

NOVEMBER 2011

## Elevator Myths & Fears

**Myth:** Many people believe elevators are held up by only one rope that can break, leaving passengers trapped in a falling car.

**Truth:** Elevators are supported by multiple steel cable. Each cable alone can support a fully loaded car.

**Myth:** Some people believe that an overcrowded elevator will fall.

**Truth:** This will not happen. An overcrowded elevator will usually not move. The doors will stay open and a buzzer may ring until enough people get off the elevator to reduce the weight.

**Myth:** Some people believe that they have been in an elevator where the elevator car fell several floors and then “caught itself.”

**Truth:** This feeling is a mystery. Elevator experts believe people may think this happened because they 1) got on an elevator going in different direction than expected or 2) saw the elevator floor indicator lights flash by quickly, which gave the visual impression of falling.

**Myth:** Some people believe that the hall doors will open when an elevator is not there.

**Truth:** The truth is that the elevator car controls whether the hall door open. If the car is not at the landing, the hall doors can't open, because their opening can only be triggered by the arriving car engaging an unlocking device after the elevator has stopped at the landing.

**Myth:** Some people believe that if an elevator is stuck between floors that they are in danger of falling and should try to get out.

**Truth:** Absolutely not! Leaving the car on your own could result in injury. Elevator cars are designed as “safe rooms”. The safest place is inside the car. Ring the alarm and wait for help. Leave the car only with the assistance of professional rescuers.

**Myth:** Pushing the CALL button repeatedly will make the elevator appear faster.

**Truth:** The call registered just once; movement is in response to the elevator controllers.

**Myth:** Pushing the DOOR CLOSE button closes the door faster.

**Truth:** The doors may close sooner, but not faster. However, if a buzzer sounds, the doors may close slower; get out of the doorway as quickly as possible.

## ELEVATOR SAFETY

“A 25 year old man dies when he fell down an elevator shaft Monday night as he tried to climb out of an elevator stuck between floors at a new shopping and entertainment complex, a Fire Department spokesman said.”

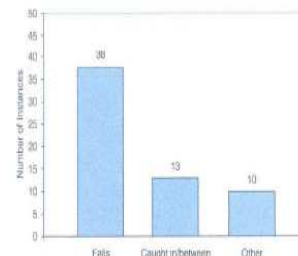
“A man’s legs were severed early today as he tried to escape from inside an elevator packed with revelers leaving a party.”

“...a 17 year old boy attending a football camp at the University of Arkansas became stuck when he attempted to leave an elevator stuck between floors in a campus building.”

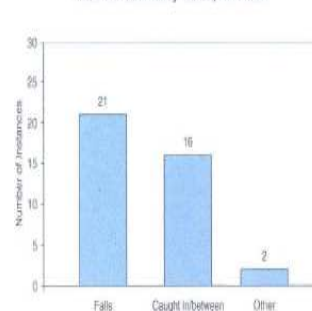
Although it doesn't happen a lot, injuries and sometimes death from individuals attempting to self evacuate from a stuck elevator, is a topic worthy of discussion.

There are an estimated 600, 000 passenger elevators in the U.S., with over 120 billion riders on elevators each year.

Deaths among Passengers Using Elevators while at Work by Cause, 1992-2001



Deaths among Passengers Using Elevators while Not at Work by Cause, 1997-2003



## Understand the Problem

There are three main causes for elevator shutdowns;

- Loss of building power
- Passenger misuse or abuse
- Electrical or mechanical failure

Power can be lost for minutes or hours, sometimes for days and in rare instances, for weeks. Reasons for loss of power include service anomalies and natural disasters, as well as vehicles hitting utility poles and knocking out a transformer.

Passenger misuse or abuse occurs when elevator passengers tamper with mechanical and electrical

systems, including overloading the elevator, forcing the doors open, stopping the elevator and using the alarm buttons for reasons other than an emergency.

### Appropriate Actions

Many people believe that they can safely climb out of an elevator. Jumping and/or climbing out of an elevator is extremely unwise. Many elevator accidents occur when people attempt self-evacuation. Elevator experts and others in the industry have the following advice for elevator passengers who become entrapped:

- Stay in the Elevator. The elevator will not go into a state of free fall.

- Keep people inside of the car. Passengers should not try to pry the doors open. They are closed for a reason. Prying the doors open may prevent the elevator from being moved to evacuate passengers.
- Do not worry about air. The elevator car is not air-tight. You will not run out of oxygen.
- Do not worry about being in the dark. Most elevator lighting will still work when the elevator stops. Even if normal power is lost, many elevators have a battery-backup system for emergency lighting.
- Be calm and patient. Try to keep others calm.
- Communicate with people outside of the elevator.
- Move away from the doors in case they are opened by rescue personnel.
- Sit on the floor. This will keep you from losing your balance if and when the elevator starts moving again.



