

# **BULLETIN**

December 2006 - January 2007

## **Winter Alert Time is Here...**



**“Don’t Let**

**SAFETY**

**Slip”**



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The Department of Labor, Mine Safety and Health Administration and Joseph A. Holmes Safety Association Bulletin contains safety articles on a variety of subjects: fatal accident abstracts, studies, posters, and other health and safety-related topics. This information is provided free of charge and is designed to assist in presentations to groups of mine and plant workers during on-the-job safety meetings. For more information, visit the MSHA home page at [www.msha.gov](http://www.msha.gov).

Please Note: The views and conclusions expressed in Bulletin articles are those of the authors and should not be interpreted as representing official policy or, in the case of a product, representing endorsement by the Mine Safety and Health Administration or National Institute for Occupational Safety and Health.

Cover page: Graphic for the cover, provided by the Graphics Design group, Instructional Materials, National Mine Health and Safety Academy. If you have a potential cover photo, please send an “8”x10” print or digital image on disk at 300 dpi resolution to Donald Starr, Joseph A. Holmes Safety Association Bulletin, National Mine Health and Safety Academy, 1301 Airport Road, Beaver, West Virginia 25813-9426.

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## **MSHA Advises Miners: 'Don't Let Safety Slip' During Winter**

### ***U.S. Department of Labor Kicks Off Winter Alert Campaign for Mine Safety***

Article from MSHA News Release dated: 10/25/06

**ARLINGTON, Va.** — The U.S. Department of Labor's Mine Safety and Health Administration (MSHA) kicks off its 2006 Winter Alert campaign this week reminding mine operators and miners to increase awareness about the hazards that lead to fatal accidents in both underground and surface mines due to the onset of colder weather. MSHA's statistics show that most explosions in coal mines occur during winter months.

"Safety principles should be followed year-round, but miners and mine operators must be more vigilant to safety precautions during wintertime when the weather increases the risk of fatal accidents," said Richard Stickler, assistant secretary of labor for mine safety and health. "As the temperature drops, miners must be aware of how cold weather affects working environments."

MSHA's Winter Alert campaign runs annually from October through March. This year's theme of "Don't Let Safety Slip" reminds mine operators and miners to be alert for environmental hazards such as slippery walkways and icy mine access roads, and to make sure safety rules are not compromised because of seasonal changes.

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Low barometric pressure, low humidity and seasonal drying of areas in coal mines can cause methane to migrate more easily into the mine atmosphere and coal dust to become dry during colder weather increasing the risk of an explosion. Other hazards include limited visibility, icy haul roads, and unstable highwalls due to the freezing and thawing process on highwalls.

MSHA personnel will distribute Winter Alert posters, hard-hat stickers, and decals to mine operators and miners displaying MSHA's safety practices for working in underground and surface mines during wintertime.

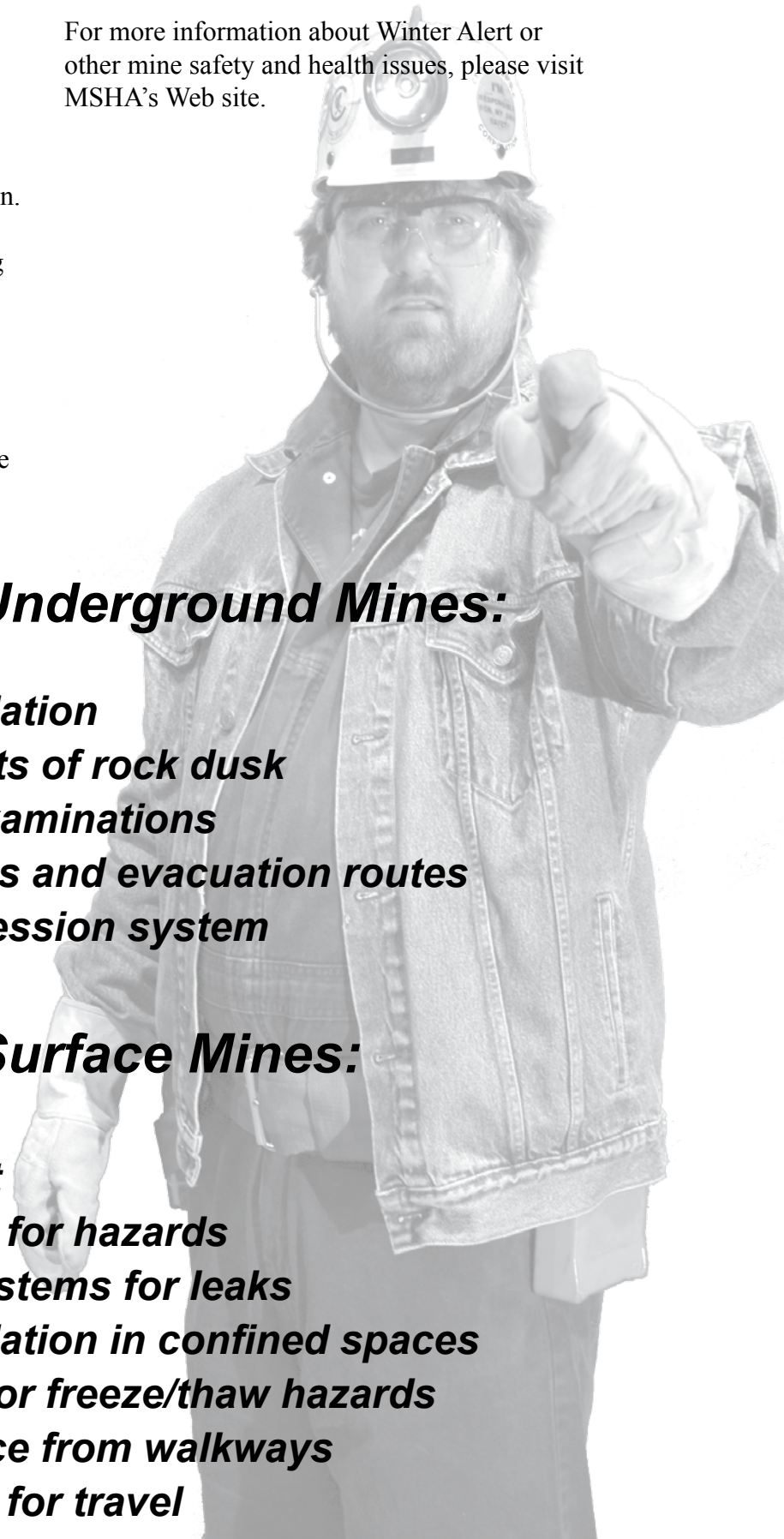
For more information about Winter Alert or other mine safety and health issues, please visit MSHA's Web site.

