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EVACUATION

Organized set of action for moving

- People
- Animals
- Valuable material object

From insecure places to secure or more secure places







Fire evacuation strategy

- Simultaneous Evacuation
- Vertical or Horizontal Phased Evacuation
- Staff Alarm Evacuation (Silent Alarm)
- Defend in Place





Simultaneous Evacuation

- Everyone in building
 on the warning signal of fire alarm
 simultaneously
 steady, without panic
 walk to first fire exit on the evacuation plan
- Appropriate for:
 - smaller object
 - Object with low number of floors

Vertical or Horizontal Phased Evacuation

- In large building, if its possible delay evacuation of people which are not in immediate risk from fire
- First evacuation only people from places closest to fire
- Warning other people to stand by
- Evacuation other people if is necessary
- Two types:
 - Horizontal
 - Vertical
- Fire warning system must have:
 - Two different sound signals (evacuation and warning) or
 - Voice signal





Vertical or Horizontal Phased Evacuation

• Vertical Phased Evacuation:

- Immediately evacuate floor with fire and floor above it
- Evacuate rest of the floors, if it is necessary, floor by floor (avoiding congestion on escape routes)

• Horizontal Phased Evacuation:

- Hospitals and nursing homes
- Evacuation from one to another fire resisting compartment horizontaly





Staff Alarm Evacuation (Silent Alarm)

- Cinema and Theater
- Large number of people can react on immediate general alarm with panic
- First step is to give alarm only to a member of a stuff
 - Stuff will make prearranged plan for safe and efficient evacuation
 - When everything is ready evacuation will start
- The general alarm may be activated automatically if manual initiation has not taken place within a pre-determined time.

Defend in Place

- In a special cases there is a request that building users stay in place while firefighters are extinguishing fire
- Hospitals, nursing homes
- Patients may be:
 - difficult to move,
 - immobile,
 - connected on life support devices
- Possible only limited patients moving
- Some patients are connected to life support system and can't move at all

Its very risky to make decision to defend on place or to move patient on life support





Evacuation Issues

- Panic
- The existence of only one vertical communication channel (only one stairs for both evacuation and firefighters)
- Reduced capacity to evacuation path or stop the evacuation route (overcrowded evacuation path or obstacles on evacuation path)
- Evacuation of disabled persons
- Children Evacuation

