

Liquid Nitrogen Dewar Spill

Thursday, October 5, 2017

Situation

A researcher was alone in the loading dock while retrieving a 55 L dewar of liquid nitrogen. While transferring the dewar onto a cart for transport, the researcher slipped, dislodging the dewar from a hook and causing it to fall on its side. Immediately, the dewar's pressure relief valve opened and cold nitrogen gas came streaming out. This gas exhaust continued for about 10 minutes. During this time, the researcher left the dock to prevent asphyxiation and called DEHS. When the DEHS employee arrived, the two were able to set the dewar upright.

Suggestions

- When transporting heavy objects such as large cryogenics dewars, researchers should use the buddy system to have better control and prevent injury.
- Whenever asphyxiation is an active risk, you should leave the area and notify others so they don't walk into an oxygen deficient atmosphere.