## ***Safety Checklist at Underground Mines:***

- ✓ ***Ensure proper ventilation***
- ✓ ***Apply liberal amounts of rock dust***
- ✓ ***Conduct frequent examinations***
- ✓ ***Examine escapeways and evacuation routes***
- ✓ ***Winterize fire-suppression system***

## ***Safety Checklist at Surface Mines:***

- ✓ ***Winterize equipment***
- ✓ ***Examine work areas for hazards***
- ✓ ***Examine exhaust systems for leaks***
- ✓ ***Ensure proper ventilation in confined spaces***
- ✓ ***Examine highwalls for freeze/thaw hazards***
- ✓ ***Remove snow and ice from walkways***
- ✓ ***Keep roadways safe for travel***





# MSHA Creates a “One Call Does it All!” Toll-Free Number for Reporting Accidents

Article from MSHA press release dated: 12/08/2006

ARLINGTON, Va. – The U.S. Department of Labor’s Mine Safety and Health Administration (MSHA) today issued a final rule that requires mine operators to increase the availability of emergency breathing devices, provide improved training on the use of the devices, improve emergency evacuation and drill training, install lifelines for emergency evacuation, and require immediate notification of MSHA in the event of an accident.

“These new requirements are an integrated approach to providing proper guidance to miners and mine operators during emergency situations,” said Richard E. Stickler, assistant secretary of labor for mine safety and health. “The new rule adds additional protections for miners and provides them with more tools to survive a mining accident should one occur.”

Earlier this year, MSHA issued a rare emergency temporary standard (ETS) aimed at protecting miners by helping them to evacuate an underground mine in the event of an emergency. MSHA held public hearings on the ETS following its publication in the Federal Register. The process was completed with issuance of the new permanent rule today.

Other requirements of the new rule include:

- Additional self-contained self-rescue (SCSR) devices for persons in underground coal mines—in working

places, on mantrips, in escapeways, and where outby crews work or travel

- Submission of a revised training plan and a revised program of instruction for improved training on SCSRs; it includes a new requirement for annual SCSR expectations training (training in smoke or simulated smoke and breathing through a realistic training unit)
- Improved quarterly emergency mine evacuation training, including a drill
- Installation of lifelines
- Additional multi-gas detectors to alert miners as to when to don SCSRs.

One of the more significant results of the new rule is the establishment of only one phone number for use in reporting mine accidents within 15 minutes after it is known an accident occurred. All mine operators, including operators of metal and non-metal mines, must call 1 (800) 746-1553 to report mining accidents within the required time limit.

Additional information, including the full text of this rule, can be found at [www.msha.gov](http://www.msha.gov).

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# ONE CALL DOES IT ALL!

Immediately Report Accidents to MSHA  
at

# 1-800-746-1553

24 Hours a Day, 7 Days a Week, 365 Days a Year

## IT'S THE LAW!

Beginning December 8, 2006, mine operators are required by the Emergency Mine Evacuation Final Rule to call the MSHA Call Center at 1-800-746-1553 to notify MSHA of immediately reportable accidents. Mine operators are required to notify MSHA immediately, but in no case later than 15 minutes after they know or should know an accident has occurred. For more information, visit [www.msha.gov](http://www.msha.gov).





