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Emergency unit***Introduction***

The aim of this document is to provide a practical, evidence based document for construction, design and renovation in health care facilities, enabling co-operation between Infection control personnel, building planners and engineers.

SIG recommendations are given in three levels:

- **Basic** - Even with severely limited resources, this is what you should do as a minimum
- **Standard** – this is what you should aim for in less wealthy countries
- **Ideal** – if you have the resources, this is what you could do

Recommendations

The recommendation is given for emergency in which clean water supply and electricity are available throughout 24 hours.

The **emergency department** provides urgent health care to a varied mix of patients (people suffering from physical trauma or infections, children, the elderly, and people suffering from psychiatric problems), 24 hours a day, seven days a week.

The emergency department should have easy vehicular access for cars and ambulances and to intensive care.

Patients with symptoms of infection, such as cough, fever, diarrhoea/vomiting, exanthema, draining wounds, should be separated from other patients to reduce the risk of transmission of infection.

Interior decoration and furnishings

All **surfaces** should withstand cleaning with detergent and water and the use of disinfectants, when required.

Wall finishes: must be easy to maintain, particularly in areas such as corridors, waiting rooms.

Floor finishes: in public areas choose easy-to-clean durable materials that facilitate heavy pedestrian and wheeled traffic.

- Ensure that floorings are joined using materials and methods which make the entire surface impermeable
- Prohibit carpet in all clinical areas.
- In passageways and places where frequent maintenance is required, the joint between wall and floor should be rounded and not at right angles, to avoid absorption of water and dirt / moulds after wet floor cleaning. Linoleum or vinyl flooring should be pulled up on to the wall; Use curved tiles to close the joint if

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flooring is tiles. Avoid unpainted wood or travertin (porous) marble as board on the wall base.

Furniture and equipment: Choose easy-to-clean, durable materials for furniture, that can withstand cleaning with detergent and water and the use of disinfectants, when required..

- Choose wire racks that avoid dust collection.
- Plan for splash panels behind and beside sinks.
- Upholstering and other surfaces must be easy to wipe off or wash.

Hand hygiene: Alcoholic hand rub must be available close to all patient beds and stretchers, and in all treatment rooms.

Room	Basic	Standard	Ideal
Waiting room	Provide toilet and handwashing facilities. Provide access to telephone and to coffee/tea	Eliminate children's play areas to limit the spread of infection	Design the waiting room to be able to divide it into sub-groups and use movable partitions to adapt the area based on various outbreaks of disease, depending on the season Eliminate children's play areas to limit the spread of infection
Triage and reception	Install a sink in the triage area.	Install a sink in the triage area	Install a sink in each triage room
Shock treatment area resuscitation	Provide a separate room for infectious case	Provide a separate room for infectious case	Provide a separate room for infectious case
Stretchers area	Provide a nurses work area Install a sink.	Movable partitions that can be wiped with cleaning agent or disinfected Provide a nurses work area Stretcher with monitoring must include larger stretcher spaces Install sinks	Movable partitions that can be wiped with cleaning agent or disinfected Provide a nurses work area. Limit the number of stretchers per room/area to less than 10 Stretchers with monitoring must include larger stretcher spaces and a surveillance station



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Room	Basic	Standard	Ideal
			Install sinks
Distance between stretchers		1.5 meter.	2 meter recommended.
Isolation room	A separate space should be allowed for infectious case.	One or more individual patient cubicles for infectious patients with extractor fans. Each with ensuite facility.	Some individual patient cubicles for infectious patients with negative pressure, each with toilet.
Patients´ toilets (1)	Sex-specific toilets.	One toilets for 5 stretchers	Toilet for each stretcher.
Wash/shower		Wash/shower on the department	En-suite wash/shower/toilet room
Other toilets (1)	Toilets for both HCWs and visitors.	toilets for both HCWs and visitors.	toilets for both HCWs and visitors.
Bathroom/shower		At least one bathroom	At least one bathroom
Nurses´ station	At least one. Organize a maximum distance between clean and dirty works.	At least one Room for clean work (preparing infusions...) and one room for dirty work (cleaning, disinfection...).	One by 15 stretchers. Room for clean work (preparing infusions...) and one room for dirty work (cleaning, disinfection...). On large department more nurses stations and rooms recommended to reduce walking distances, for ambulatory area and each stretcher area.
Doctors´ rooms	One room for doctor and examination.	At least one room for doctor and examination.	Ambulatory area for examination, and administration area, for room for doctors
Kitchen			Small kitchen with refrigerator.
Storage		At least one large storage room for clean items.	At least one large storage room for clean items.
Changing room for staff		Centralized or one room only for changing on the department.	Centralized or one room only for changing on the department.
Cleaning room		One room with sink, disinfectants, cleaning agents and cleaning car.	One room with sink, disinfectants, cleaning agents and cleaning car.
Dirty room	Facilities for disposing of liquid and semi-solid waste (flushing sluice), bedpans and their contents. May be combined with cleaning room and waste room.	Facilities for disposing of liquid and semi-solid waste (flushing sluice), bedpans and their contents.	Facilities for disposing of liquid and semi-solid waste (flushing sluice), bedpans and their contents.

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Room	Basic	Standard	Ideal
Waste room		May be combined with dirty room.	One special room for waste storage.
Stretcher reprocessing		Centralized or in a reserved room.	Centralized or in a reserved room.
Ambulatory area	Separate from the stretcher area It includes some multipurpose rooms	Separate from the stretcher area It includes some multipurpose rooms	Separate from the stretcher area and has its own station. It includes some multipurpose rooms and others with more specific functions, such as minor surgery rooms,
Family support area and mourning room	One mourning room	Provide a space allowing the body to be viewed and the family to be welcomed.	Provide separate space allowing the body to be viewed and the family to be welcomed.
Procedure room / emergency operations room	Should be available.	Should be available.	Should be available.

(1) Toilets must have window ventilation or mechanical air supply.

Some literature :

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