This course is about life safety in buildings – preventing possible accidents or deaths from occurring in YOUR building.

Just how safe is your building? Close your eyes. Envision it without people. Mentally walk through the halls. Go through all the exits. What do you see?

#### What's in Your Area?



Are your hallways and exits clear and uncluttered with unobstructed exits, or like this one?

Or are your hallways lined with various machines and other equipment?





Are there objects like boxes or barrels obstructing the hallways and exits?

Are there conference rooms or break areas that are obstructing the hallways and possibly the exits?



# **Building Safety Violations**

This course will show you some common life safety problems for you to keep in mind on your next walk around.

## **Hallways**

Electrically powered equipment such as refrigerators, copiers, and others CANNOT be stored or permanently operated in corridors.

First, it is a violation of the Fire Code. The law prohibits the obstruction of hallways and exits. Make sure they stay clear.

Second, it's a maze for people navigating the hall. Can you imagine trying to get through here when it's filled with smoke and fire? Or try to imagine walking around these things if chemical fumes from a spill are filling the hall.



#### Machines in Hall



Most of UAB's inside building space is taken up by classrooms, research labs, administrative areas, patient areas, and offices. A break area is a luxury that few departments have in their buildings. However, hallways should NEVER be used as break areas or patient waiting areas.

And while a mini-refrigerator for employees' use is an excellent addition, it should NOT be located in a hallway obstructing exit access.

## Hazards in the Hall

If your area handles hazardous or medical waste, it must be stored in an appropriate storage area – NOT the corridor.



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# **Blocked Safety Showers**

This shower was originally installed in this ceiling for a reason. Nothing should obstruct a person's access to it.

Safety showers and eye wash stations should always be immediately accessible.

## **Hallway Libraries**

This place has two major violations. First, the bookcase is obstructing the door.

Second, the fire extinguisher is on the floor and not correctly mounted next to the door. When moving and placing furniture, think safety first – YOUR safety and that of others around you.





# **Happy Holidays!**

There's nothing wrong with celebrating special holidays/occasions. However, it should NOT be celebrated in the halls or obstructing exit doors. Decorate the offices, just not the halls.

## Signage in the Halls

There's nothing wrong with a few signs in the halls, but when things like homecoming and other significant events roll around, we tend to want to let the world know and use the BIG paper.

Wall coverings, such as posters or decorations, must be flame retardant or cover less than 10% of the surface area of the wall.

Signage on bulletin boards, elevator areas, doorways, in labs, and other areas should be kept to a minimum.

Remove those out-of-date ads, flyers, and posters often.



#### **Exits**

Exit Routes consist of three parts:



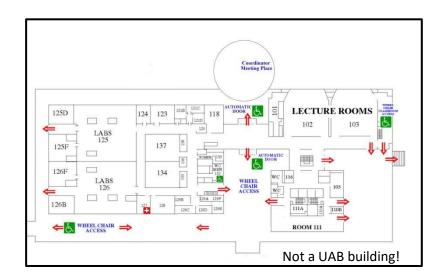
This exit access is a part of a route leading to a way out. This doorway leads to a stairway leading to outside.



The exit shown here is a part of a route that is generally separated from other areas to provide a protected way of travel to the outside.



The exit discharge shown here is the part of a route that leads directly outside or to a street, walkway, refuge area, public way, or open space with access to the outside



During an emergency, exit routes become lifelines. Know where the exits are located. Make sure everyone knows, and make sure the exit routes are clear at all times.

#### **Fire Doors**



Fire doors are rated to withstand a fire for a specified amount of time. This delays the spread of smoke or fire and gives people extra time to escape.

Fire doors are self-closing when released. They may have a magnetic hold-open device.

A fire door should NEVER be propped open for any reason. These doors/exits must have clear access at all times.

Fire doors are usually located in stairwells, labs, office suites, corridors and mechanical rooms. Some fire doors may be marked.

Consult with UAB Architecture & Engineering when replacing a fire door to assure code compliance.

# Fire Door Open

Doors like this one are used to protect areas from lots of things. One of these is to keep people out who don't belong. Purses, money, credit cards, papers, and even cars have been stolen due to a lack of security.

It is also a fire door. If it says to keep it closed, then do it. The sign is there for a reason.



# **Security Doors**



In a fire, stairwells with fire doors propped open to act as chimneys allowing fresh air to reach the fire. An open door allows the smoke and fire to spread to other floors quickly.

Additionally, stairwells are considered refuge areas for persons with disabilities. Elevators will not work during a fire, so there may be someone depending on a stairwell as a safe place to await rescue.

If the stairwell is filled with smoke, it may be impossible to use it as an exit route or a refuge area.

## **Exit Signs**

Exit signs that are obstructed or burned out won't benefit anyone, especially during an emergency. Make sure that all your exits signs are working correctly before an emergency occurs. If you see an exit sign that is damaged or not working, report it to maintenance immediately.

