



# ASPHYXIATION HAZARDS

## ASPHYXIATION CAN HAPPEN ANYWHERE, TO ANYONE



Jan 2021

Chemical Safety Board deployed after six workers were killed at a Poultry Plant in Georgia.



Dec 2020

Leaking Nitrogen kills two workers at a California Food Processing Plant.



Feb 2020

Two people were killed after entering a tank purged with Nitrogen at a steel fabricator facility.



May 2014

Argon welding gas used in a confined space killed one worker and injured a rescuer in the oil and gas industry.



June 2011

Carbon Dioxide leaked, killing one person and injuring two firefighters at a fast food restaurant.

## NITROGEN

## CARBON DIOXIDE

## ARGON

## HELIUM



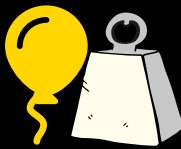
### Danger of Displacement

Inert gas kills by displacing oxygen in the air. Oxygen concentrations below 19.5% are unsafe and people experience immediate impact at 16%.

### Liquid Death



Liquid inert gas expands nearly 700 times its original volume when it leaks from equipment.



### Highs and Lows

Test all elevations because gas can sink or rise if it is heavier or lighter than air.

### Without Warning



Most inert gases are odorless and people can be easily overwhelmed before they realize what is happening.

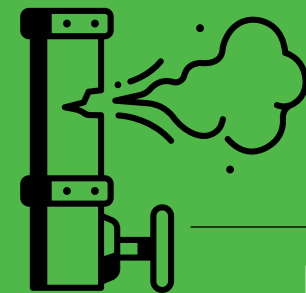
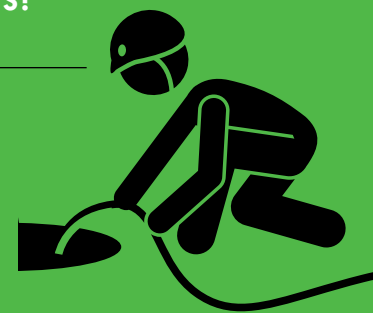
## PREVENT TRAGEDY TOGETHER

We all have a role to play to prevent injury and death due to asphyxiation.



**LOOK** for inert gas supply lines and storage areas. Ask questions to **UNDERSTAND** the hazards!

**MONITOR** the atmosphere, respond to **ALARMS**, and **VENTILATE** the area!



**MAINTAIN** equipment and report leaks immediately, evacuating out of harm's way.

Do not allow complacency to creep into your workspace. **TRUST BUT VERIFY** and speak up when things aren't right. Looking out for each other saves lives!



**No one should die at work. Asphyxiation hazards should be considered within an operational risk management program.**

CONTACT US

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On the safe side.