Spring Facility Managers Meeting

June 13, 2018

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University of Wisconsin-Madison

Agenda

- Update on Dry Ice Safety Recommendations (New Poster)
- Campus AED Program Update – What you need to know
- Waste Drums for Recycling

Dry Ice Safety

What's Changed?

1. Changed the wording of "Effects of CO_2 Exposure" to "Carbon Dioxide Toxicity"
2. Under "Carbon Dioxide Toxicity" we've added the term "unconsciousness"
3. New section on "Disposing of Dry Ice"
    a. DO NOT dispose of dry ice in a regular trash can!!

DRY ICE SAFETY

Hazards of Dry Ice

Dry ice is solid Carbon Dioxide (CO_2) and is extremely cold

As dry ice heats up, it sublimes into asphyxiant gas

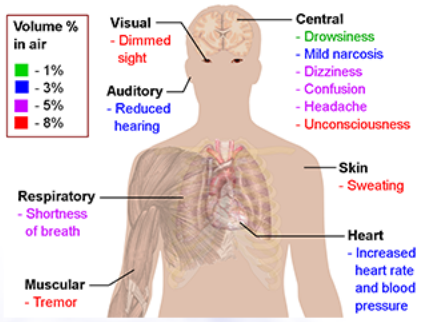
A small amount of dry ice can sublime into a large volume of gas

Dry ice can be hazardous when used or stored in a confined space or when consumed in "smoke drinks"

In well-ventilated areas, CO_2 gas dissipates and is harmless. However, in confined or poorly ventilated spaces, CO_2 gas can accumulate

Risks of CO_2 exposure include: dizziness, loss of consciousness, and suffocation

Carbon dioxide toxicity



How to Handle Dry Ice

Wear thermal gloves when handling dry ice

Store in a well-ventilated space

Do not consume dry ice

Secure dry ice to prevent unauthorized access

Do not store in tightly sealed containers

Avoid leaning into or over any storage container storing dry ice

Transporting Dry Ice

You should avoid transporting dry ice in the cab of a truck or passenger compartment of a car when possible

If you must transport dry ice in the driver's compartment, ensure the compartment is well-ventilated (windows open)

Make sure the container holding the dry ice is closed securely to minimize the release of gas

