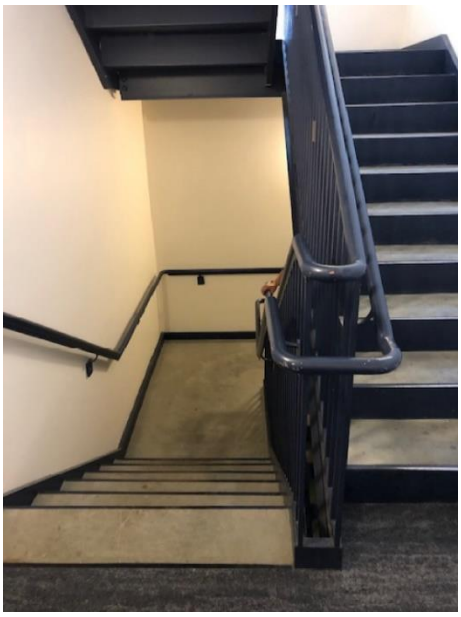
*Please report all accidents and near misses. Things happen and it is important to learn from others. Environmental Health and Safety (EHS) and your colleagues appreciate hearing about incidents, reviewing their causes, and learning from them.*

# STAIR SAFETY

We use stairs and steps every day and we take them for granted. It seems like a simple task to use a stairway, yet more than six percent of all injuries reported at Yale occur on stairs and steps. The average cost for injuries on stairs is higher than for other injuries, because the injuries are often more severe. Almost one-third of all injuries occur because of a misstep on the last few steps at the top or bottom. More than 10 percent of stairway injuries at Yale happen to people carrying objects, which changes a person's center of gravity, blocks their view, and doesn't allow them to use the stair handrail.



## What Happened?

A fall when walking up or down stairs can lead to injuries, which can drastically impact a person's quality of life and their work. For example, in 2019 a worker started their routine tasks, which included retrieving materials and supplies from a lower-level storage room. They had used an elevator for the initial work, but had forgotten an item. Rather than wait for the elevator, the worker decided to use the nearby stairs to make up for lost time. As the worker was walking down the stairs, they overstepped, started to fall forward, shifted their weight backward to avoid falling, and fell backward onto the steps. The worker suffered multiple injuries, including cracked ribs, required hospitalization, and was not able to work for nearly a year.

## What Went Right?

- The worker sought medical treatment immediately and EHS was notified of the hospitalization for reporting purposes and timely follow-up investigation.

## What Should Have Been Done Differently?

- Avoid rushing. Being in a hurry will increase your chance of a misstep or a fall on the stairway.
- Maintain two points of contact as you walk up or down the stairs. Use the railing to steady yourself and don't hurry. Take each step one at a time.

## What Corrective Actions Have Been Taken?

Workers were retrained on the job procedure of using the elevator to obtain supplies. Use of a stair handrail was required for the instances when the stairs are used. Moreover, workers were trained on how to minimize the risk of slips, trips, and falls.

## How Can Incidents Like This Be Prevented?

- Avoid rushing. Being in a hurry will increase your chance of a misstep or a fall on the stairway.
- Maintain two points of contact as you walk up or down the stairs. Use the railing to steady yourself and don't hurry. Take each step one at a time.
- Avoid carrying a load with both hands while going up or down the stairs. Carrying items impacts your ability to hold the handrail, your ability to see the stairs/hazards on the stairs, and your ability to focus on ascending/descending the stairs. Instead, use an elevator to carry heavy or bulky objects to another floor.
- Avoid distractions while walking on the stairs, while standing or walking on a stairway landing, or when using a door that leads to or from a stairway.
- Inspect the stairs and stairway. Pay attention to the tread surface, stair riser, handrails, and lighting. Look for damage and conditions which make the surface slippery such as debris, loose objects, or dirt, water, ice, and snow. Report any damage and where there is insufficient lighting provided on any workplace stairway, indoors or outdoors.
- Use extra care when using stairs while entering or exiting a building during cold and wet weather. The temperature difference can cause icing on the entry stairs, and water is often tracked into the building for dozens of feet past the entryway floor matting.
- Know your limitations. If you are feeling rushed or need to carry a heavy or awkward object, pause and consider alternatives such as an elevator, making multiple trips with lighter loads, or asking for help. If you wear glasses, they may alter depth perception. Medications may cause dizziness or drowsiness. Either of these may result in a misstep or trip.
- Avoid using stairways or landings as a storage place.
- Make sure your shoes are tied before using any stairway.

## More Information

- **Tradesafe Stair Safety: Common Hazards and How to Prevent Them**-https://shorturl.at/R7eCF
- **Slip, Trip and Fall Prevention Guidelines, Yale EHS**-https://ehs.yale.edu/sites/default/files/files/slip-trip-fall.pdf
- **Stair Safety Guidelines, Yale EHS**-https://ehs.yale.edu/sites/default/files/files/stair-safety-guidelines.pdf