

Environmental hygienic requirements for health facilities. Mongolia 2016

MNS 6392 : 2013

1. Objective

The objective of this standard is to ensure the provision of quality and safe health services in custom-built facilities.

2. Scope

2.1 The standard sets requirements for hygienic conditions and infection control regimen in buildings and structures, and outdoor and indoor environment of health facilities.

2.2 The standard is to be followed in selecting a construction site and developing an architectural plan for building or expanding health facilities.

2.3 The standard is to be utilized for evaluating, accrediting and inspecting public and private health facilities.

3. Normative references

The following referenced documents are indispensable for the application of this document. For undated references, the latest edition of the referenced document (including any amendments) applies.

- MNS 6330-3:2012, Structure and Performance of Specialized Outpatient Medical Center
- MNS6330-4:2012, Structure and Performance of Regional Diagnostic and Treatment Center
- MNS 5292-3:2011, Structure and Performance of Family Health Center
- MNS 5095-3:2001, Structure and Performance of Aimag General Hospital
- MNS 5232:2003, Structure and Performance of Spa and Resorts. General Requirements
- MNS 5082:2001, Structure and Performance of Soum Hospital. General Requirements
- MNS 6188-3:2010, Maternity Hospital Structure and Performance
- MNS 5161-3:2002, Pest Control, Deratization and Disinfection. Part Three. Services
- MNS 12.1.009:1985, Occupational Safety. Noise. Threshold Limits for Noise in Housing and Civil Engineering
- MNS 0900:2010, Potable Water. Hygienic Requirements. Its Inspection
- Construction Norms and Rules 30.01.03, Norms and Rules of Urban Planning and Construction
- Construction Norms and Rules 41.01.11, Heating, Air Exchange and Conditioning
- MNS 4943:2011, Water Quality. Environmental Release of Treated Wastewater. General Requirements
- MNS 5924:2008, Pit Latrine. Wastewater Pit. Technical Requirements
- Hygienic Rules and Norms 2.1.3.1375-03, 2007, Hygienic Requirements for Construction Site Selection, Civil Works, Furnishing and Exploitation of Hospitals, Maternity Hospitals and Other Inpatient Facilities
- MNS 6055:2009, Special Considerations in Planning Space and Environment for the Disabled in Civil Works
- Construction Rule 31-115-11, Hospital Building
- Radiation Safety Norm–83, Radiation Safety Norm

4 Hygienic requirements for buildings

4.1 Requirements for outdoor environment

4.1.1 Health facilities should be located at least 100 meters distant from residential districts and at least 1000 meters distant from industrial facilities.

4.1.2 Health facilities for communicable diseases, tuberculosis or psychiatric patients should be located outside residential area.

4.1.3 Land area of a health facility shall be determined depending on the number of hospital beds and its service capacity as per Table 1 and 2.

Land Area of a Health Facility

| Number of hospital beds | Land area per hospital bed (square meter) |
|-------------------------|---|
| Less than 50 | 300 |
| 50-100 | 300-200 |
| 100-200 | 200-140 |
| 200-400 | 140-100 |
| 400-800 | 100-80 |
| More than 800 | 60 |

Land Area of an Outpatient Facility

| Service capacity | Land area per hospital bed (square meter) |
|---------------------------|---|
| 100 clients per shift | 2500 |
| 150-200 clients per shift | 3500 |
| 400 clients per shift | 4500 |

NOTES: For calculation of land area of a paediatric and maternity hospital correction factor of 1.5 and 0.7 should be used, respectively. Land area of health facilities outside residential area could be increased as follows: communicable disease and oncology facilities – by 15%, tuberculosis and psychiatric facilities – by 25%, adult rehabilitation center – 20%, child rehabilitation center – 40%. Land area of health facilities within residential area could be decreased by up to 25%.

4.1.4 Plantation shall occupy at least 60 percent of land area of a health facility.

4.1.5 Land area of a health facility shall be fenced, and walking trails for pedestrians, the elderly and the disabled shall be paved.

4.1.6 Outdoor lights shall be placed in sufficient numbers, be in working order, and have fire-proof covers.

4.1.7 Parking lot for employees and customers shall be constructed and clearly marked.

4.1.8 Dedicated disabled parking spaces shall be clearly marked and reserved for people with disabilities.

4.2 Requirements for indoor environment

4.2.1 Health facility buildings shall be constructed in accordance with an architectural plan.

4.2.2 Health facility buildings shall be resistant to 8-10 magnitude earthquakes, be properly earthed and have lightning shields.

4.2.3 Health facility buildings shall have up to 9 storeys. Paediatric wards for children under 3 years of age with custodians shall be located up to the 5th storey, and wards for children under the age of 7 years and underage psychiatric patients shall be located up to the 2nd storey.

4.2.4 Patient rooms shall be 3.3 meters in height, and operating theaters shall be 3.5-5.4 meters in height.

4.2.5 Single occupancy patient rooms shall be no less than 3 meters in width, corridors of regular wards shall be 2.4 meters in width, and corridors of surgical and intensive care units shall be 2.8 meters in width.

4.2.6 Area of patient rooms shall be planned to ensure patient safety and infection control regimen, and in accordance with Table 3.

