtla           |  |
| taviEleon              |  |
| Corvlasel              |  |
| tsreipaRor             |  |
| gsoglGe                |  |
| tqiEupnme              |  |
| erssaHn                |  |
| otrteocPni             |  |
| hcdlrneThe s           |  |
| kreoSt                 |  |
| Cotl                   |  |
| eEsrxeci               |  |

Answers: (In descending order) Healthy, Cardiovascular disease, Obesity, Smoking, Cigarette, High blood pressure, Inspector, Walkway, Front loader, Elevation, Coveralls, Respirator, Goggles, Equipment, Protection, Trench shield, Stroke, Clot, Exercise

# Through Her Eyes:

## A Day In The Life Of A Mine Inspector



The day for a mine inspector begins very early, and very late at night if you are Senior Mine Safety and Health Specialist Laura McMullen. Armed with a clipboard and her personal protective equipment, Laura enters the mines looking for potential health and safety hazards that could cause harm to miners. What is the first thing she looks for? “Footprints.”

Laura looks for footprints because they show where most of the mine traffic is headed. Where miners are working, potential hazards could be lurking. Some of the most common violations include exposed energized electrical parts, improper guarding, low/no berms and employees not wearing their seatbelts. Other common violations include not blocking and chocking equipment and employees failing to wear personal protective equipment.

If work is taking place, Laura first stops the miner from what he or she is doing. If there are no miners working at the site, she asks who performs specific tasks at that location and calls him or her over to the site of the hazard. Laura then calls all miners in the area over to the hazard and explains why the situation is hazardous, how it can harm them and suggests ways to reduce the risk or eliminate it.

Laura talks to every miner she sees. She educates all of the miners on how to correct the hazard then explains to the miners rights under the Federal Mine Safety and Health Act of 1977. Unfortunately, many miners do not know their rights. Under the Mine Act, miners have the right to refuse to work in conditions that pose a threat to their safety and health until the problem is corrected. She always tells them to remember that “safety is everyone’s personal responsibility—the foreman is not solely responsible for safety— we all are responsible for our own safety and the safety of our fellow miners”. Her passion for miners’ safety and health is evident through the interview. Before Laura moves on to the next point of inspection, she reminds the miners of the **SLAM Risks** program-(**Stop Look Analyze Manage Risks**).

**Stop** what you are doing and look around – think through the task.

**Look** around and identify the hazard for each job step.

**Analyze** and assess if you have the knowledge, training and tools to do the job safely. Determine what else you need to safely do the task.

**Manage** the situation by removing or controlling the hazards, always remembering to use proper equipment.

Laura educates miners on how to correct the hazards and advises them to correct them as they find them. Her advice to miners is to remember they are responsible for their own safety. She believes it is important to always make safety a priority not only when working in the mines but in our personal lives. Her motto is “take time for safety now. If you don’t, time won’t matter when you are hurt. You can’t turn back time, but you can manage hazards.”

Previous issues of the Metal and Nonmetal Quarterly are available on the MSHA website at [www.msha.gov](http://www.msha.gov).



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