**SUMMARY TIPS**

- Store in ventilated area
- Do not use in confined spaces or unventilated rooms
- Do not store in sealed containers
- Avoid contact with skin

**DRY ICE**

**THE COLD FACTS**

It’s the “smoke” drifting across a stage or the packet in a shipment of perishable food items. Dry ice is frozen carbon dioxide (CO₂) and sublimes or goes from a solid to a gas without becoming a liquid. One pound of dry ice will sublime to produce 8.8 ft³ of CO₂ gas. In a typical cooler, dry ice will sublime at a rate of 1-2%/hr. When left at room temperature it sublimes at a much faster rate. A 2 pound block of dry ice left at room temperature may sublime completely in as little as 15 minutes, and pellets even faster.

**OSHA LIMITS**

OSHA limits CO₂ 8 hr. exposure to 5000 ppm or 0.5%. Levels approaching 4% are dangerous. This means that as little as 5 pounds of dry ice left over the weekend in a walk-in cooler with no air circulation could potentially raise the CO₂ to a hazardous level by the start of work on a Monday morning! If dry ice has been in a closed space, open doors and allow adequate ventilation before entering the space. CO₂ is heavier than air and will accumulate in low spaces. Do not enter closed storage areas that have contained dry ice before airing out completely. Warning signs for CO₂ exposure include rapid breathing, and blue lips or fingernails. Any of these mean it’s time to get to fresh air!

**WHAT WENT WRONG?**

One woman died and another was in critical condition after the car they were driving filled with CO₂ when coolers in the back seat containing dry ice leaked.

Three people died in a swimming pool that dry ice was thrown into for theatrical effect. The CO₂ quickly overcame those that were in the pool at the time.

**Questions?**

If you have any further questions or need assistance with safe handling of dry ice, please don’t hesitate to contact Safety Management at 581-4055 or email us at sem@maine.edu.

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- Do not use in confined spaces or unventilated rooms
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- Avoid contact with skin

Dry ice is extremely cold at -109.3°F. Contact with bare skin can cause frostbite. Always handle dry ice with care. Wear protective clothing, and insulated gloves whenever touching it, and use tongs if possible.