

Hospital Fires

Why in news?

Recently, a fire broke out in the ICU ward of COVID-19 hospital at Virar, near Mumbai.

What is the cause for fire in public buildings?

- In 2019, National Crime Records Bureau (NCRB) reports that 330 people died in commercial building fires while fatalities for residential or dwelling buildings were much higher at 6,329.
- Electrical faults are cited as the leading cause of fires but State governments are widely criticised for being lax with building safety laws and fail to equip public buildings with modern technology.
- Hospital ICUs (intensive care units) are a great fire risk because they are oxygen-suffused and need to meet high standards.

What are the fire safety guidelines?

- The National Building Code (NBC) of India is the central standard for fire safety and part 4 of the Code deals with Fire and Life Safety.
- It is published by the Bureau of Indian Standards and it is a recommendatory document.
- The code provides specifications and guidelines for design and materials that reduce the threat of destructive fires.
- Under the Code, all existing and new buildings are classified by nature of use-residential, educational, institutional, assembly (auditorium), business, mercantile, industrial, storage, hazardous.
- States are asked to incorporate it into their local building bylaws, making the recommendations a mandatory requirement.

What does the Code specify?

- It recommends the location of buildings by type of use in specific zones to ensure that industrial and hazardous structures do not coexist with residential, institutional, office and business buildings.
- It specifies the technical requirements for special buildings, high rises, educational and institutional buildings higher than 9 metres, and those

with an area of over 300 square metres.

- It gives the specifics of fire resistance based on the materials used — exterior walls, interior bearing walls, floor, roof, fire check doors, fire enclosure exits, and so on.
- In case of a fire, sound alert technologies are expected to be incorporated into buildings.
- It includes automatic fire detection and alarm system, down-comer pipelines connected to a roof tank, automatic sprinklers and water sprays, fireman's lift, fire barriers, escape routes, markings.
- Incorporating these guidelines in the building design can avert deadly fires and gives occupants sufficient time to exit safely.

What are the other guidelines?

- Aftermath the hospital fires queries, centre announced a Fire Safety Committee.
- The committee should conduct periodic audits on fire installation, heating, ventilation and air-conditioning, electrical sub-stations and other electrical equipment in the union government's hospitals.
- The Health Ministry has circulated strict guidelines stipulating third-party accreditation for fire safety and a fire response plan beforehand.
- National Disaster Management Authority (NDMA) has also stipulated requirements for fire safety in public buildings, including hospitals.

Do state governments follow the Code?

- Every State has fire safety rules, but the provisions of the NBC are ignored in practice.
- Maharashtra, which has been hit by a series of fires, has a Fire Prevention and Life Safety Measures Act since 2008.
- CAG report says that only fire extinguishers were installed in 11 of 53 buildings and the remaining 42 buildings were not equipped with any of the fire-fighting installations.
- In Kerala, though the rules prescribe firefighting equipment and installations should meet Indian Standards, but it do not contain a direct reference to the NBC.
- In Tamil Nadu's fire licence is required under the Fire Service Act but it has no reference for compliance with the Code.

What is the future course?

- Last year, the Supreme Court directed all States to carry out fire safety audits of dedicated COVID-19 hospitals.
- It has become evident that State forces lack the manpower to inspect and ensure compliance with safety codes, including the NBC, where it is mandatory.
- Therefore heavy fire liability insurance should be made compulsory for all public buildings, which would offer protection to occupants and visitors and bring about external inspection of safety.

Source: The Hindu

