



# Fire Safety in SARI Treatment Centres in Cox's Bazar

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# Fire safety

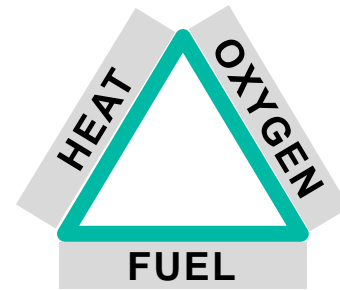
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## Context: Risks in Health Facilities in Informal Settlements like Cox's Bazar



### High risk in informal settlements already

- Combustible construction materials such as bamboo and plastic sheeting
- Dense living conditions
- Smoking & Disposal of Cigarette butts
- Poor electrical installations and playing with kites
- Poor accessibility for fire response vehicles
- Poor handling of fuels (kerosene, LPG etc)



### Specific risks in health facilities

- Sleeping risk (patients and staff accommodation)
- Patients on ventilators in ICU will be immobile and other patients will be served by fixed oxygen feeds with low mobility
- Oxygen-enriched atmospheres increase the likelihood and potential severity of a fire.
- Storage of combustible materials (diesel generators, laundries, cooking fuels, batteries, solid chlorine products)

### Recent fires in Cox's Bazar

- Camps 14 and 18 in late January
- Cox's Bazar district hospital
- Large fire on 22nd March 2021 which destroyed 7 health facilities along with over 10,000 shelters including the IOM primary health clinic and the Turkish hospital

Image credits

Above: Saiful Arakani via BBC

Below: Reuters/Stringer



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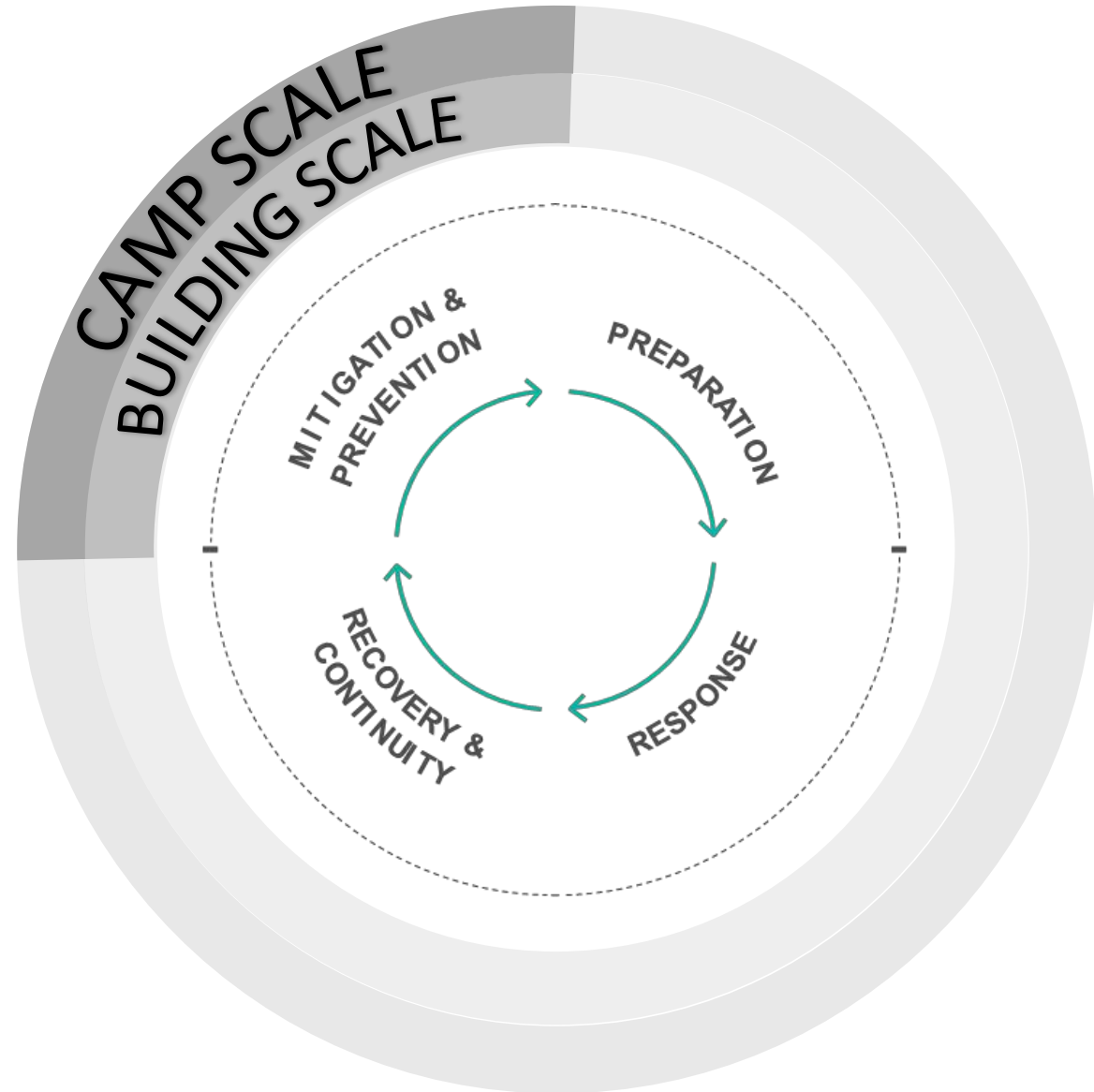
### Approach to Fire Safety

