Safe Handling of Dry Ice

Procedure Overview
Hazard Recognition

- Dry ice is the solid form of carbon dioxide that is available in flakes, pellets or block form and is non-combustible.
- Dry Ice will sublime (vaporize directly to the gas state) at a temperature of -78.5°C (-109.3°F) or higher. Dry ice will sublimate about 5 to 10 pounds every 24 hours (blocks last longer) in a typical storage cooler.
- Handle dry ice with appropriate PPE – insulated gloves, face shield/goggles and lab coat.
  - Exposed skin can result in burns/frostbite in a short period of time.
- Use of dry ice in poorly ventilated areas can result in the depletion of the oxygen level resulting in asphyxiation.
- Placing dry ice into a tightly sealed container can produce sufficient gas build up to cause an explosion.
Safe Handling & Disposal

• Shipping dry ice requires DOT training. Training is available on the RMS website at [http://riskmanagement.nd.edu/training/shipping-dry-ice-training/](http://riskmanagement.nd.edu/training/shipping-dry-ice-training/)

• Storage containers of dry ice require hazard communication labeling. Example label:

• Proper disposal methods:
  – Let the unused portion sublimate in a well-ventilated area
  – Never dispose of dry ice in a sink, toilet or other drain.
  – Never dispose of dry ice in the trash or garbage
  – Never leave surplus dry ice in the corridors.