

## **HOSPITAL EVACAUTION & EVAC+AIDS**

The current law does not stipulate hospital and healthcare facilities must have evacuation equipment, however, there are requirements for responsible persons, as determined by legislation, to ensure suitable and sufficient procedures are in place to ensure the safe evacuation of all users at their premises in the event of an emergency without the dependence on the emergency services. Evacuation equipment assists hospital caregivers team having the hassle-free evacuation of individuals during an occurrence of an emergency case or some critical events such as fire, extreme bad atmospheric condition, or toxic issue.

Hospitals are vulnerable to fire accidents as they contain inflammable objects like cylinders, chemicals and other medical supplies. With most of the patients being immobile or in different states of ill health, evacuation of patients become a nightmare when fire breaks out. They are incapable of moving away from a fire or smoke or evacuating without some form of assistance from others.

Henceforth, there is a need to formulate a practical strategy to protect and evacuate the patients during emergency and non-emergency evacuation. Evacuation procedures underpin the fire safety strategy in the event of an emergency. For non-emergency also need to have provision in place for any circumstance where someone may need assistance and is unable to use the lifts or the lifts is not in operations.

Assisted evacuation of vulnerable patients can be considered to consist of the following phases:

- preparation of patients prior to movement
- communication this is necessary to achieve the person's cooperation
- preparation of mode of transportation if ambulatory difficulties transportable bed, type of wheelchair, and other evacuation equipment
- implementation of any personal health care measures (e.g. oxygen, disconnecting or connecting drips)
- Horizontal movement to a safer location (if available)
- Vertical movement to a safer place or exits of the building (if required)

The risks associated with vertical evacuation of vulnerable persons can be reduced by:

- locating vulnerable persons as close to ground level as possible
- providing more horizontal compartments to allow progressive horizontal movement to a safer place should a fire occur in one compartment
- minimising the likelihood of a significant fire through the provision of a well-maintained and managed sprinkler system and other fire safety measures
- providing special designed patients evacuation lift
- providing evacuation equipment to move patients down stairways

Stairs are the conventional means of achieving vertical emergency evacuation when lifts are not available. However, these can be difficult to negotiate for able-bodied persons, but even more so for vulnerable persons who must be assisted. The use of healthcare Evac+Aids / evacuation equipment such as evacuation chair, evacuation mattress, evacuation sheets can be both time consuming and labour intensive but are required if stairs are to be used.

Potential buyers of evacuation equipment often ask the functionality of the hardware and how many they need for their environment. This is where a risk assessment comes in. The fire risk assessment should











identify what is the most acceptable solution based on the current fire safety measures in place, the hospital layout and any individual circumstances. Have your risk assessment team carry out a number of scenarios for predicted vulnerabilities, for both natural and man-made disasters. The only heart burning issue we face from the hospital management is how do we evacuate patient with critical condition or with serious back/neck injuries? They want the evacuation to be as safe and comfortable as possible for their patient.

Only by envisioning all the potential situations your facility may face can you get to a point where you can estimate your needs. A combination of the right evacuation equipment plays a role in the safe evacuation of your patients:

- <u>Evacuation sheet</u> when placed between the patient's mattress and the frame of the bed, it can
  quickly and easily envelope the patient and mattress; helps evacuate bedridden people in
  emergencies.
- Most chosen emergency evacuation method was the use of <u>evacuation chairs</u> that provide safe evacuation for anyone visiting the premises who may require help. Evacuation chairs are not customised to fit individual users' needs and there may be some discomfort experienced to certain user during the evacuation. It is not always possible for a patient to transfer into an evacuation chair or to maintain a sitting position once seated in one.
- When evacuation chairs are not the answer to the escape requirements of certain patient, evacuation mattress is an alternative.

For hospital in-patient environment, a general rule of thumb is that you should have as many equipment as you have potential users per floor. Our general rule of thumb is 'ONE equipment on ONE floor will serve ONE patient'. With that as the starting point and in conjunction with the findings of the fire risk assessment, you'll be answering the question of how many evacuation equipment you need. Using this as a guide to work from, you can then assess and take into account additional factors which could affect the number of equipment required and their locations. Essential to have adequate manpower trained to operate such equipment.

Typical storage location for evacuation equipment in space assignments, most place units at each floor exit, others towed units in fire warden offices, first aid stations, aboard fire carts, adjacent to medical areas and in emergency rescue vehicles.

It is important to note that merely purchasing evacuation equipment does not secure the safety of all and does not mean compliance and users are safe. Realistic evacuation plans require multiple types of evacuation equipment in place. Both the evacuation mattress and the evacuation chair are evacuation tools that provide the same solution to evacuate the mobility challenged people down the stairs in an emergency – even though the respective product features are different. Evacuation mattress is deemed to be a safer solution to evacuate the unconscious than the evacuation chair. A combination of the right evacuation equipment, in the right quantities, and in the right locations will play a role in the safe evacuation of your patients in an unpredictable emergency situation. Evacuation equipment are the 'tool' to facilitate the evacuation of mobility impaired patients as part of the hospital's evacuation plans. A key requirement is having as many of the staff as possible trained in the use of evacuation equipment in an emergency. This is to ensure that there are always sufficient numbers of trained people on site when emergency arises. There must be suitable guidelines and clear procedures in place, i.e. initial training and refresher training for designated operators. Fire drills need to be carried out every six months and a clear, concise maintenance regime in place.







