

Safety Protocol for using and working in the School of Biological Sciences Walk-in Freezers

15th December 2015

Introduction

The School of Biological Sciences (SBS) currently has four -20°C walk-in freezers that staff and students can use. These are room 273, 374 and 474 in the Biology Building (SBS1) and a temporary freezer located in the Biology car park. The aim of this safety protocol is to inform the user of the risks and correct procedures to minimise injury and remain safe when using and working in these areas.

Hazards

The temperature inside the walk-in freezers is set at -20 °C. Therefore, this environment is defined as extreme thermal working conditions. If someone were to be trapped inside the walk-in freezer, was unable to leave the freezer by their own means or was working inside the freezer for long periods they could quickly be put at risk of cold-related medical conditions.

Cold-related medical conditions are; freezing injuries (frost nip and frost bite), hypothermia, and pre-existing medical conditions brought on by cold (such as asthma). It should be noted that these medical conditions are more serious than the discomfort many people experience when feeling cold.

Other hazards which may be encountered when entering and working in these areas are; physical injuries from slips and falls due to condensate freezing on the floor. Items inappropriately stored or restrained in the area. Physical injury, chemical and/or biological hazards from the items stored in the freezers.

Working and Using SBS Walk-in Freezers

All of SBS walk-in freezers have an occupancy alarm and an emergency alarm.

1. Open the door – this starts the occupancy alarm timer.

The automatic occupancy alarm system is activated every time the freezer door is opened, even if you don't enter the freezer.

Before entering the freezer, CHECK the door latch inside the freezer is working and opens easily from the inside. To open the door latch a firm bang on the green button with your hand is required. If the door latch is not working properly, then inform the Floor/Area Manager immediately and do not enter the freezer. Floor and Area managers must contact Engineering Services to arrange repair of the door latch and place appropriate signage informing all staff and students of the hazard of the door latch and that access to the freezer is limited until repair of the door latch is completed.

Familiarize yourself with the location of the red emergency alarm button inside the freezer.

If the internal overhead light is not working, notify the Biological Sciences Office (extn 6500) and the Floor or Area Manager immediately. Do not enter the freezer if the light is not working.

Floor/Area managers must ensure Engineering Services have been contacted to arrange repair of the lights and place appropriate signage informing all staff and students that the light is not working and that access to the freezer is limited until repair of the light is completed.

DO NOT SHUT THE DOOR WHILE YOU ARE IN THE FREEZER.

2. Close the door on exiting – once you are finished shut the freezer door.

3. Press the black button to deactivate the occupancy alarm.

You must press the black button beside the door – even if you don't enter the freezer. Pressing the black button cancels the occupancy alarm timer. If you do not press the black button the alarm will sound in the lab and at UC Security after twenty minutes. If the activated occupancy alarm is not attended by lab personnel, UC Security will respond to the alarm after three minutes of its activation by contacting the school and will send UC Security personnel.

What to do if you become trapped in the freezer

- PRESS THE RED EMERGENCY BUTTON ONLY ONCE.
- This activates an alarm in the UC Security office and they will respond. Currently no alarm will sound in the freezer.
- DO NOT PUSH THE RED EMERGENCY BUTTON AGAIN as this will deactivate the emergency alarm.
- After twenty minutes the occupancy alarm will sound in the lab.
- Follow the instructions located inside the walk-in freezer on the door.

What to do if you hear the freezer alarm

- CHECK IF THERE IS ANYONE TRAPPED IN THE FREEZER.
- Close the freezer door and press the black button – this will stop the alarm.
- Notify a technician that the alarm was activated, if it is after hours notify the UC Security office, extn 6888 to report a false alarm.

What to do if you find the freezer door is not closed

- CHECK IF THERE IS ANYONE INSIDE THE FREEZER.
- Close the freezer door and press the black button – this will stop the occupancy alarm activating.

What to do if you need to work in the Walk-in Freezer for Extended Periods

- If you need to spend time working in the freezer leaving the door wide open is not ideal as the inside of the freezer and its contents will warm up. Instead, allow the door to rest against the door frame latch to minimise the loss of cold air from inside the freezer but do not shut the door.
- Place an appropriate sign on the outside of the door informing other staff and students that you are working in the freezer.
- Where possible inform the floor/area manager and/or your supervisor that you are intending to work in the walk-in freezer.
- Inform Alan Woods and/or Bill Davidson so that if the alarm that monitors the temperature in the freezer activates because it is too high, they can respond appropriately.
- Wear appropriate PPE.
- Take regular breaks. Extreme cold can impair physical ability and mental judgement.
- Inform the floor/area manager and/or your supervisor when you have finished working in the walk-in freezer.

Personal Protective Equipment

- Normal Laboratory PPE is mandatory (lab coat, fully enclosed footwear).
- Additional PPE; protective gloves (mittens), head wear, coat should be worn if handling samples and spending extended time in the freezer.
- Safety glasses when handling chemicals.

Related Information

Refer to the following for additional general information on protective equipment and work practices

Safe Method of Use 1 - Laboratory Work Practices

Safe Method of Use 2 – Personal protective Equipment

Safe Method of Use 3 – Storage of Chemicals in the Laboratory

Refer to the Safety Data Sheets for specific Compounds

Refer to the following protocols and processes in the Health & Safety Toolkit

Protocol: Hazardous Substances

Protocol: Manage Hazardous Substances

Protocol: Biological Hazards