## 2006 Holmes Scholarships Awards

Article provided by Bob Novello

On June 6, 2006 the Joseph Holmes Scholarship committee recommended to the Holmes Executive Committee that they award three scholarships for the 2006 program. The Executive Committee approved the recommendations and the successful applicants are:

**Delana June Winters** was awarded a \$2,000 scholarship for undergraduate studies at Southeastern Illinois College (SIC). Delana is the mother of three boys ages eleven, twelve, and thirteen. She is a full time employee of Job Corps where she works with underprivileged teens. She is taking night classes at SIC working toward her degree in Applied Science in Coal Mining Technology. With all that she is doing, she has still managed to achieve a cumulative GPA of 3.47 at SIC. She comes from a coal mining family: her father was killed in a fatal coal mining accident in 1990, her mother was one of the first women to work in an underground coal mine, and her brother and uncles are currently working in a coal mine.

**Jonathan M. Glass** was awarded a \$1,000 scholarship for undergraduate studies at Southeastern Illinois College (SIC) majoring in Coal Mining Safety and Technology. Jonathan maintains a full time position during the day and attends SIC at night and on weekends, where he has achieved a cumulative GPA of 3.63. He comes from a family with a five generation tradition in coal mining. This is the second time Jonathan has received a Holmes Scholarship. Jonathan is also a certified EMT and has committed himself to continuing the safety tradition in his family.

**Gregory D. Ison** was awarded a \$1,000 scholarship for undergraduate studies at the University of Kentucky where he is pursuing a Mining Engineering degree. Gregory has achieved a cumulative GPA of 3.08. He has spent his summer and winter breaks working for coal companies and is now in an Engineering Intern program with one of those coal companies, where he is being trained as a future successor to their mining engineering and management team.

# 2006 Mine Construction, Maintenance, and Repairs Seminar Showcases the Benefits of Safety Alliances

by Tom Bonifacio



Construction workers, mechanics, electricians, demolition workers, welders, crane operators, riggers, and safety professionals from throughout the United States and Peru participated in the annual Mine Construction, Maintenance and Repairs Seminar held September 6-7, 2006 at the National Mine Health and Safety Academy, Beckley, West Virginia.

Those attending the seminar reaped the benefits of the safety alliance between the Mine Safety and Health Administration, the International Union of Operating Engineers and the International Association of Iron Workers, which enabled the seminar to provide in-depth and hands-on presentations on 23 topics. Attendance more than doubled from last year's event.

The seminar began with a panel discussion in which ideas were discussed on how to utilize the

alliance to provide comprehensive training and safe workers for mining operations involved in construction, maintenance and repairs activities.

Members from MSHA who participated on the panel included Jeffrey A. Duncan, Director, Educational Policy and Development; James R. Petrie, District Manager, Northeastern District, MNM; Rodric M. Breland, Manager of Western Educational Field Services.

Barbara McCabe, Program Manager of the IUOE National Training Fund, National HAZMAT Program, represented the International Union of Operating Engineers, and Frank Migliaccio, Executive Director of Safety and Health for the International Association of Bridge, Structural, Ornamental, and Reinforcing Ironworkers represented the International Association of Iron Workers.



Members of the audience who participated in the panel discussion provided solid, useful ideas on how to improve the seminar and activities to develop and share training material.

The seminar wouldn't have been a success without the safety professionals who gave freely of their time and resources in order to present the topics for the seminar. A pictorial review of the presentations follows:



*Attendees listen to speakers at the opening day ceremony.*



*Attendees of the seminar listen to panelists.*



*Instructor gives a lecture in one of the classrooms at the seminar.*



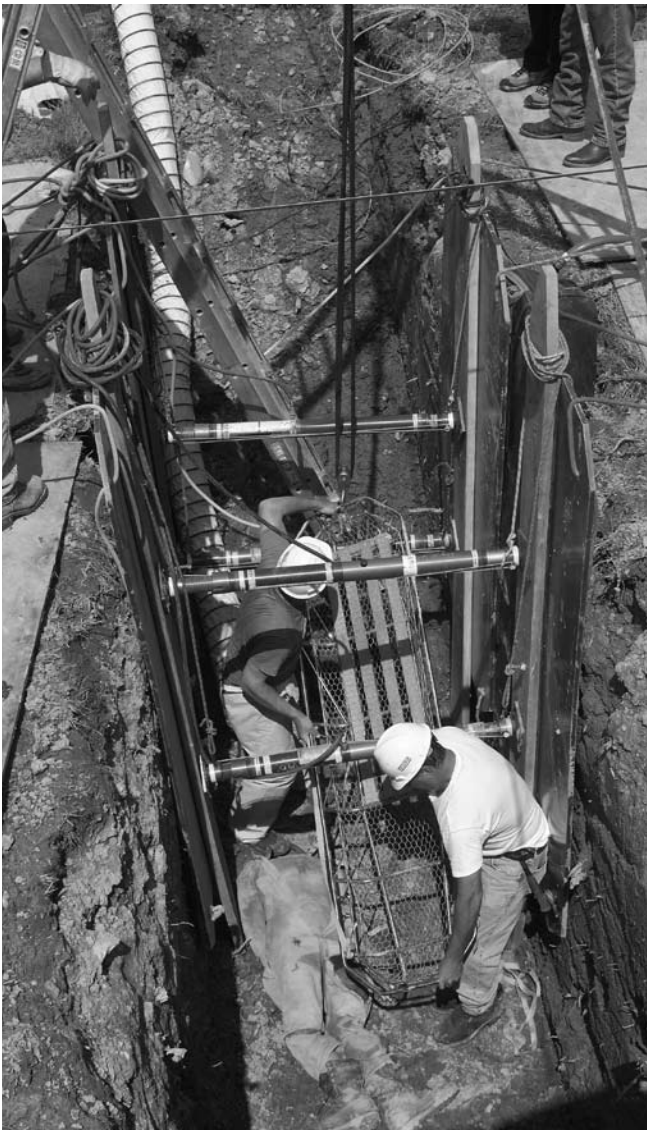
*Seminar attendee presents a question to the discussion panel.*



*Static displays from several organizations were a part of the seminar.*

(See next page)

# Seminar Photo Gallery



*Workers demonstrate proper rescue techniques for rescuing an injured worker from a trench.*



*Instructors giving out safety tips and techniques in Electrical Hazards and Personal Protection workshop.*

*Seminar attendees look on at the Trench and Excavation Rescue demonstration.*





If you were not able to participate in the seminar this year, we want to know why. You missed an excellent seminar! The alliance wants to offer topics of value to you and your operation, and we want you here next year. Please send your comments on what we can do to get you here to:

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*Instructor gives lecture on different types of rigging.*

*Methane gas explosion demonstration (Below). Attendees examine burn material from the explosion (Right).*





# Ladders and Ladder Safety

by Steve Hoyle

We use ladders to help us perform many different tasks. Ladders can be made of wood, metal, or other materials; they look pretty simple, but they can be dangerous.

Studies show that accidents involving ladders usually have three root causes: improper ladder selection, failure to inspect the ladder before use, and improper use of the ladder.

Let's look at these root causes a little more closely.

- *Improper selection* – Make sure that you use the right ladder for the job. For example, metal ladders conduct electricity. Therefore, you do not want to use metal ladders anywhere near electricity. You also do not want to exceed a ladder's weight and height limits. In short, know the hazards of the job and select the right ladder for the job.
- *Failure to inspect the ladder before use* – Using a ladder before inspecting it can have potentially deadly consequences. Check ladders out before using them. If a ladder is defective or has missing parts, there's a good chance that it will not be able to support you safely.
- *Improper use of ladders* – Use ladders for their intended purpose. Ladders are not platforms, scaffolds, skids, or braces. They are designed to get you from one level to another.

Take time to pick the right ladder for the job. Proper ladder selection goes a long way toward protecting you from hazards. Ladder selection involves weight limits and length.



Will the ladder hold your weight safely – and the weight of any other equipment you may be using? Ladders are “rated” according to their capacity.

Ratings – What Do The Numbers Tell Us?

I-A means that a ladder can hold 300 pounds (heavy duty)

I can hold 250 pounds (heavy duty)

II can hold 250 pounds (medium duty)

III can hold 200 pounds (light duty)

Is the ladder the right length for the job?

How Long is Long Enough?

- Stepladders should be no more than 20 feet high.
- One section ladders should be no longer than 30 feet high.
- Extension ladders can be up to 60 feet high; the sections must overlap.

Now is the time to inspect the ladder. Here's a checklist for ladder inspection. The answer to all of these questions is "yes."

Did you check to see that:

- ✓ Steps and rungs are in place and firmly attached?
- ✓ Support braces and devices such as bolts and screws are in place and firmly attached?
- ✓ Metal parts are lubricated where necessary?
- ✓ Rope (where applicable) is not worn or frayed?
- ✓ Spreaders (or other locking devices) are in place and working?
- ✓ Splinters are removed?
- ✓ There are no sharp edges?
- ✓ Safety feet are in place?
- ✓ Metal ladders are not dented or bent?

What do you do if a ladder is defective? Tag it, remove it from service, and tell your supervisor. Do not try to fix a ladder by yourself – that's a job for an expert.

You have selected your ladder, made sure that it is right for the job and checked to see that it is safe. Now you have to get the ladder to the job site. Can you see where you are going? Are other people or equipment in your way?

