



In this Metal and Nonmetal Quarterly

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Metal and Nonmetal Quarterly

Multitasking Causes Inattention

Multitasking or performing more than one action simultaneously can actually cause more harm than good. According to a study conducted by researchers at the Virginia Tech Transportation Institute (VTTI), "inattention, distraction and driver fatigue [were] shown to be factors in crashes".

Using cellular phones while driving takes your attention away from the road way and this action triples the likelihood of a crash. "According to studies conducted by the National Highway Traffic Safety Administration (NHTSA), some form of driver distraction is a contributing factor in 20 to 30 percent of all crashes". Therefore, multitasking while operating a vehicle leads to inattention. Inattention can cause deadly accidents.

According to the Department of Transportation (DOT), 70 to 80% of transportation accidents are the result of human error. Guess what the human error is? We all know what it is because we have done it ourselves. The human error is: the driver was not looking at the road. They were multitasking (doing something else while driving), and this required that they take their eyes off the road for just a second.

One highway patrolman said the funniest excuse he had ever heard was "I was just driving down the road and from out of nowhere the car jumped in front of me." Think about what the driver is saying. It is simple, "I had to do something that required me to take my eyes off the road". The Virginia Tech survey also found that reaching for a moving object while operating a vehicle increased the chance of crashing by nine times. When attention is taken away from driving, reaction time is slowed, therefore making accidents a greater

possibility than if all of your energies were focused on the task at hand.

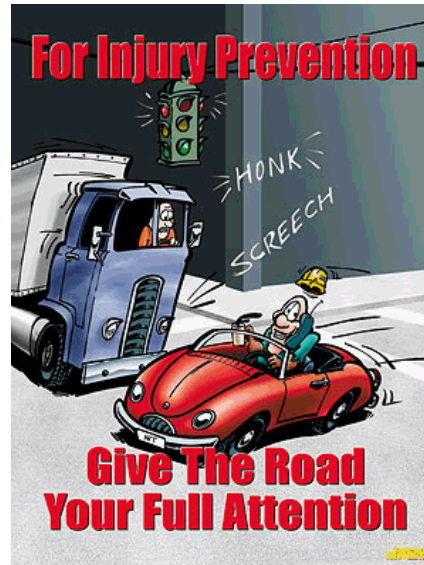
Activities such as reading magazines, grooming, speaking on cellular phones, and checking e-mails all compromise your ability to focus on the road. The NHTSA has said: "Because driving requires full attention and focus...hands-free or hand-held cell phones [cause] cognitive distractions significant enough to degrade a driver's performance. This can cause a driver to miss key visual and audio cues needed to avoid a crash".

So what is the bottom line? Any type of multitasking, especially while operating heavy mobile equipment, or while working around congested areas where traffic is present, can impair an individual's ability to concentrate. This inattention can cause accidents with fatal consequences.


The next time you are operating mobile equipment and your cell phone rings, resist the urge to answer that cell phone. Or how about

when you take your eyes off the road to pick up that bottle of water you dropped? Take the time to pull over to a safe area and park. Then pick up that bottle. The same goes for eating while operating mobile equipment. Don't eat and drive. Highway Patrol Officers comment that when they see a car weaving, most of the time it is because the driver is eating.

If you are walking or working in an area where traffic exists, take the time to communicate with the equipment operator and pay attention to the activity occurring around you. If you must make a phone call or read something, go to an area where there is no traffic. Protect yourself by paying attention to what is going on around YOU!



Nuggets



Remember the importance of TASK Training:

- T**each the miner
- A**ll the job steps and
- S**kills to safely perform the task with
- K**nowledge

Editor: Laura McMullen

Stay Alert!

The key to safe and efficient operations is an operator who is concerned about safety and health. They are constantly alert for situations which may cause injury to him/herself and coworkers, or damage machinery. By remaining alert to your surroundings, the operator can have a significant effect on safety and health. Accidents caused by unsafe operation or carelessness can result in fatalities, personal injury, unnecessary downtime, or costly machine repair. Accidents also contribute to higher production costs, both in terms of dollars and lost opportunities. Most accidents can be avoided simply by paying attention to what is going on in your work area.