Transporting dry ice in an insulated cooler will minimize off-gassing

Load and unload dry ice in a well-ventilated area

Disposing of Dry Ice

Let the unused portion sublimate in a well-ventilated area

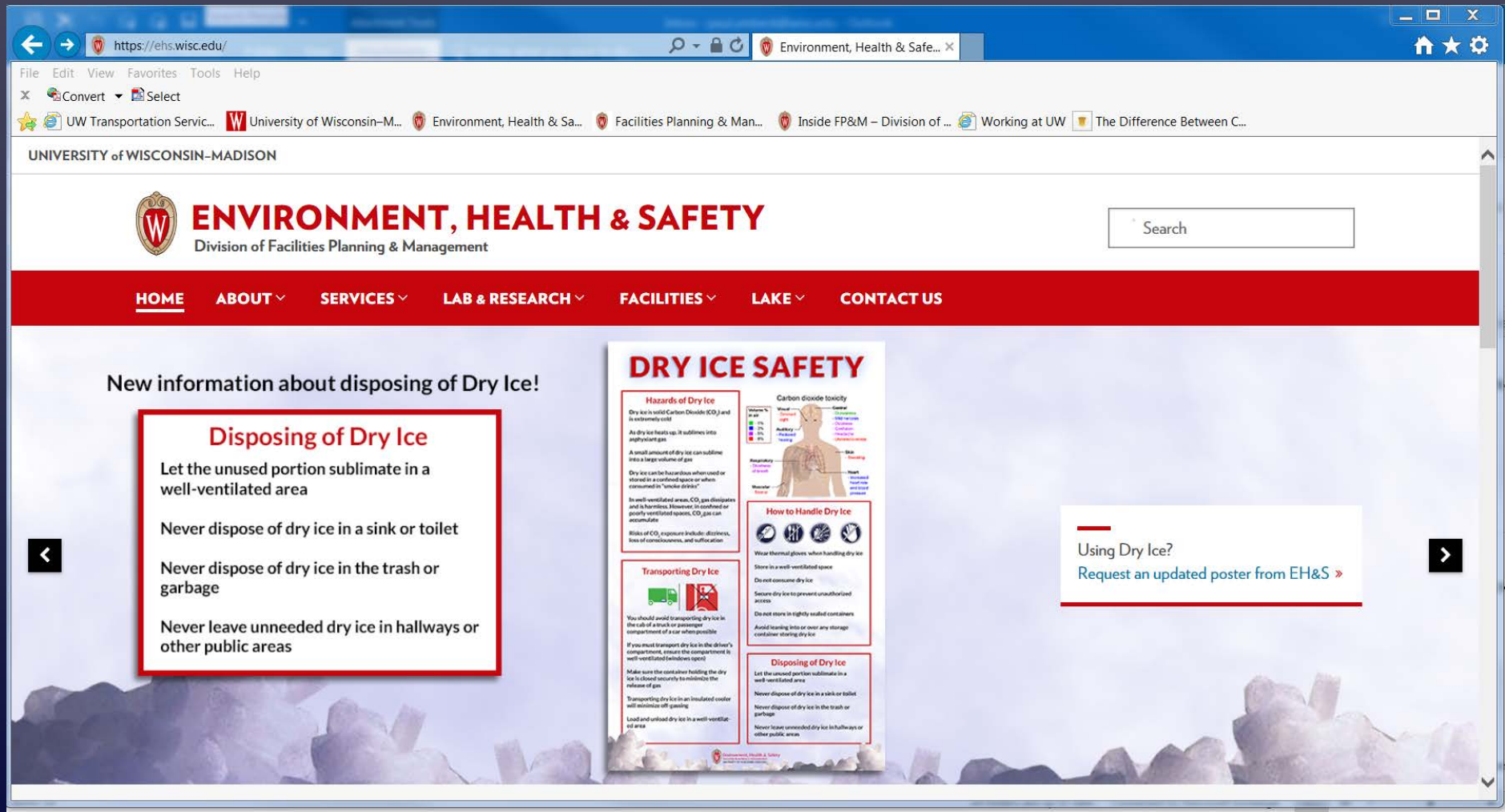
Never dispose of dry ice in a sink or toilet

Never dispose of dry ice in the trash or garbage

Never leave unneeded dry ice in hallways or other public areas

Environment, Health & Safety
FACILITIES PLANNING & MANAGEMENT
UNIVERSITY OF WISCONSIN–MADISON

To obtain copies of the Dry Ice Safety poster contact:
Chemical Safety at chemsafety@fpm.wisc.edu
or Call: 608-265-5700



AED Program

UW-Madison AED Program

- Initially, our program started with 60 publically available AEDs on campus
  - Does not include AEDs located within healthcare facilities that are not designated as public access
- Current count is 220 AED in 95 campus buildings
  - This does not include portable AEDs for UWPD, AEDs available in buildings managed by UW Athletics, EMTs, registered nurses, etc. that are authorized to use AEDs due to specific training and reporting requirements

What is Happening With AEDs on Campus?

- ☺ Standardization of AEDs across campus
  - ☺ By make and model
- ☺ Centralize AED purchases and consumable parts purchases
  - ☺ Will help drive down initial ownership and maintenance costs
  - ☺ Continuity of familiarity of AED units across campus

AEDs Standardization on Campus

- Departments would need to agree to participate in the program to take advantage of purchasing power and replacement parts
  - Fire & Life Safety will fully monitor units for battery and pad replacements – No units would be taken out of service
  - No need for inspection notices to facility managers
  - Departments would still be responsible for AED purchase and replacement costs of batteries and pads
  - Facility managers and departments would consult with F&L Safety prior to AED relocation with a building
  - F&L Safety would keep building evacuation maps current with AED locations in a building
  - All AEDs would be entered into Pulse Point AED phone App

Recall & End-of-Life AED Units

- Recall Notification by Philips on Feb. 16, 2018
  - AEDs typically have a self-test that runs automatically when not in use
  - Isolated failures can occur that cannot be detected by the self-tests
  - During use, these failures can put patients at risk of not receiving therapy
  - Failures could result in serious injury or death