Mitigation of fire risks must be considered as part of a **holistic approach**.

Often appropriate to take an ALARP approach (As Low As Reasonably Practicable).

Key issues:

- Patients on ventilators in ICU will be **immobile** and other patients will be served by **fixed oxygen feeds** with low mobility
- Oxygen-enriched atmospheres increase the **likelihood** and potential **severity** of a fire.
- Existing fire risks **already high** in some cases

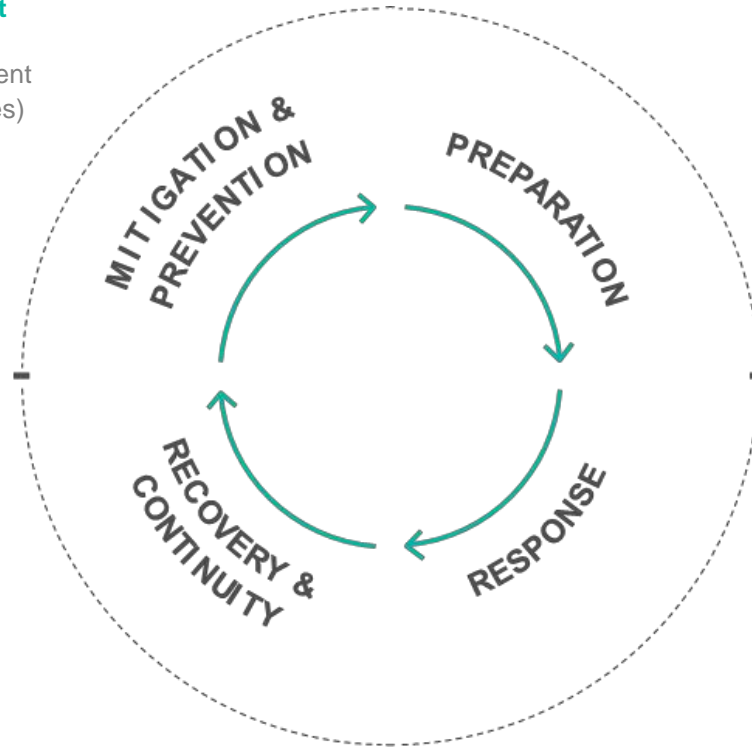


## Fire safety

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#### Approach to Fire Safety

- Construction **materials**
- Fitout/ Building /**site arrangement**
- Use and **maintenance** of equipment (electrical equipment, stored gases)
- **Storage** of combustibles