Of course, you don't want to hurt yourself or others around you, so make sure you carry the

ladder correctly. It's best to use two people to carry a ladder – get help if you need it. If you do it yourself, balance the center of the ladder on your shoulder. Position the ladder so the front end is above your head and back end is near to the ground.

Here you are at the job site. Now what do you do? Assess the situation before you begin. Do you know how to recognize potential risks?

Take time to place the ladder on a level surface. Put wide boards under the ladder if the ground is soft. Make sure the ladder's feet are parallel to the surface the ladder is resting against. The ladder should be positioned so that the distance from the base of the ladder to the wall is  $\frac{1}{4}$  the length of the ladder.

Pay attention to your surroundings. Never place a ladder either on a window or on a window sash. Never place a ladder in front of a door unless you *know positively* that the door is locked, blocked, or guarded.

Position any extension ladder before you extend the ladder. Extend the ladder (where applicable) so that the top of the ladder is at least three feet above the top support. Anchor the top of the ladder and secure the bottom of the ladder as well (or get someone to hold it).

So far, so good. Safe use of a ladder is your responsibility. Here's a list of best safety practices for ladders.

NEVER

- Have more than one person at a time on a ladder.
- Carry tools or equipment in your hands while going up or down a ladder.
- Step on the top two steps of a stepladder.
- Step on the top four rungs of a one-piece or extension ladder.
- Move a ladder while you are on it.

(See next page)



- Leave a raised ladder unattended.
- Let any kind of ladder contact electrical wires.

#### ALWAYS

- Wear shoes or boots with clean, nonskid soles.
- Make sure extension ladder locks are engaged before climbing the ladder.
- Carry tools or equipment up or down on a belt, or use a rope or hoist.
- Face the ladder while climbing up or down; hold the side rails with both hands.
- Keep your body centered on the ladder between the side rails.
- Move slowly and cautiously while on a ladder.

Good housekeeping prevents accidents, so pick up and clean up when the job is done. Return tools and equipment to where they belong and store the ladder (preferably standing up) in a dry area where the temperature is neither too hot nor too cold. If you store a ladder on its side make sure that it's supported on either end and in the middle to keep it from sagging or warping.

Want to find out more? Check these websites.

CSPC Safety Tips

<http://www.cpsc.gov/CPSCPUB/PUBS/ladder.html>

Home Safety Council – Ladder Safety Tips

[http://www.homesafetycouncil.org/safety\\_guide/sg\\_ladder\\_w001.aspx](http://www.homesafetycouncil.org/safety_guide/sg_ladder_w001.aspx)





## Shoveling Snow Safely Be Heart Healthy and Back-Friendly While Shoveling Snow

by Janet Williams

Winter is upon us, and for many, this means tons of the white fluffy stuff. Although snowstorms create fun, frolic, and scenes straight from a Currier and Ives Christmas card, they also produce unwanted snow on sidewalks and driveways. Snow shoveling can be a healthy, good exercise that helps burn calories and can augment your exercise routine.

But because getting rid of snow usually means sudden exertion in cold weather, snow shoveling can be a risk for those who are sedentary or in poor physical condition. Researchers report an increase in the number of fatal heart attacks among snow shovelers after heavy snowfalls. Snow shoveling may cause a quick increase in heart rate and blood pressure and can be made even more difficult by the weather. Cold air makes it harder to work and breathe, adding to the strain on a body. Additional risks are hypothermia, if one is not dressed correctly, and back strain and

injury, if proper shoveling techniques are not practiced.

### Take the Safe Snow Shoveling Quiz

So how much do you really know? The following quiz from the *Canada Safety Council* offers a chance for you to test your safe snow shoveling knowledge.

1. To minimize exposure to the cold I should wait until it stops snowing and do my shoveling all at once.
  - True
  - False



(See next page)

2. Because shoveling counts as moderate physical activity, I need to warm up and drink lots of water.
  - True
  - False
3. I should treat snow shoveling like lifting a heavy object.
  - True
  - False
4. Pushing the snow to the sides of the driveway or sidewalk rather than lifting and throwing is a safer technique.
  - True
  - False
5. If I feel tired or short of breath, it is a sign I am benefiting from the exercise of shoveling and I should continue.
  - True
  - False

### Quiz Results and Tips for Safe Snow Shoveling:

1. **False.** Don't let the snow pile up. Removing smaller amounts of snow more frequently will reduce the need for heavy lifting. If snow has piled up, tackle it in two stages by skimming off the snow from the top, then removing the bottom layer.
2. **True.** Warm up before shoveling by stretching, bending, or marching in place for a few minutes. Warm muscles are less prone to injury. Dehydration is just as big an issue during the cold winter months as it is in the summer, so drink lots of water and take breaks.
3. **True.** Bend the knees while shoveling, not the back, and keep the shovel as close to your body as possible.
4. **True.** By pushing, you avoid the twisting or turning movements that can cause back injury. Use a lightweight, pusher-type shovel that is

not too big. If you must lift snow, avoid filling the shovel full with heavy loads.