- UW-Madison has 38 AED's involved in the recall
- We also have 10 units approaching their end-of-life
- Replacements and EOL units will become part of the centralized purchasing process

Drums

Drums – Transport & Disposal

- Recently, issues have been raised concerning the transportation of hazardous materials/drums by Campus Services
- University employees are broadly exempt from the Federal Motor Carrier regulations
  - Personnel transporting chemical hazardous materials may be required to acquire a CDL Class H – Hazardous Materials endorsement to ensure complete compliance with all applicable local, state and federal regulations, reduce accident liability risk and maximize protection of University personnel and property according to UW Risk Management recommendations
- Empty chemical drums will no longer be transported by Campus Services

HAZARDOUS MATERIALS PLACARDING CHART

CLASS 1

EXPLOSIVES 1.1, 1.2, & 1.3
*The Division number 1.1, 1.2 or 1.3 and compatibility group are in black ink. Placard any quantity of Division number 1.1, 1.2 or 1.3 material.

CLASS 1

EXPLOSIVES 1.4
*The compatibility group is in black ink. Placard 454 kg (1,001 lb) or more of 1.4 Explosives.

CLASS 1

EXPLOSIVES 1.5
*The compatibility group is in black ink. Placard 454 kg (1,001 lb) or more of 1.5 Blasting Agents.

CLASS 1

EXPLOSIVES 1.6
*The compatibility group is in black ink. Placard 454 kg (1,001 lb) or more of 1.6 Explosives.

CLASS 2

OXYGEN
Placard 454 kg (1,001 lb) or more aggregate gross weight of either oxygen compressed or oxygen, refrigerated liquid. See §172.504(f)(7).

CLASS 2 Division 2.1

FLAMMABLE GAS
Placard 454 kg (1,001 lb) or more of flammable gas. See DANGEROUS.

CLASS 2 Division 2.2

NON-FLAMMABLE GAS
Placard 454 kg (1,001 lb) or more aggregate gross weight of non-flammable gas. See DANGEROUS.

CLASS 2 Division 2.3

POISON GAS
Placard any quantity of poisonous by inhalation material.

CLASS 3

FLAMMABLE
Placard 454 kg (1,001 lb) or more gross weight of flammable liquid. See DANGEROUS.

CLASS 3

GASOLINE
May be used in the place of FLAMMABLE on a placard displayed on a cargo tank or a portable tank being used to transport gasoline by highway. See §172.542(a).

CLASS 3

COMBUSTIBLE
Placard a combustible liquid when transported in bulk. A FLAMMABLE placard may be used in place of a Combustible placard on a cargo tank or portable tank or a compartmented tank car which contains both flammable and combustible liquids. See §172.504(f)(2).

CLASS 3

FUEL OIL
May be used in place of COMBUSTIBLE on a placard displayed on a cargo tank or portable tank being used to transport by highway fuel oil not classed as a flammable liquid. See §172.544(b).

CLASS 4 Division 4.1

FLAMMABLE SOLID
Placard 454 kg (1,001 lb) or more gross weight of flammable solid. See DANGEROUS.

CLASS 4 Division 4.2

SPONTANEOUSLY COMBUSTIBLE
Placard 454 kg (1,001 lb) or more gross weight of spontaneously combustible material. See DANGEROUS.

CLASS 4 Division 4.3

DANGEROUS WHEN WET MATERIAL
Placard any quantity of dangerous when wet material.

CLASS 5 Division 5.1

OXIDIZER
Placard 454 kg (1,001 lb) or more gross weight of oxidizing material. See DANGEROUS.

CLASS 5 Division 5.2

ORGANIC PEROXIDE
Placard 454 kg (1,001 lb) or more gross weight of organic peroxide. See DANGEROUS. Placard any quantity of 5.2, ORGANIC PEROXIDE, TYPE B, LIQUID OR SOLID, TEMPERATURE CONTROLLED.

CLASS 6 Division 6.1 Inhalation Hazard

POISON INHALATION HAZARD
Placard any quantity of poisonous by Inhalation material.

CLASS 6 Division 6.1 Other Than Inhalation Hazard

POISON
Placard 454 kg (1,001 lb) or more gross weight of poison. See DANGEROUS.
See TOXIC and PG III placards.

