It is silent and deadly, it can strike without warning. It can kill your employees, your patrons, even you. It is odorless, colorless and can't be detected by human senses. Nearly every restaurant uses this gas in bulk form to create the fizz in soft drinks. I'm talking about CO2, carbon dioxide. Without careful precautions, this innocent gas can become a killer.

In recent years, several deaths have occurred at restaurants as a result of CO2 poisoning. The victims have been restaurant employees, patrons and CO2 delivery drivers. An 80 year old woman in Florida died in the restroom when gas seeped into the bathroom while CO2 tanks were being refilled. In this case, a line that was designed to funnel excess CO2 out of the restaurant was disconnected. Nine other people were sickened in the incident including three firefighters and two other patrons who were found unconscious after trying to help the dying woman. In another case an 18 year old McDonald's employee and a CO2 delivery driver both died from asphyxiation from a leak near a fill port which was located in a small room with no ventilation.

CO2 exposure can cause cause dramatic effects in a person quickly and silently. Here are some of the warning signs that you may be exposed: labored breathing, severe headaches, increased heartbeat, faintness and dulled awareness or poor judgment. If the exposure is strong enough or lasts for a long enough time then a victim might experience unconsciousness, rigidity, tremors, convulsions, asphyxiation or even death. And all of this can occur without warning and in the presence of normal oxygen levels.

CO2 poisonings in restaurants are most often related to leakages in older or retrofitted installations or fill ports, or in lines in or near enclosed spaces. CO2 is heavier than oxygen and so it will tend to be trapped closer to the ground. For this reason, your CO2 alarms should be mounted close to the ground near your fill ports. Consult your supplier for the most appropriate type of alarm for your particular restaurant.

OSHA has published a list of guidelines for safer use of bulk CO2. Here's a short list of those recommendations. People handling liquid CO2 should be thoroughly familiar with the hazards. New CO2 receptacles should be installed at ground level. Properly ventilate fill areas to allow exhaust to leave at the lowest level and replacement oxygen to enter the room at a higher point. Develop and implement a procedure to monitor CO2 levels near all fill ports. Display warning signs outside areas where high concentrations of CO2 could build up. Establish and implement procedures for inspection and maintenance, at regular intervals of all piping, tubing, hoses and fittings. Make sure that you have proper lighting at the fill ports to allow servicing workers to use

these systems safely.

Some simple precautions and education of your employees could help save a life. CO2 is not often thought of as a killer by most people in our society. It is up to you to take the precautions needed to keep others safe in your restaurant.

Clinard Insurance Group, located in Winston Salem, NC is a niche player in the restaurant insurance market. We want all restaurant insurance buyers to be informed consumers. If you would like help with your restaurant insurance, please call us, toll free, at 877-687-7557.