**5. False.** Take breaks **before** you feel tired. Rest when you are fatigued. Stop shoveling immediately if you experience chest, shoulder, or back pain. **Remember, the combination of lifting and cold weather can lead to a heart attack.**

### References

Canada Safety Council. (2005). *Canada's voice and resource for safety: Snow shoveling quiz.* (<http://www.safety-council.org/quiz/snowshov-q.htm>).

National Safety Council. (2004). *Snow shoveling.* (<http://www.nsc.org/library/facts/snowshov.htm>).

Wisconsin Heart and Vascular Clinics, S.C. (2006). *Snow shoveling safety: Tips from the American Heart Association.* (<http://www.whvc.org/Content/1588>).



# Personal Safety & Wellbeing: Managing Stress

by Janet Williams



The first article in this series, *Personal Safety & Wellbeing: Understanding Stress*, provided answers to some general questions about stress. “Is stress really a major health problem in America?” “What is stress and is it all that bad?” and “What are some of the causes of stress?” Here we will share strategies for reducing the stress in your life.

Strategies for reducing stress are as individualized as stress itself. What works for one person may not necessarily work for another. The literature reveals countless techniques for dealing with stress. One might conclude that a combination of approaches is the best approach.

Learning to identify the stress in our lives, and making positive change to either eliminate or properly channel that stress, contributes to better health and a greater sense of wellbeing. The key lies in recognizing those things that we can *realistically* change and learning to cope with those things that we cannot change.

Stress can be positive as well as negative and that each person handles stress differently. Healthy stress can interest, excite, and motivate us to achieve, while excessive stress or lack

(See next page)



thereof can lead to problems. Headaches, heart problems, stomach distress, insomnia, anxiety, and depression are just some of the medical and psychological conditions that may be caused by unhealthy levels of stress. A health professional should be consulted if there is any indication of these or other physical and emotional concerns. Remember that stress management is not a substitute for good medical care, but it can be crucial to your overall health and wellbeing.

Even though we may not always be able to control things that cause stress in our lives, we can control the way we react to stressors and/or manage our stress. Here are some techniques to help you reduce or control the stress in your life. As you read through the list of suggestions, remember that what works for someone else may not work for you. Choose what fits you and your situation. It may take time and persistence, and it may even require a change in lifestyle. The key is to find what works for you and stick with it.



- **Identify stressors.** Consider the things that may be causing stress in your life (i.e., friends, family, work, or other issues) and how the stress is affecting you. Take responsibility. Control what you can and leave behind those things you cannot control. Many of us find that we are faced with too many demands and too little time. Most often, these demands are ones we have imposed upon ourselves.
- **Set realistic goals and expectations.** It is important to recognize that you cannot be one hundred percent

successful at everything. No one is perfect, so do not expect perfection from yourself or from others. It is OK to make mistakes now and then. Chalk it up to learning. Identify what really needs to be done, being careful not to take on too much. Applying effective time management strategies such as setting priorities, requesting help when needed, and establishing realistic timelines can be beneficial.

- **Take one thing at a time.** If you are under stress, an ordinary workload may seem unbearable. One way of coping with this feeling of being overwhelmed is to take one thing at a time. Try prioritizing. Choose one task on which to focus your energies. Once you have completed that task, choose another, and so on. Checking tasks off your list can be very rewarding and motivate you to keep going.

- **Assert yourself.** Do not beat yourself up over things. It is difficult to meet the expectations and demands of others. Remember, you cannot please all of the people all of the time. Learn to say NO. If you feel overwhelmed, perhaps you are trying to do too much or taking on more responsibility than you should. Try to eliminate an activity that is not absolutely necessary be it at work or during your leisure time.
- **Healthy lifestyle.** Eat and drink sensibly. Good nutrition really does make a difference. Limit your intake

