

## **Hospital Fire- Cause of Concern in India**

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### **Why Hospital Fires are a cause of concern:**

Hospital fires are dangerous because most of the patients in hospitals are physically not fit enough to quickly respond to emergency measures, especially evacuation calls. Hospitals have zones such as intensive care units that are not only more prone to accidents than other zones but also cause more deaths due to the presence of critically ill patients or people who are extremely vulnerable (for example, newborn babies). Special codes and practices must be established for such zones. The general population must understand the severity of such fire incidents occurring in Hospitals.

### **Hospitals adherence & guidelines – An overview.**

Acts, guidelines and building safety codes are available, not just to prevent accidental hospital fires but also to minimize harm when such fires do occur. However, it is observed that there are no automatic fire systems in Indian hospitals, as is the case in most developing countries. It resulted in several instances where fires caused heavy casualties in hospitals, particularly multi-storey buildings. adherence to the stipulations appears not sufficiently strict, with more emphasis placed on breach than compliance.

### **Lacunae in Hospital Safety and cause of Hospital fire.**

It is observed that in practice, fire prevention and control devices are frequently installed solely to obtain the necessary permission to operate. As a result, there is little or no follow-up to keep the gadgets fully functional and the staff adequately trained. Indiscriminate use of air conditioners, medical equipment, and computers, leading to extreme tripping points and so on overloading the wires because there seems to be no mandatory inspection of the power supply system. It has come to notice that many hospitals lack even the most basic fire protection measures. During most of the Hospital fire incident reports, it is observed that the emergency exit gate, the fire alarm and the elevator were non-operational and the hospital lacked basic firefighting infrastructure such as fire extinguishers.

Short circuits have been known to be the major cause of Hospital fire accidents, contributing to 89% of the total outbreaks. Flammable chemicals are the next biggest trigger, causing 4% of accidents.

A study published by (Juyal, S., Tabassum-Abbasi, *et.,al*) on “An Analysis of Failures Leading to Fire Accidents in Hospitals; revealed that 49% of the fires were seen in Private hospitals and 51 % in Government hospitals. 50 % of the hospitals were found to be non-compliant with the Safety Norms.

### **Recommendation for Hospitals in Prevention of Hospital Fires.**

1. Firefighting appliances must be in place and must be in always working condition. The alarm system should be kept fully functional around the clock. The staff need to be adequately trained for emergencies. Mock drills and fire safety audits should be conducted at regular intervals.
2. Electrical equipment should be well maintained to prevent sparking.
3. No building should be operational unless a fire clearance certificate has been obtained from the appropriate authority/department. Such certificates need to be renewed before they expire. Approval certificates should also be obtained for the building's electrical fixtures and installations.
4. An alternative emergency exit door should be made available in each ward.
5. Too many modifications and changes should not be done in the electric circuit connections. If any change is done, wire capacity should be kept in mind.
6. All applicable laws, standards, codes, and regulations must be considered without exception during the building design stage. There should be unwavering compliance.
7. Collaboration between engineers and fire safety professionals is required during the planning phase of building design. The building's structure and design should be such that in the event of an emergency, there is as little damage to life and property as possible.



*Bhandara hospital fire, 2021. (Photo source: Hindustan Times)*



*(Murshidabad hospital fire: people trying to douse flames. 27-08-2016  
(Photo source: The Indian Express)*



*(Fire at Sunrise Hospital in Dreams Mall, April 7, 2021 (Photo source: The Indian Express)*