Quick Tips

- A quick review of training manuals will help experienced operators refresh their memories about correct operating procedures and appropriate safety precautions. New or inexperienced operators should take time to carefully read the manual and become thoroughly familiar with the operating instructions and safety precautions for the machine.
- Take your time and check for obstructions—Don't hesitate to ask somebody to serve as a lookout.
- Beware of Multitasking - Many individuals compound their problems by attempting to be multitasking drivers. Eating, cell phone use, loud radios- all are distractions that require even the slightest bit of concentration. Talking on the phone or even taking a swig of your water bottle impairs your concentration, which leads operators to taking their eyes off the path they are traveling on. The same goes for using your personal vehicles. At least 22 states have laws pending or are debating legislation to control cell phone use while operating an automobile. The inability to concentrate increases the likelihood of an accident.
- Driver inattention is the leading cause of accidents. According to the Department of Transportation's National Highway Traffic Safety Administration, "nearly 80 percent of crashes and 65 percent of near-crashes involved some form of driver inattention within three seconds before the event". Drivers are still doing what they have always done, from daydreaming to listening to the radio. The debate over driver distraction is almost as old as the automobile. But the fact remains that driver inattention is the leading cause of accidents.
- Intoxication = An Absolute No - Under no circumstances should anyone operate a vehicle or large machinery while under the influence of alcohol or drugs. As much as 75 percent of fatal accidents on the road involve alcohol or drugs to some degree. Considering that there are plenty of alternatives to driving while under the influence, there is really no excuse for putting yourself in the driver's seat



Hazard Alert

Maintenance and Repair Work At Metal and Nonmetal Mines

Maintenance and repair work usually involves multiple activities taking place at the same time. More often than not, employees performing these types of duties work alone. When performing maintenance or repair work, keep these best practices in mind:

- Before you start the job, identify hazards in the area.
- Eliminate identified hazards.
- Follow established procedures for the tasks to be performed.
- If you need help, ASK for it.
- Use and wear all required personal protective equipment.
- Communicate to other employees working in the area what you will be doing.
- Stay alert to what is going on around you.



**Don't Get Hurt
STAY ALERT**



Emergency Preparedness

It is always important to know what to do in case of an emergency, should one arise. Emergency kits are great ways to gather all the essentials in one place so that you and your loved ones are ready to face no matter what obstacle lies ahead. Here are some general guidelines to create an emergency kit that could help you and your family cope in case disaster strikes.

Emergency Kit:

In a durable container, keep the following items:

- Battery-powered flashlight with extra batteries
- Portable radio with extra batteries
- Extra non perishable food (canned or dried food is best)
- Can opener
- Bottled water (at least 3 gallons per person)
- First-aid kit
- If you have a pet, make sure to put food and water in the kit for your pet so that they do not become malnourished or dehydrated
- For infants, make sure to include items such as formula, diapers, etc.
- For the elderly or disabled, make sure to include medication and other medical necessities.



You can tailor your emergency kit to your taste by packing some playing cards, games, and books. These items will help you and your family focus on something besides the storm. In addition to the emergency kit, make sure each member of your household has a warm coat, gloves, hat and water-resistant boots. Extra blankets and heavy clothes should also be available and easily accessible. Be aware of potential fire and carbon monoxide hazards if you plan to use an emergency heating source such as a fireplace, wood stove or space heater. It is a good idea to get a carbon monoxide monitor for your home and for your emergency kit.

Following these simple steps can keep you and your family safe, and give you peace of mind that in case of an emergency, you and your family is prepared.

The VALUE of Partnerships

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Partnerships are relationships between two entities that are based on their close relationships. They are established at the Metal/Nonmetal District level with specific mine operators or contractors. These partnerships are the same as alliances, but they are on a more personal level; forming intimate relationships with the district management. MSHA is creating partnerships with mine operators and contractors such as MSHA's Southeast District and HOLCIM (US) – Holly Hill Plant partnership. Partnerships formed with mine operators and contractors that are committed to improving mine safety and health for the Nation's miners will help MSHA keep miners safe and help reduce the number of injuries, illnesses and fatalities because of the partners' dedication to enforcing mine safety and health regulations.