- of caffeine and alcohol (these may appear to reduce stress, but actually increase symptoms). Get adequate rest, exercise regularly, and find a healthy balance between work and play. Twenty to thirty minutes of physical activity can benefit both body and mind.
- **Eliminate smoking.** Aside from the obvious health risks of smoking, nicotine acts as a stimulant and increases the symptoms of stress.
  - **Use relaxation techniques.** Relax each and every day. There are a variety of relaxation techniques. Take time for deep relaxation and time for aerobic exercise, both are ways to protect your body from the effects of stress. For example, take ten to twenty minutes of quiet reflection (i.e., listen to music, relax and think about something pleasant, or think of nothing at all). This should help relieve existing stress and increase your tolerance level to future stress. Another technique is to picture a stressful situation and imagine how you could manage the situation successfully. Many people believe visual rehearsals increase self-confidence and help them assume a more positive approach to a difficult task.
  - **Hobbies.** Give yourself a break from worry and do something you enjoy. Whether it is gardening or painting, shopping, or taking a walk in the park, it is important for you to schedule time to indulge your interests.
  - **Share your feelings.** Talk with someone you trust. A conversation with a trusted friend or family member gives you a chance to express and
- affirm your feelings. Their love, support, and guidance can oftentimes help you cope. However, if you prefer to talk with someone outside your family or circle of friends, you might talk with your doctor, a religious advisor, professional counselor, or social worker.
- **Live by your values and believe in yourself.** Let your values guide your actions. No matter how busy your life is, you will feel better about yourself when your actions reflect your values and beliefs. Whenever you are feeling overwhelmed, remind yourself of the things you do well. A healthy sense of self-esteem will do you good.
- This is just a sampling of the many strategies you can use to reduce the stress in your life. Ask your health care professional for more information on managing stress.
- Watch for the third article in our series on personal safety and wellbeing to learn about stress in the workplace.
- References*
- American Academy of Family Physicians. (2005). *Stress: Who has time for it?* Leawood, KS. (<http://www.familydoctor.org>).
- National Mental Health Association. (2006). *Factsheet: Stress – Coping with everyday problems.* Alexandria, VA. (<http://www.nmha.org>).
- Reuters Health. (2001). *Stress.* New York: Nidus Information Services, Inc. (<http://www.reutershealth.com/wellconnected/doc31.html>).
- The Cleveland Clinic. (2005). *Manage your stress: Ten ways to ease stress.* Cleveland, OH. (<http://www.clevelandclinic.org>).

# Candle Safety

by Janet Williams

Candles can be aesthetically and aromatically pleasing, and can create a comforting and peaceful ambiance. Unfortunately, they can also lead to disaster. According to the U.S. Fire Administration (USFA), retail sales of candles have increased significantly over the last 10 years – and so too have the number of fires, injuries, and fatalities resulting from their use.



With this article, we hope to “shed some light” on the dangers associated with using candles and give you some helpful information on how to reduce the risk of candle fires while enjoying the romance of candlelight.

The following quiz will test your knowledge about candles and the risk involved in using them.

## Candle Safety Quiz

Answer the following questions True or False. Check your answers on this page to see how “bright” you are about candle safety.

1. Residential fires caused by candles are very rare.  
 True       False
2. The majority of candle fires begin in the kitchen.  
 True       False
3. There are more fires caused by candles in December than in any other month.  
 True       False
4. The majority of candle fires are caused from candle wicks being cut too short.  
 True       False
5. Men are more likely to be injured in candle fires than women.  
 True       False

## Answers to the Candle Safety Quiz

The answers to this quiz were taken from information released in 2006 by the USFA National Fire Data Center.

1. **False.** An estimated 23,600 residential fires are caused by candles each year, leading to 1,525 injuries, 165 fatalities, and \$390 million in property loss.
2. **False.** Over one-third of residential candle fires start in the bedroom.
3. **True.** December has the highest occurrence of residential fires caused by candles.
4. **False.** The majority of residential candle fires were caused by the candle being placed too close to combustible materials.





- 5. False.** More than 95% of candle buyers are women, which may be part of the reason women are 30% more likely to be injured and 45% more likely to die in candle fires than men.

### **More Candle Fire Facts**

As indicated by the growth in retail sales, candles are increasing in popularity. According to the National Fire Protection Association (NFPA), 7 out of 10 households in the U.S. now use candles. Furthermore, younger adults are more likely to use candles than older adults.

The NFPA also reports that children between the ages of 5 and 9 are twice as likely as the general population to die in residential fires caused by candles.

### **Candle Precautions**

When burning candles in your home, keep in mind the following safety tips offered by the NFPA and the Canada Safety Council:

1. Burn candles only when an attentive adult is present.
2. Keep candles away from anything that could catch fire (e.g., curtains, books, etc.).
3. Keep candles away from flammable liquids.
4. Place candles on a stable surface away from drafts and out of the reach of children and pets.
5. Make sure candles are in sturdy holders that will not tip over easily, are made from materials that cannot burn, and are large enough to collect dripping wax.
6. Keep candle wicks trimmed to  $\frac{1}{4}$  inch.



7. Extinguish tapers and pillar candles when they are within 2 inches of the holder. Votives and candles in containers should be extinguished before the last ½ inch of wax begins to melt.
8. Avoid carrying a lighted candle, but if you must, do so with caution.
9. Use flashlights as an alternative light source during power outages rather than candles when possible.
10. Have a fire extinguisher on hand if you burn candles in your home.
11. Never leave candles unattended; extinguish all candles before leaving the house or before going to sleep.

Please review these safety tips with everyone in your household. It is important for children, teens, and adults to know and understand the rules of safe candle use.

If you choose to use candles in your home, use them with care and remember, **“When you go out, blow out!”** (NFPA, Fire Prevention Week 2005).

#### *References*

U.S. Homeland Security, U.S. Fire Administration National Fire Data Center. (2006). *Candle fires in residential structures*. (<http://www.usfa.dhs.gov/statistics/reports/pubs/tfrs.shtm>).