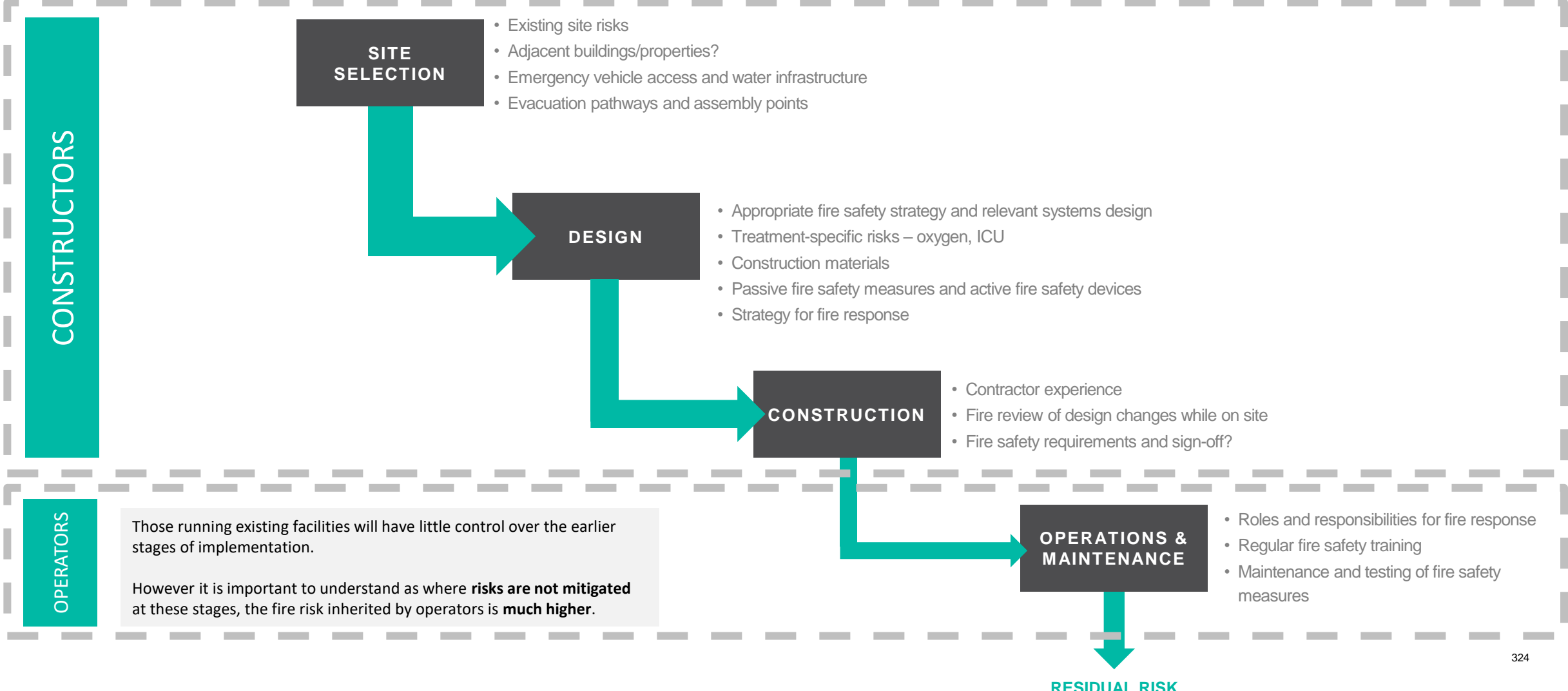


- Post fire smoke clearance
- **Contingency** plans for occupants
- Build back better

- **Diverse escape routes** from room/ building /site
- Fire **exit routes**
- Emergency lighting
- Fire safety **equipment**: exit signage, fire fighting equipment, smoke detection and alarms
- Fire fighting preparation: staff **training**, co-ordination with local fire services, providing facilities for the fire brigade