Partnerships like the one with HOLCIM (US) – Holly Hill Plant will allow both parties to pool resources when necessary to provide efficient and affective training and education, outreach and communication, technical assistance and promoting the national dialog on mine safety and health. There is also an aspect of social responsibility that comes along with partnerships. Participation in a community based event, as in the annual HOLCIM (US) – Holly Hill Kid's Day event to educate community members on the "Stay out, Stay Alive" program will bring government involvement in local community events to a new level.

AGREEMENT ESTABLISHING A PARTNERSHIP
BETWEEN
THE SOUTH EAST DISTRICT, MINE SAFETY AND HEALTH ADMINISTRATION
AND
HOLCIM (US) – HOLLY HILL PLANT

The South East District of MSHA and Holcim (US) Inc. - Holly Hill form an agreement, through the use of collective efforts, expertise and leadership, to foster a culture of injury prevention and to dedicate the necessary resources to address the prevailing safety and health challenges of the mining industry.

- Cooperatively agreeing that "Zero" injuries and industrial illnesses is an achievable goal for the mining industry.
- Committing to a risk analysis program to engage every employee in work-place risk analysis.
- Developing and sharing best practices on effective approaches to controlling safety and health hazards to prevent injuries near-misses, occupational diseases and illnesses.
- Embracing "Training Makes a Difference" values.
- Holcim (US) - Holly Hill agrees to participating in Safety and Health related seminars/conferences and/or Joseph A. Holmes Association meetings. Both management and non-exempt/hourly employees will participate.
- Cooperatively developing incremental goals to improve Holcim (US) - Holly Hill's Safety and Health incidence rates and improve regulatory compliance. Additionally, MSHA will provide technical guidance as support to assist in the achievement of those goals.
- Holcim (US) - Holly Hill will participate in MSHA's Professional Miner Program.
- Cooperative sharing of resources when necessary and appropriate to resolve technical problems at Holcim (US) - Holly Hill, i.e., MSHA Pittsburgh Technology Center, Academy, Small Mines Office, EFS.
- Cooperatively agreeing that it is the goal of both MSHA inspectors and mine operators to resolve citation issues at the close out session and eliminate the need for further conferences.
- MSHA participate in annual Holcim (US) - Holly Hill Kid's Day to educate community members on the "Stay out, Stay Alive" program.
- MSHA will work with Holcim (US) - Holly Hill to reinforce Safe work practices with contractors prior to the winter outage period by participating in a joint training session on contractor safety.
- MSHA will assist in the improvement of Holcim (US) Holly Hill mine rescue and recovery capabilities through cooperative training of the sites Response Team.
- Agreeing to participate in special accident reduction, compliance assistance, and other outreach initiatives as appropriate.
- MSHA sharing its educational resources, e.g., videos, web casting, and long distance learning programs.
- Agreeing to periodic in-person meetings between Holcim (US) – Holly Hill and South East District Management to discuss the progress achieved through this agreement.

MSHA and Holcim will provide all services, product, and resources relating to or created under this Partnership without reimbursement from Holcim.

MSHA and Holcim agree that either party may terminate this Partnership for any reason at any time provided they give 30 days written notice. This agreement also may be modified at any time with the concurrence of all signatories.

Mike Davis
District Manager, South East District
Mine Safety & Health Administration
DATE Oct 31, 2006

Chester Goodson
District Manager, South East District
Mine Safety & Health Administration
DATE Oct 31, 2006



Relationships such as these allow individual mines to strive for higher standards in mine safety and health. Because they have the support of MSHA, they can make some of their goals, such as "Zero" injuries and industrial illnesses", achievable. By partnering up with MSHA, trust can be built and cooperative relationships with the agency can be made. Parties can Network with others committed to mine safety and health and they can leverage resources to maximize miner safety and health protection.

Preparing for a Winter Storm

Winter Weather Safety Rules!

How to stay safe this winter!