National Fire Protection Association. (2006). *Candle safety*. (<http://www.nfpa.org/search.asp?query=candle+safety>).

Canada Safety Council. *Be careful with candles*. (<http://www.safety-council.org/info/home/candles.html>).



**Picture Gallery**



*Checking the Cables...*



# Are You and Your Vehicle Ready for Winter?

by Steve Hoyle

Just when you get used to warm weather, winter comes around again. Winter driving is dangerous and tough on both you and your car or truck, so take a few minutes now to check your vehicle – it could save your life.

Let's start by looking under the hood – you'll probably need your owner's manual to answer some of these questions.

- ✓ Have you checked your vehicle's ignition, brakes, wiring, hoses, and belts?
- ✓ Is it time to have the cooling flushed and new coolant added?
- ✓ Are all fluid levels o.k.?
- ✓ Is the battery o.k.?
- ✓ Does the vehicle need an oil and filter change?
- ✓ Is the vehicle due for a tune-up?

Now let's look at the tires

- ✓ Are the tires properly inflated?
- ✓ Is the spare tire properly inflated?
- ✓ Is there enough tread on the tires?
- ✓ Have you put snow or studded tires on your vehicle if necessary?

Get inside the vehicle – you'll need someone to help you with some of these checks.

- ✓ Are the headlights working properly – both low and high beams?
- ✓ Are all turn signals working?
- ✓ Do all backup lights work?
- ✓ Do the emergency flashers work?
- ✓ Do both the heater and defroster work?
- ✓ Does the windshield washer work? Did





you remember to fill the washer reservoir with fluid for low temperatures?

- ✓ Do the wipers work – do you need to replace the wiper blades?

Let's look inside the trunk

- ✓ Is the spare tire there?
- ✓ Is the spare tire properly inflated?
- ✓ Is there a lug wrench and jack in the trunk?
- ✓ Do you know how to set up and operate the jack safely?
- ✓ Do you need tow and tire chains?
- ✓ Do you have a set of jumper cables and know how to use them safely?
- ✓ Is there a bag of rock salt or cat litter in the trunk?
- ✓ Do you have something to put under the wheels for traction in case you get stuck?
- ✓ Do you have an ice scraper and snow shovel?
- ✓ Do you have a tool kit, working flashlight, and extra batteries?

- ✓ Do you have flares, reflective triangles and brightly colored cloth?
- ✓ Is the first aid kit up-to-date and fully stocked?
- ✓ Do you have a supply of non-perishable high energy foods?
- ✓ Do you have extra mittens, socks, a cap, and a blanket? This is specially important if you drive long distances in cold, snowy conditions.

Allow extra time to reach your destination. Most important, remember to adjust your driving to road and weather conditions, and allow extra distance between your vehicle and others on the road.

Find out more at these websites:

“Cold Weather ‘To Do’ List.”

<http://www.roadandtravel.com/carcare/winter.htm>

“Fluids”

<http://www.theallineed.com/entertainment/05011003.htm>

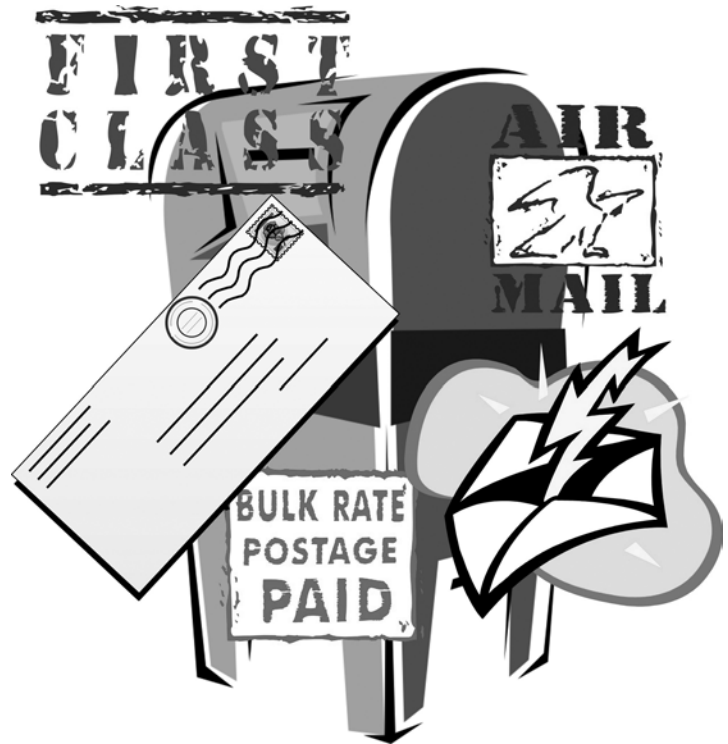
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Reminder: The District Council Safety Competition for 2007 is underway—please remember that if you are participating this year, you need to mail your quarterly report to:

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