CLASS 6 Division 6.1 Other Than Inhalation Hazard

TOXIC
Placard 454 kg (1,001 lb) or more gross weight of poison. See DANGEROUS.
The word "TOXIC" is allowed to be used in place of the word "POISON."

CLASS 6 Division 6.1 Other Than Inhalation Hazard

PACKING GROUP III
Placard 454 kg (1,001 lb) or more gross weight of Packing Group III. See DANGEROUS. The text "PG III" is allowed to be used in place of the word "POISON."

CLASS 7

RADIOACTIVE
Placard any quantity of packages bearing the RADIOACTIVE YELLOW III label; unpackaged LSA-I or SCO-I shipments; exclusive use shipments per §§173.427, 173.441, 173.457, and closed vehicles per §173.443(b).

CLASS 8

CORROSIVE
Placard 454 kg (1,001 lb) or more gross weight of corrosive material. See DANGEROUS.

CLASS 9

MISCELLANEOUS
A Class 9 placard is not required. However, you may placard 454 kg (1,001 lb) or more gross weight of a material which presents a hazard during transport, but which is not included in any other hazard class. See DANGEROUS.

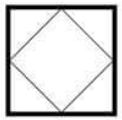
SUBSIDIARY RISK

NUMBERED

DANGEROUS

Placard 454 kg (1,001 lb) gross weight of two or more categories of hazardous materials listed in Table 2.
A freight container, unit load device, transport vehicle, or rail car which contains nonbulk packages with two or more categories of hazardous materials that require different placards, as specified in Table 2, may be placarded with a DANGEROUS placard instead of the separate placarding specified for each of the materials in Table 2. However, when 1,000 kg (2,205 lb) aggregate gross weight or more of one category of material is loaded therein at one loading facility on a freight container, unit load device, transport vehicle, or rail car, the placard specified in Table 2 for that category must be applied.

SQUARE BACKGROUND



The white square background is required for the following placards when on rail cars: EXPLOSIVES 1.1 or 1.2; POISON GAS (Division 2.3, Hazard Zone A); POISON INHALATION HAZARD (Division 6.1, PG I, Hazard Zone A) and for DOT 113 tank cars FLAMMABLE GAS.
The white square background is required for placards on motor vehicles transporting highway route controlled quantities of Class 7 materials.

DISPLAY OF IDENTIFICATION NUMBER

The display of an identification number on a placard is allowed, except for Class 1, Class 7, DANGEROUS, or subsidiary hazard placards.

For a COMBUSTIBLE placard used to display an identification number, the entire background below the identification number must be white for transportation by rail and may be white for transportation by highway.

1132 (Rev. 10/14)

Process for Empty Drum Disposal/Recycling

- In order for Physical Plant (Waste and Recycling) to dispose of metal or plastic 55-gallon drums the disposer of the drums must:
  - Submit a Work Order to Physical Plant Customer Services
  - Ensure both bung plugs are removed
  - Ensure that each barrel is Triple-Rinsed, Empty and Dry inside
  - Clearly mark each barrel *"TRIPLE RINSED"* (with a Sharpie or other indelible marker) including the name and phone number of the disposer
- If drums contain residue that you are unable to rinse, such as oil or hard debris, please contact the Department of Environment, Health & Safety (EH&S) and submit the Chemical Waste/Surplus Pickup Request Form for drum pick-up and removal

RATING EXPLANATION GUIDE					
HEALTH		FLAMMABLE		REACTIVE	
Recommended Protection		Susceptibility to Burning		Susceptibility to Energy Release	
4	Special full protective suit and breathing apparatus must be worn	4	Very Flammable	4	May detonate under normal conditions
3	Full protective suit and breathing apparatus should be worn	3	Ignites under normal temperature conditions	3	May detonate with shock or heat
2	Breathing apparatus with full face mask should be worn	2	Ignites with moderate heating	2	Violent chemical change but does not detonate
1	Breathing apparatus may be worn	1	Ignites when preheated	1	Not stable if heated use precautions
0	No precautions necessary	0	Will not Ignite	0	Normally stable

DOT Placard & HazMat Placard NFPA Ratings
This particular sign is for Diesel Fuel Oil No. 1