

.Riding Elevators and Escalators Safely: What Parents May Not Know

BY Barbara Allen, Johnathan Butler and Ashley Rains

Introduction

According to industry experts, elevators and escalators are the safest form of transportation in the world. Most accidents that occur on elevators and escalators could have been prevented simply by educating of the riding public. The elevator industry recognized this and, in 1991, they founded the Elevator Escalator Safety Foundation to educate the public on the safe and proper use of elevators, escalators and moving walks through informational programs.

The Elevator Escalator Safety Foundation is getting the word out on safety issues that you, as a parent should be aware of, but may not know.

There are certain safety precautions to observe on elevators –
When approaching a closing elevator door, leave it alone and wait for the next elevator. Never reach your hand out to stop a closing door because the elevator doors may not reopen.

Always look down when entering the elevator cab and check to make sure the elevator is level with the floor. Children, as well as adults, can easily trip if the elevator is not exactly level with the floor.

If you find yourself stuck in an elevator, remain calm. Use the emergency alarm button to alert someone and then use the emergency phone to speak to someone for help and advice. There is plenty of air in the elevator. Be patient and never climb out of an elevator! Follow only instruction from professionals (elevator or building maintenance, firemen or police).

In case of fire, use the stairs, not an elevator.

Escalators are very different from elevators. However, there are still safety precautions to be observed on escalators

Always be sure your child's feet are center of the step and do not allow your child to sit on the steps. Adults should follow the same rules.

If someone (or someone's clothing) gets entangled in the escalators moving parts, turn the escalator off - stop buttons are located at the top and bottom of every escalator.

Be sure your child holds the handrail if your child is able grasp the handrail without their feet touching the sides of the escalator. If a child is too small to hold the handrail without

their feet being too close to the side of the escalator, they should only ride holding your hand.

Baby strollers, luggage or large packages should not be taken on an escalator. Maneuvering strollers, carts or even large packages can prevent you from holding the handrail. Dropped packages or falling luggage can cause passengers to fall. It is much safer for everyone if you take the elevator when you are using strollers, luggage, shopping carts or are overloaded with packages.

Simple, Safe Riding Rules

As parents, you should know and share with your child these very important rules of riding elevators and escalators safely so they may avoid an accident. The following is a list of safe riding rules for elevators, escalators and moving walks developed by experts for the Elevator Escalator Safety Foundation:

Elevators

Watch your step getting in and out - step over the gap.

Leave closing doors alone.

If elevator stops and the doors do not open, ring alarm button, use the emergency phone, and wait.

If there is a fire in the building, use stairs.

Escalators and Moving Walks

Step on and off carefully.

Check shoelaces and loose clothing before riding.

People only - no strollers (escalators only).

Hold the handrail.

Do not touch sides with hands or feet.

Stand facing forward.

Take care of younger children (hold the hand of children too small to hold the rail).

Never let children sit on or play on escalators and moving walks.

Stand to the right, walk on the left (moving walks only).

How do Elevators and Escalators Work?

Elevators are a mechanism for moving people from floor to floor in a multi-storied building. Electric elevators consist of an enclosed cab (elevator car), fastened to one end of steel cables. The cables go up and over a grooved drive wheel (sheave) and down to a counterweight of cast iron blocks that counterbalance the weight of the car. An electric motor supplies power to move both car and counterweight guided between steel guide rails in an enclosed shaftway.

Button controls in the lobby or floor bring the elevator to the rider. Push button controls inside the car allow the riders to select the desired floor. Hydraulic elevators use a plunger that moves up and down to operate the elevator car by a motor pumping

hydraulic oil in and out of the plunger cylinder. The car and hall push buttons on both types of elevators do the same function.

Escalators are designed to move large numbers of people between floors quickly. An escalator consists of an endless chain of moving steps. The stationary sides of the moving steps are called skirts. An endless moving belt traveling on the top of each escalator on each side forms what is called the handrail. The handrail moves at the same rate of speed as the steps to help passengers maintain their balance.

Safety features include brakes that are automatically applied when the drive motor stops for any reason. Escalators also have automatic shutoffs if the speed increases or decreases the designed speed. There are also emergency stop buttons located at the top and bottom of each escalator, generally under the moving handrail or near the top of the moving handrail.

Moving walks will be most often encountered at airports to transport passengers over long distances between the gates, baggage areas and to different terminals. The equipment is similar to an escalator except the steps are laid flat like a conveyor belt. One exception to the safety rules, it is permissible to walk on moving walks. The rule is "stand on the right - walk on the left."

Some Common Myths and Misconceptions

Some common myths, as well as misconceptions, exist about elevators and escalators. Here are a few:

Elevator Myths

Many people believe elevators are held up by only one rope that could break leaving passengers trapped in a falling car. Actually, elevators are supported by multiple steel cables, which individually can support a fully loaded car. In fact, the only elevator to ever fall due to a complete cable system failure occurred when the cables in the shaft of an elevator at the Empire State Building were severed by an airplane in the 1940s.

Some believe the hall doors will open when an elevator is not there. The truth is, if the car is not at the landing, the hall doors cannot open. Their opening can only be triggered by engaging an unlocking device after the elevator has stopped at the landing.