The exit sign shown here shows the difference in how a working exit sign usually looks and in a smoke-filled hallway.





# Waste Storage?

If you are waiting on a pickup from the Hazardous Materials Facility, a vendor, or a recycling company, don't leave objects in the hallways for days. Move them out shortly before the pickup or put them in a designated storage area. You never know when people may need to exit the building immediately.

# Building Managers and Supervisors Responsibilities Everyone believes they could get out of their buildings with their eyes closed.

Ok, here's your hall. It's like an extra storage room – bookcases, empty boxes, file cabinets, chairs, and other miscellaneous non-used items.





Now, here's your hall filled with smoke from a fire.

You and your co-workers are trying to exit the building, but you are blinded by the smoke. You and your co-workers are coughing, choking. Your eyes are watering.

Where's the exit? Boxes are falling and being kicked into your path. People are bumping into and falling over things. The fire is advancing. People are pushing – panicking. You have only seconds to exit before it's too late.



As a building administrator or department head, you have a responsibility to make sure that your building is safe for all its occupants.

#### **Blocked Outside Exit**

Exit discharge areas must be kept clear at all times. This "trash" should be put in its proper place!



## **Unwanted Barriers**

Obstructed exits or exit routes cluttered with office equipment and supplies are potential fire hazards. Getting those in order can help in case of an emergency such as a fire.

But did you know that ceilings and floors can also serve as fire, smoke, and heat barriers? These must be kept clear at all times, as well.



These items are stored too close to the ceiling. In an area without a sprinkler system, the fire code states that there must be a 24-inch clearance between the ceiling and stored items.

In areas with sprinkler systems, the fire code states that there must be an 18-inch clearance between stored items and the level of the sprinkler head. There's not 18-inches clearance here.



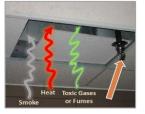
The 18-inches is a continuous plane. You can't build a void around sprinkler heads and expect them to work.



# **Ceiling Tiles**

There are two problems with missing or displaced ceiling tiles.

- 1. The opening allows smoke, heat, and toxic gases to spread to other areas of the building.
- 2. The fire alarm/suppression system might be delayed. The open area will allow smoke and hot air to bypass the sprinkler head or smoke detector, which will delay the system response. Burns, accidents, and deaths could be avoided by simply checking your ceiling tiles.



## Chemicals in the Floor



Floors should be clear of clutter to prevent accidents and provide a path in case of an emergency, especially a fire. This example is not only a fire hazard but a chemical one, as well.

# Heat, Flammables, & Combustibles

Flammable and combustible liquids must be stored in an approved, marked flammable storage cabinet.



#### In Case of Fire

Fire extinguishers, fire alarm pulls, audio visual fire alarms and fire fighter connections are all part of the fire control system in your building.

They must remain accessible AND visible to be effective.



## **Fire Fighters**



She needs to go in and fight the fire in your building – perhaps saving lives and valuable research data and equipment. Here is an example of what she sees obstructing her path.

Who is at fault is it when your work area goes up in flames?

# The Fire Extinguisher

The Fire Code requires that fire extinguishers must be visible and accessible at all times. Many UAB fire extinguishers are located near exit access areas. Do you know where the closest fire extinguisher is?

Fire extinguishers must be accessible at all times, conspicuously marked, and serviced regularly.

# **Pull Aim Squeeze Sweep (PASS)**

UAB does NOT expect you to fight a fire UNLESS you are comfortable in doing so and know how to fight one properly. Occupational Health and Safety can provide training for employees. EH&S also posts PDF files on fire prevention information on its website.

## **Basic Electrical Safety**



If you see electrical equipment that needs re-wiring, call maintenance. Do NOT attempt to fix it yourself. Thankfully, the burned, electrocuted arm does not belong to a UAB employee. It is only an example of what could happen.

## **Overloaded & Rewired**

Please don't try to re-wire electrical equipment or plug too many things into outlets. Call a UAB electrician if you need help. Improvising or making do with electrical equipment is like standing in a thunderstorm holding a lightning rod. Something is bound to happen.

We could quote you all the rules and regulations, but suffice it to say – don't use home extension cords or overload circuits. It's just too dangerous.



Call EH&S. They can help you with questions or whom to contact.

#### **Electrical Panels**



In the event of an emergency, electrical panels must be immediately accessible so that power can be shut of quickly when necessary.

Regulations state that there should be nothing within 36 inches in front of an electrical panel.

## The Checklist

This concludes the Building Life Safety Course. To receive credit for this course, conduct a walk-through of your building/area, and submit the completed checklist (i.e., Building Life Safety Survey) located on the EH&S website and in this course. We strongly recommend that you do a walk-through annually.

Please send the completed checklist to:

Rob Emmons at: campussafety@uab.edu