1. Dress for cold weather- Wear several layers of loose fitting clothing because entrapped, insulating air, warmed by body heat is the best protection from the cold. Hats and mittens are also great ways to trap body heat.

2. Avoid Overexertion- The strain from cold temperatures and heavy labor such as shoveling, pushing a car, or walking in deep snow may cause a heart attack in older and less physically fit individuals.

3. Winterize Your Vehicle Early- When the weather begins to get colder, make sure to keep your tank greater than half full to avoid freeze ups in your automobile gas line. With good old Jack Frost around, make sure that your car always has adequate anti-freeze in its system. Store extra in the trunk incase you run out of the solution while running errands. Get your car inspected to make sure your heater and defroster are working properly. While you are there; check your tire traction and inflation and battery. It is important to have a battery no more than 3 years old because with age, batteries can loose their ability to charge. Pick up a good ice scraper while you are at it!

4. Carry a Winter-Survival Safety Kit in your vehicle- blankets and a bright piece of cloth to tie on your antenna in case you are stranded because of bad weather are crucial to a Winter-Survival Safety Kit. A compass as well as a shovel, sand, a tow rope, and jumper cables are important to have in your vehicle in times of bad weather. Make sure to have a flashlight with spare batteries, an extra change of clothes to keep dry as well as non-perishable goods such as candy bars, canned food, and energy bars just in case you get snowed in. You can also use waterproof matches to melt snow for drinking

5. Before traveling- Make sure to check the latest weather forecast and road conditions before you head out

into winter weather. Let someone know where you are going and your approximate arrival time, just incase you have difficulty on your journey.

6. If you become stranded in your vehicle during a Winter storm: Stay inside your vehicle. To stay warm, run your engine at 10 minute intervals so that you receive heat without running out of fuel. Maintain proper ventilation by making sure that your exhaust pipe is not plugged with any snow, ice or debris and make sure your windows are opened slightly to avoid carbon monoxide poisoning. Use the bright colored cloth in your survival kit to make yourself visible to rescuers and turn on your dome light at night, but only when running the engine to avoid draining your battery.



7. At home, do the following before winter becomes a reality- Have your furnace checked and seal any windows that may have cracks that allow cold air in with caulking or plastic before the winter weather is in full swing. Creating a home safety kit that includes extra non-perishable food, medicine, and a battery operated radio is great in case of getting snowed in. Keep extra batteries handy as well as a flashlight, candles and matches for a power outage.