Some believe that if an elevator is stuck between floors that they may be in danger of falling and should try to get out. **Leaving the car on your own could result in serious injury.** Elevator cars are carefully designed to provide a safe environment for its occupants if such an event should occur. First, make sure to ring the alarm, use the emergency phone, and wait for trained personnel to arrive.

Escalator Myths

The most common myth about escalators is that you do not have to pay much attention to them. The truth is they are six-ton moving machines with more parts than a Swiss clock

and should be treated as such. Teach your children to give escalators the same attention they would a train or bus.

Children often think that the steps fall into the basement and have to be restacked every morning. The truth is that escalator steps move on an endless chain system. At the bottom, they rotate under and move up the underside of the chain, reappearing at the top (down escalator).

Many believe escalators can reach out and grab you. No part of an escalator can actually do this; however, passengers must be careful of loose clothing, untied and long shoelaces, high heels, long hair or jewelry, etc. These items can easily be caught between the skirt panel and the steps or in the combplate at the top and bottom. The only safe way to ride is standing up, facing forward, holding the handrail with feet away from the sides.

Please take a little time to share the safe riding rules with your child. If they understand the importance of riding safely, perhaps it will encourage them to share these facts with others and help you as parents rest a bit easier when you are not with them.

The Elevator Escalator Safety Foundation

The elevator industry recognized the need to educate the general public on safe riding practices in order to help avoid accidents. In 1989, representatives of the elevator and escalator industry met to discuss funding a study of how the public could be better informed on the importance of safe and proper use of elevators, escalators and moving walks, thus forming the Elevator Escalator Safety Council. The study unveiled the following results: young children and the elderly represent age groups most vulnerable to injury; educating parents directly is expensive, but teaching children in classrooms, and through them their parents and siblings, is more achievable; and only a nonprofit, charitable organization could bridge these needs and provide public safety programs.

In 1990, Safe-T Rider© was carefully developed for second graders later that year, and the Foundation was granted 501© (3) nonprofit status as a charitable foundation. The Foundation's mission is to educate the public on the safe and proper use of elevators, escalators and moving walks through informational programs. The Foundation continues to develop more programs to achieve this mission.

APPENDIX A – EESF Programs

Safe-T Rider© (Children's Program)

The Elevator Escalator Safety Foundation (EESF) first piloted the Safe-T Rider© program (designed for 2nd graders) in 1991 in seven U.S. cities. The statistics indicated that after participating in the program, 93% of all students scored 90% or better on their post test and 76% of the students scored a perfect 100%. In 1992, a goal was set to reach one million children and their parents by the year 2000. Over the past five years, this program alone has reached a total of one million children, parents and teachers. The 35-minute Safe-T Rider© instructional program includes an eight-minute video presented in elementary language by the cat-like character, "Safe-T Rider"©. It utilizes a repetitive

"rap" song and some lively background pop music designed to catch the attention of youngsters. The classroom package also includes a Teacher's Guide (with background information on elevators and escalators with diagrams, tear-out templates and evaluation forms), a classroom poster on "Safe-T Rider©" and his "Safe Riding rules," and each student receives a test, coloring book, certificate of completion and a lunch box sticker.

According to the latest records, the Safe-T Rider© program is also reaching 50% of the children's parents. Yes, even parents learn from the program and, in turn, they reinforce the safe riding rules whenever they are on elevators and escalators. The Safe-T Rider© program is free to all public and private school second graders in the U.S. and Canada. Experts suggested second graders because this age group is old enough to read, still accepts authority figures well, (parents, teachers, etc.) and is likely to share this information with others. Parents with young children can also purchase these educational materials directly from the Foundation for a small purchase price. The program has also been used with scout troops, church youth groups, athletic and/or social clubs, etc.

Perhaps as a parent, you may be willing to serve as an EESF volunteer, delivering the safety message to children in your local school district. EESF volunteers receive a volunteer packet of information explaining the steps it takes to persuade your local school board or council to adopt the Safe-T Rider© program. It also includes information on how you can coordinate and implement the program once it is approved.

A Safe Ride® for Adults

Also available is the A Safe Ride® for Adults -- a program targeted to helping senior citizens clearly understand the importance of using elevators and escalators properly. The program consists of a 12-minute video (two 6-minute segments, one on elevators and one on escalators), a facilitator's guide and participant handbooks. The video alone is suitable for adults of all ages.

National Elevator Escalator Safety Awareness Week

The Foundation sponsors National Elevator Escalator Safety Awareness Week during the second full week in November to spread the important message of learning to ride elevators and escalators safely. The industry celebrates this week by having their state governors, city mayors and transit presidents sign proclamations, setting up booths in subway stations or malls or conducting Foundation programs in large groups, etc. The Foundation offers a comprehensive planning guide to give companies/individuals ideas on how to celebrate.

If you would like further information on the Safe-T Rider© program, A Safe Ride program or the National Elevator Escalator Safety Awareness Week, contact the Elevator Escalator Safety Foundation at 362 Pinehill Drive, Mobile, Alabama 36606; phone: (888) RIDE SAFE, fax: (251) 479-7099 or e-mail info@EESF.org.

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