Winter Safety Tips

KATHRYN BLASS

Two big winter snow storms have come and gone and we are in the midst of a polar freeze. As you navigate the winter season, keep in mind these tips to guide you safely through!

First, slow down…don’t move so fast. Drive slower, walk slower, shovel slower. Taking a little extra time may ultimately be the best way to save time and complete the task.

For walking in snow and ice:
1. Wear shoes or boots with slip-resistant soles, and wide, low heels.
2. Consider obtaining products to attach to your shoes to improve traction when outside on ice. Two products available are YakTrax, www.yaktrax.com, and STABIlicers, www.32north.com/4-play. Warning: Remove these products before going inside so you don’t slip and fall on the tile floor.
3. Walk with small steps or shuffle, as needed, with arms out to sides for balance.
4. On campus, you can report icy patches to Grounds Services at 617-253-5001, and help us all be a little safer. At home, clear your walks and treat surfaces, as needed, with eco-friendly ice melts.

For safe shoveling:
1. Start with an ergonomic shovel such as the one pictured below. A shovel with a bent handle can make a big difference for your back.
2. Push the snow as much as possible. If you need to lift it, don’t overload the shovel, lift forward and up, and avoid twisting.
3. Start clearing snow before it becomes heavy and packed, and try to clear it before it melts and refreezes.
4. If you opt for a snow-blower instead, remember to stop the engine and turn the power off if the blower becomes jammed. Use the handle of a rake or shovel to break up ice or snow clogged in the blower.

For more winter safety tips, visit the EHS Office Winter Safety web page at: ehs.mit.edu/site/content/winter-safety
Nano Materials Update: Exposure Limits

MARILYN HALLOCK

NIOSH Establishes New Occupational Exposure Limit for Carbon Nanotubes and Carbon Nanofibers

The National Institute for Occupational Safety and Health (NIOSH) has recently issued a new occupational exposure limit for carbon nanotubes (CNT) and carbon nanofibers (CNF). NIOSH reviewed 54 lab animal studies which showed serious pulmonary toxicity such as inflammation, granulomas, and fibrosis that developed rapidly and persisted after exposure ended. The Recommended Exposure Limit (REL) was set at 1 µg/m³ for eight hours a day over a working lifetime to prevent the development of lung toxicity. The REL was based on a quantitative risk assessment, extrapolating from the animal studies to humans. This REL is comparable to RELs developed for other very toxic particulates, such as crystalline silica (25 µg/m³) and cadmium (2 µg/m³). Please see NIOSH Current Intelligence Bulletin 65 for more information: [www.cdc.gov/niosh/docs/2013-145/](http://www.cdc.gov/niosh/docs/2013-145/).

At MIT all work with CNTs, CNFs, and other nanoparticles that may produce aerosols must be done under exhaust ventilation such as fume hoods, biosafety cabinets, or nano enclosures to prevent inhalation of particles. See the EHS web site for more information on how to work safely with nano materials at: [ehs.mit.edu/site/content/working-safely-nanomaterials](http://ehs.mit.edu/site/content/working-safely-nanomaterials). If you wish to have your lab evaluated for possible exposure to nano materials, please contact the EHS Office at environment@mit.edu.

For an opportunity to learn more about nanomaterial health and safety, you may want to attend the IAP Session:

- **Health and Safety Issues of Nanomaterials**
  Marilyn Hallock & Susan Leite
  Jan 23, Thu, 11am–12pm, 46-3189
  *No advanced sign-up needed.*

Plan to be (Emergency) Prepared

SUSAN LEITE

Is it a surprise that the word “prepared” surfaces frequently in the most quotable quotes, particularly in connection with success? MIT abounds with the spirit of preparedness, typically in the quest to be the best, the most innovative, and the most game-changing. What about preparedness for ourselves to handle the unthinkable? In the last 18 months, several “unthinkable” emergency scenarios tested MIT. Though challenged, the Institute emerged resilient. The experiences highlighted our strengths along with opportunities to build a more robust system.

One opportunity identified was a need for all campus Departments to have a current Emergency Preparedness Plan (EPP). The MIT Environment Health and Safety (EHS) Office and the MIT Security and Emergency Management Office (SEMO) have been working with Departments across campus to establish a current all hazards Emergency Preparedness Plan (EPP) for the New Year. These plans are designed to provide everyone with a common understanding of what to do across a broad spectrum of scenarios: fires, power and utility outages, severe weather, and yes, even the spine-chilling thought of a violent intruder. To assist with plan development, the MIT EHS Office developed an all-hazards EPP template. See the Emergency Management webpage for more details about EPPs and planning. For questions about the status of your Department’s EPP send an email to environment@mit.edu.

Now, test your own fortune by guessing who is behind the memorable lines in this article! [flip to bottom/end of newsletter]
Spotlight: ROCK THE COAT/EHS IAP OFFERINGS

Embrace your creativity and make use of that smart phone with a video camera by making a short video about use of lab coats and entering it into our contest. First Prize is $1000, second prize is $500.00. For contest rules and registration, visit: labcoats.mit.edu/contest

IAP is a wonderful time for investigating both new and familiar topics, from how samples from outer space are managed to ways to improve housekeeping in the lab. Consider attending one of the sessions listed below sponsored by the EHS Office.

- Preventing Contamination and Maintaining Return-Sample Integrity from Near Planet Missions
  Dr. Claudia Mickelson, EHS Deputy Dir. and Special Advisor to the VP for Rsrch, Dr. Catharine Conley, Planetary Protection Officer, NASA
  Jan 27/28, Mon and Tues, 9am–4pm, N52-496
  Sign up by 01/10, Enrollment limited.

- Computer Workstation Ergonomics
  Suzanne Adams
  Jan 07, Tue, 11:30am–12:30pm, 4-145.
  No advanced sign-up needed.

- Strategies for Good Housekeeping in Your Lab or Work Space
  EHS Office Staff
  Jan 30, Thu, 1–2pm, N52-496.
  Advance sign-up required.

- Introduction to the FDA Investigational New Drug Process: Getting from Bench to Bedside
  Dr. Claudia Mickelson, EHS Deputy Dir. and Special Advisor to the VP for Rsrch
  Jan/29, Wed, 10am–12pm, N52-496
  Enrollment Limited

Visit: ehs.mit.edu/site/content/ehs-iap for other IAP offerings from the EHS Office and information for sign up, when required.

Answers from page 2
A) Louis Pasteur
B) Miguel de Cervantes
C) Johann Wolfgang von Goethe

Questions? Comments? We'd love to hear from you!
Please email environment@mit.edu