- **Investigation** of fire
- **Intervention**
- **Evacuation**

Considerations throughout the implementation cycle

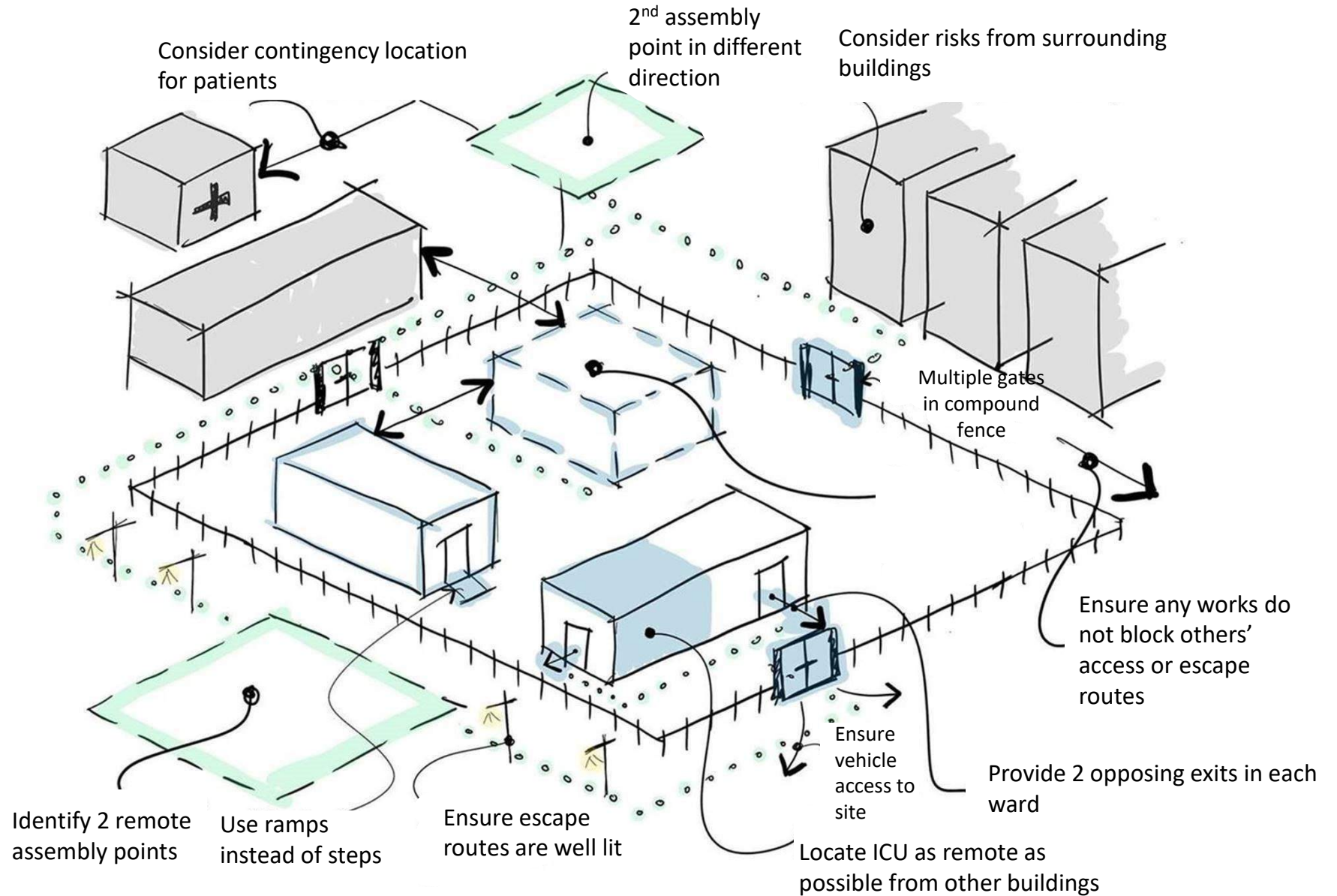


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Summary

**Fire risk mitigation is a holistic activity!**

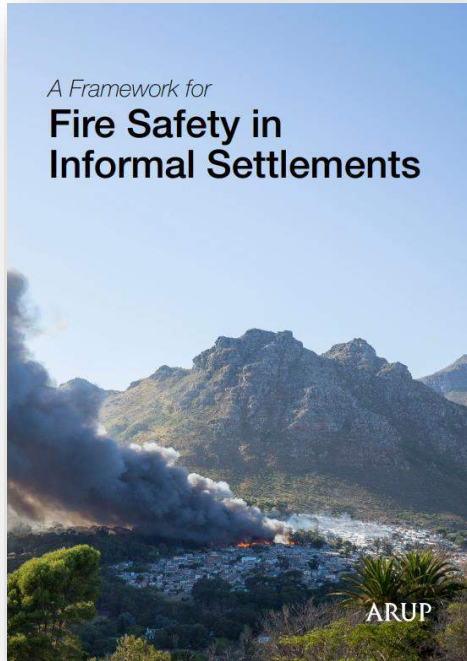




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Further Resources



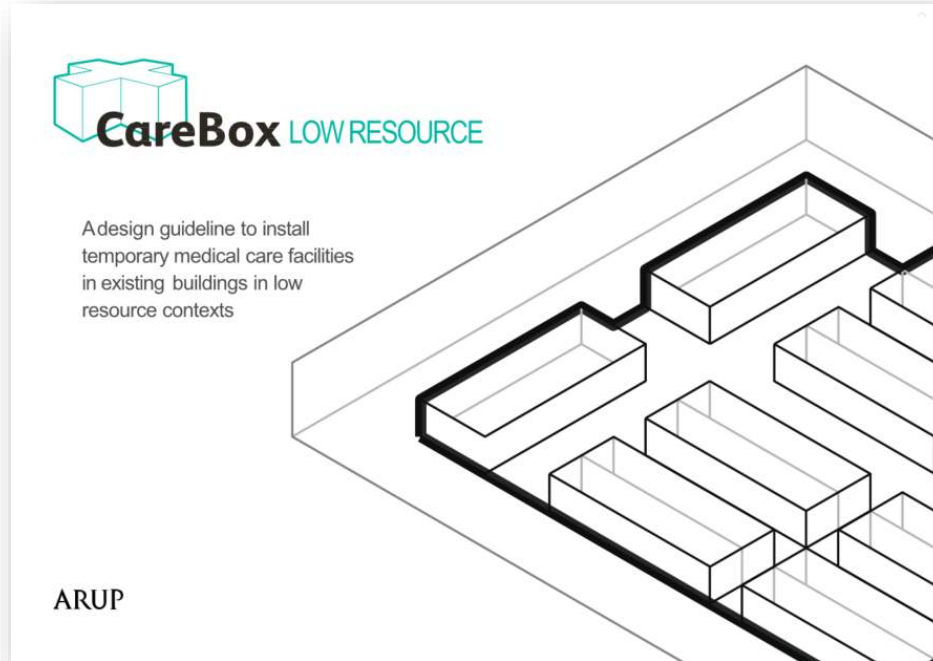
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<https://www.arup.com/perspectives/publications/research/section/a-framework-for-fire-safety-in-informal-settlements>

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