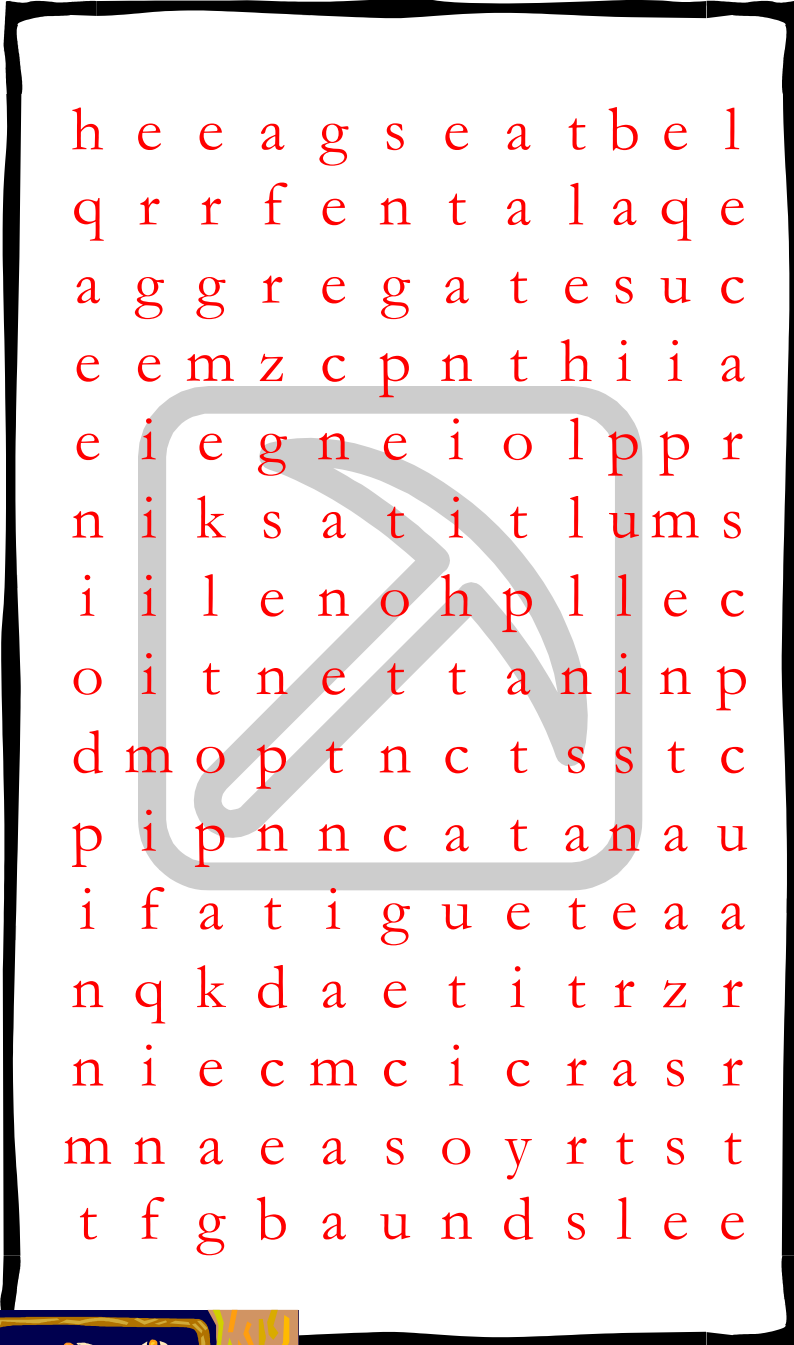
8. If you loose heat in your home, seal off any unused rooms by stuffing towels or rags in the cracks under the doors. This will conserve heat in the places you need it. Cover windows with blankets or sheets at night if you have some extras available to help seal out the cold .Make sure to only use devices that are designated for indoor heating. Follow all safety precautions on the indoor heating unit, taking all precautions necessary.

9. Install and test smoke alarms in your home. Also, have fire extinguishers checked to combat an accidental fire due to the use of alternative heat sources.

Crossword

Metal and Nonmetal Word Search

Use the word key to locate words found in this issue of the Metal and Nonmetal Quarterly



Word Key

- Accident
- Aggregates
- Asphalt
- Caution
- Cell phone
- Emergency kit
- Equipment
- Fatigue
- Hazard
- Inattention
- Maintenance
- Mine
- Multitasking
- Quarry
- Seatbelt



Crushed and Broken Stone Uses



Have you ever looked down at the sidewalk on your way to work and wondered what makes up that magical building material they call concrete? Are you amazed that it paves your way to the office, or think about what is in the roads you drive along every day? Well they are made from aggregate materials such as crushed or broken stone. Aggregates are construction materials of crushed stone, sand and gravel. Crushed stone, which makes up 85 percent of aggregate production, is used to make concrete and asphalt for roads, concrete for homes and office buildings, and is used in a wide variety of erosion control projects. Aggregate operations are relatively long lived and are vital to the economic health of communities.

One mile of typical 2-lane asphalt road with aggregate base requires about 25,000 tons of crushed stone.

The single largest market for aggregates is road and street construction, including base and asphalt paving for highways, parking lots and other pavements.

Other large markets are portland cement concrete for bridges, pavements and building structures, riprap and erosion control stone, and railroad ballast.

Approximately 50 percent of all aggregate is used for publicly funded construction projects such as highways, water and sewer systems, public buildings, airports and other county and municipal public works projects. Over 90 percent of all aggregate is moved by dump truck. Most aggregate is used within 40 miles of where it is produced because it is so heavy.

Previous issues of the Metal and Nonmetal Quarterly are available on the MSHA website at www.msha.gov.



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