

# What could have happened

In the final investigation report, an authorised examiner reconstructs how the doors of a lift at Block 322, Tah Ching Road, might have severed the hand of Madam Khoo Bee Hua

## As Madam Khoo enters

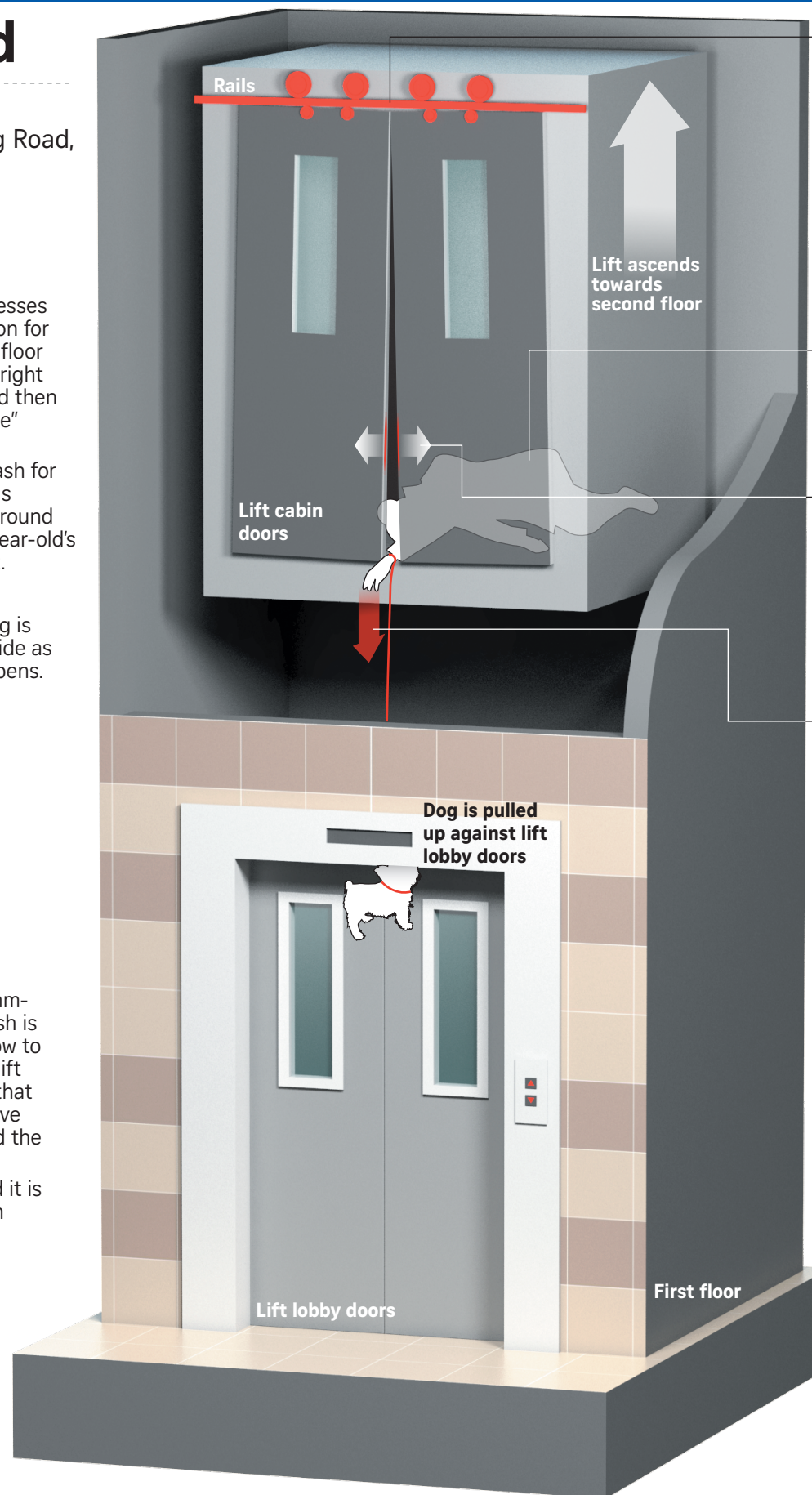


- 1 • She presses the button for the 16th floor with her right hand, and then the "Close" button.
  - The leash for her dog is looped around the 85-year-old's left wrist.
- 2 • Her dog is still outside as this happens.

## Doors close



- 3 • The 2mm-thick leash is too narrow to activate lift sensors that would have reopened the doors.
  - Instead it is caught in between.



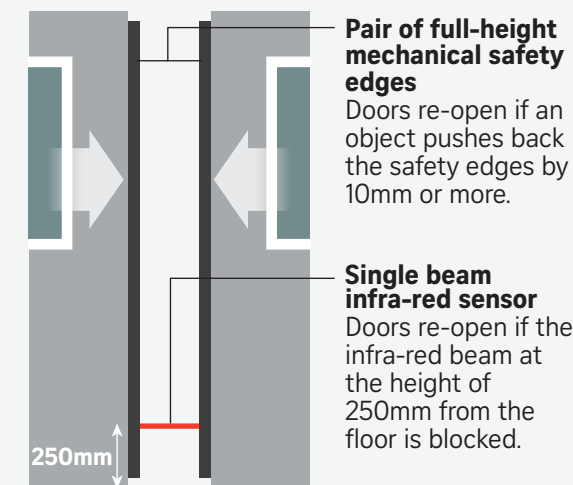
## The Fulcrum Effect

- The lift cabin doors are hung from rails at the top.
- If a significant force is applied to the bottom of the lift cabin doors while they are closed, it is possible for the doors to be prised open slightly.
- The gap would be narrowest at the top and widest at the bottom, forming a slim A-shape opening.

## Lift ascends

- 4 • As the lift rises, the leash around Madam Khoo's wrist tightens. She is pulled to the floor. The dog is also pulled up against the lift lobby doors till its harness buckle is caught at the top part of the lift lobby door.
- 5 • The pull of the taut leash against the lift doors forces them apart slightly, opening up a small gap at the base.
  - As the lift continues to go up, the force of the leash is strong enough to pull Madam Khoo's left hand through this small gap.
  - The hand widens the gap, triggering the lift to come to a gradual emergency stop.
- 6 • The hand is crushed and severed between the lift cabin doors and the internal parts of the lift lobby doors. This happens near the second floor landing.
  - The lift stops near the third floor. The severed hand falls to the bottom of the lift pit.

## Safety features of the lift at Block 322



## Why doors did not re-open

The devices were not designed to detect obstructions that are too thin, such as a 2mm-thick dog leash.