Elevators and escalators: A major safety concern

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A journey up and down the elevator in the old Navsari Building in the Fort area in South Mumbai is sure to send a few shivers up one’s spine. After all, this 104-year old, wood paneled, hand-operated elevator is one of the oldest in the city. A warning posted at the entrance of the lift does not seem to deter many from using it, though. "The lift is in perfect working condition and used on a daily basis by the occupants of this building," says 55-year-old Rajnath Yadav, who has been operating the lift for 10 years now.

An antique elevator like this is one of the very few still around today. With infrastructure development and growth in the real estate industry, the market for elevators and escalators is on an upward spiral. According to industry experts, all metros and upcoming cities with an urban population of over one million, are growing markets for elevators and escalators. The Indian elevator industry is growing at a rate of 15 per cent to 20 per cent year-on-year with about 30,000 elevators and escalators sold per year.

Residential buildings and commercial establishments like shopping malls and call centres along with infrastructure projects like airports and metro railways are driving this growth. However, one fact that needs to be kept in mind is the safety aspect of elevators and escalators. With an increasing number of malls and high-rises coming up in Tier-II and Tier-III cities, one needs to ascertain if the market is ready to ride these high-end contraptions.

The Bombay Lift Rules of 1958 mandate that every lift be inspected once in six months. However, the Public Works Department is often unable to undertake even one inspection in a year. While there are a total of 71,742 elevators across Maharashtra, the total number of PWD lift inspectors is not more that 50. "It takes about three hours to inspect a single elevator in an average 25-storey building. It is not humanly possible for the PWD to ensure the safety of every elevator in the state on a regular basis," says TAK Mathews, member of the International Association of Elevator Engineers and of the National Association of Vertical Transportation Professionals (USA).

Incidents like the Bangalore Garuda Mall escalator accident (in July 2007, six-year old Ahaan Bhandari lost his life when he fell through the gap between the escalator step and the railing) and the Varanasi (in May 2008, eight-year old Annu fell to his death while stepping off the escalator on the second floor of a shopping mall) cast a cloud over the rising issue of elevator and escalator safety in buildings.

In a mature elevator market like the US, there are about 30,000 elevator-escalator accidents resulting in about 30 fatalities in a year. About 29,000 children are injured in such accidents. So, how does India fare in relation to this? There are no official statistics available. Such incidents can be controlled to a great extent however, if elevators are used appropriately. In the US, only about 5.4 per cent of injuries caused to children as a result of elevator mishaps were due to elevator malfunctioning.

With more numbers of youngsters spending an increasing amount of time in malls and multiplexes, there is an urgent need to elevate the awareness level of people on how to use these vertical transportation systems effectively. It is not an uncommon sight to find young children pacing up and down crowded escalators in city malls. Safety regulations state that a child should always hold the hand of the parent and travel on the same step, while travelling on an escalator. For this, the minimum width of an escalator step must be 1,000 mm. Standard escalator steps come in sizes of 600 mm and 800 mm and rarely are they 1,000 mm wide.

Attempting a style statement with your footwear might prove fatal in this case. Crocs, the latest fad in fashion footwear, are not escalator-friendly and have caused several accidents across the developed world. These shoes, being soft and lightweight are at a greater risk of getting stuck in the gap between the escalator step and the floor landing. By default, average Indians, especially women are at a handicap while using these transportation systems. "Indian women adorned in sarees and similar flowing garments must be extra cautious of dupattas, scarves and loose garments that have a
possibility of getting stuck in the gaps between escalator steps,” says Mathews.

The Elevator and Escalator Safety Foundation, a not-for-profit organisation in the US, trains about 300-400 school kids every year on how to use elevators and escalators safely. Similar initiatives are needed in a market like India too, which is seeing an exponential rise in the number of vertical transportation systems dotting the cityscape. “We approached about five city schools offering to conduct free training workshops for their students on proper elevator/escalator use but except for one school, none of the others were supportive enough,” says Mathews.