Cold Storage Safety Meeting Kit

Cold storage spaces include refrigerator or freezer boxes or rooms in which food and other materials can be stored or processed at controlled, cool temperatures. When you work in and around such spaces, get training and be aware of the hazards that might be involved with cold storage: cold stress, slips and trips, confined space, chemical storage, and ergonomics.

DANGERS TO WORKERS

People in real life get trapped in walk-in refrigerators or freezers, and sometimes they die. Exposure to cold temperatures can cause hypothermia, a potentially fatal lowering of the body's core temperature. If the space is small, lack of oxygen could cause death before freezing does. Spending too long a time in a freezer, or being in continual contact with frozen items, can also cause frostbite, which is tissue damage from freezing. Amputating fingers and toes is sometimes necessary after frostbite.

DANGERS IN COLD STORAGE FACILITIES: Cold storage facilities carry all the same potential dangers as a standard warehouse, as well as a few special risks and fire hazards that have to be dealt with. Risk assessment shows the kind of approach a cold storage warehouse might take.

Insulated Metal Panels: Effectively sustaining adequate temperature ranges in refrigerated warehouses presents itself as an obstacle that is frequently cleared by installing insulation in the ceilings and walls of the facility. However, it's important to avoid using unprotected spray-on foam padding while performing cold storage maintenance in order to lessen the chances of fire spreading quickly across the building's ceilings and walls.

Ammonia: Very frequently, ammonia is the preferred coolant in refrigerated storage facilities. Anhydrous ammonia, which is a highly combustible gas, has the ability to cause catastrophic fires and explosions

Moisture: In addition to temperatures within cold storage units and warehouses, moisture levels are of considerable importance. When relative humidity levels are too dry, goods dehydrate and shrink. When condensation levels are too high, electronics may experience problems, goods deteriorate and products may experience mold, bacterial or insect contamination that may pose health risks to workers and consumers.

Fire risks: It may sound illogical given the extremely cold conditions, but cold storage facilities actually carry a fire risk. Contributing factors include chemicals, air composition, and storage of flammable materials.

SAFETY SOLUTIONS TO MINIMIZE RISK FOR WORKERS: Because cold storage areas are generally confined spaces, there is always a need to get training and become familiar with the safety features along with some pre-requisite safety measures. Here are safety solutions to minimize risk.

- reduce worker exposure to the cold, consider using upright or deep freezers instead of walk-in coldrooms
- reduce the time workers are in coldrooms – restrict to the shortest time period possible
- for periods of more than about 10 minutes, ensuring clothing suits the temperature and duration of activity and minimises skin exposure to the cold (eg thermal/fleece jumper, gloves, hat etc.)
- ensure walk-in coldrooms' internal door opening mechanisms are in good working order and are regularly maintained and tested
- ensure walk-in coldrooms have emergency alarm buttons fitted and regularly tested so that anyone trapped inside can send for help
- use slip-resistant floor surfaces to reduce slip hazards
- maintain good housekeeping practices when stacking and storing items to remove trip hazards
- use a buddy system to provide an immediate support in the event of an emergency and avoiding people working in isolation

- have emergency response procedures in place with appropriate training and regular test drills
- have reliable communications systems in place that you test regularly
- assess manual handling tasks and implementing systems to eliminate the risk of injury
- provide appropriate personal protective equipment (PPE) to suit the working conditions (eg footwear and clothing) and making sure workers wear it.
- For escape in an emergency, cold storage rooms should have at least one door that opens from the inside
- Lighting must be supplied through a constantly burning bulb or a light with an illuminated switch located inside the cold room
- If anti-freeze doors are not installed at the cold storage workplace, ensure a firefighter's axe is available.
- Doors at the worksite must have inside and outside locking mechanisms.
- Other options include posting warning signage on the door and providing audible and visible signal systems inside the room that are tested daily.
- Ensure that chemicals in cold storage are stocked properly and with compatible materials.
- Note that forklifts and combustion equipment can cause fumes to build up in enclosed spaces – use only with proper ventilation.

BEST SAFETY COLD STORAGE PRACTICES TAKEAWAYS

- **Provide Proper Work Attire:** When working in areas with low temperatures, all employees should have protective clothing to prevent slips and frost-related health issues. Make sure employees have warm, layered clothes, gloves with gripping surfaces and steel toe shoes with non-slip soles. Also, make sure employees have easy access to a warm room with warmers and hot beverages.
- **Practice Regular Facility Upkeep:** Keep your cold storage

warehouse in pristine condition and safe by regularly removing any ice buildup and maintaining workspaces by clearing debris and promptly cleaning any spills.

- **Install Safety Features:** To avoid accidentally having employees locked in cold storage spaces, create safety guidelines and install the necessary equipment. Only allow authorized workers into specific areas, ensure there is at least one clearly marked emergency exit that opens from the inside and install a battery backed-up alarm and lighting system that automatically triggers during lock-ins.
- **Follow Proper Operating Procedures:** Always follow safety guides when using large machinery or equipment to prevent and avoid unexpected equipment failures and potential personal injuries.
- **Conduct Regular Health Screenings:** All cold storage employees should be periodically screened and tested throughout the year to ensure they’re physically fit enough to work in a cold storage warehouse.

FINAL WORD

Cold conditions can increase the hazards of strains and sprains in jobs such as processing poultry, meat or fish. Talk to your supervisor about the correct procedures and equipment to help you work without developing repetitive strain injuries.