Patient Room Area

| Room Type | Area per hospital bed (square meter) | |
|---|---|------|
| Communicable disease and tuberculosis ward rooms for adults | 8,0 | |
| Communicable disease and tuberculosis ward rooms for paediatric cases | Children without custodians | 6,5 |
| | Children with day-time custodians | 8,0 |
| | Children with custodians (24 h) | 10,0 |
| Traumatology ward rooms | For adults or children with day-time custodians | 10,0 |
| | Children with custodians (24 h) | 13,0 |
| Post-surgical and intensive care unit rooms | 13,0 | |
| Paediatric ward rooms | Children without custodians | 6,0 |
| | Children with day-time custodians | 7,5 |
| | Children with custodians (24 h) | 9,5 |
| Psychiatric, neurology and <u>narcology</u> ward rooms | Patient room | 6,0 |
| | Insulin treatment and detox rooms | 7,0 |
| Paediatric psychiatric ward rooms | Regular room | 6,0 |
| | Observation room | 7,0 |
| Newborn unit rooms | 6,0 | |
| Patient rooms with 2 or more hospital beds | 7,0 | |
| Single occupancy patient rooms | 9,0 | |
| Single occupancy semi-isolation rooms for patients with communicable diseases | 12-14 | |
| Single occupancy full-isolation rooms for patients with communicable diseases | 20-22 | |

4.2.7 Space requirements for examination and procedure rooms, and other facilities including laboratory, pathology, sterilization, laundry and kitchen shall be planned in accordance with corresponding Normative References.

4.2.8 Communicable disease hospitals shall have full and semi-isolation rooms. Full isolation rooms shall have individual doors and sanitary amenities. Semi-isolation rooms shall have sanitary amenities shared between two rooms.

4.2.9 The number of isolation rooms in admission ward of a communicable disease hospital shall be planned in accordance with the number of its hospital beds. There shall be 2 isolation rooms per 60 hospital beds, 3 isolation rooms per 61-100 hospital beds, and in hospitals with more than 101 beds the number of isolation rooms shall be equal to 3 percent of beds. Isolation rooms shall have individual doors facing outdoors, one-way flow and individual sanitary amenities.

4.2.10 X-ray cabinets, ionized radiation treatment rooms and radiology (nuclear) diagnostic rooms shall not be located adjacent to, directly below or directly above delivery or paediatric wards. Radiology rooms shall have radiation protection in compliance with radiation safety norms.

4.2.11 Operation theatre shall be located in an isolated wing of the hospital building, and shall have connections to other treatment and diagnostic wards.

4.2.12 Operation theatre, haemodialysis and examination rooms, patient wards, laboratory, sterilization, kitchen, laundry and sanitary amenities shall have washbasins with sensors.

4.2.13 Sanitary amenities in health facilities shall have floor area of 1.1 x 1.6 meters per lavatory pan, outwards facing doors and washbasins with sensors. In case of communal sanitary facilities there shall be 1 flush toilet and 1 urinal per 10 male patients, and 1 flush toilet per 8 female patients.

4.2.14 Sanitary amenities for outpatients shall be located on every floor, and staff shall have separate amenities.

4.2.15 There shall be at least 1 shower per 40 patients. There shall be at least 1 shower per 10 staff of communicable disease and tuberculosis hospitals, and 1 shower per 15 staff in other hospitals.

4.2.16 Medical piped gas systems for reanimation and intensive care units shall be planned in accordance with technical drawings, and compressed gas cylinders shall be located in a separate room.

4.2.17 Health facility shall have proper stockrooms, archives and training rooms.

4.2.18 Health facility shall have proper elevators

4.3 Hygienic requirements for health facility environment: specific provisions for the elderly and the disabled.

4.3.1 Health facility shall have friendly environment for the disabled in compliance with relevant standards.

4.3.2 Sanitary amenities for the elderly and the disabled shall have a floor area equal to or more than 6 square meter, and have handrails along the walls.

4.4 Ventilation

4.4.1 Health facility rooms shall be equipped with conventional or mechanical ventilation system in order to meet proper microclimate requirements.

4.4.2 Room temperature, the frequency of air exchange and the degree of room cleanliness shall be planned in accordance with the requirements spelled out in Table 4.

Health facility room temperature and air exchange frequency requirements

| Room type | Room temperature OC | Frequency of air exchange per 1 hour | | Degree of room cleanliness | Frequency of natural ventilation |
|--|---------------------|--|---|----------------------------|----------------------------------|
| | | Exhaust rate | Supply rate | | |
| Ward room for adults or children with custodians | 20 | 80 cubic m/h per hospital bed 100% | | Clean | 2 |
| Ttuberculosis patient ward room | 20 | 80 cubic m/h per hospital bed 80% 100% | | Not clean | 2 |
| Ward room for patients with hypothyroidism | 24 | 80 cubic m/h per hospital bed 100% | | Clean | 2 |
| Ward room for patients with thyrotoxicosis | 15 | 80 cubic m/h per hospital bed 100% | | Clean | 2 |
| Operation theatre, post-surgery, intensive care unit, delivery room, therapeutic pressure chamber, ward room for 1-2 patients with burns | 22 | According to estimation, but no less than 10 times | | Clean | NA |
| Post-delivery room | 22 | 100%* | 100% | Clean | NA |
| Ward room for paediatric patients or 2-4 patients with burns | 22 | 100% | 100% | Clean | NA |
| Ward room for newborns, premature infants, breastfed children and children with injuries | 25 | According to estimation | | Clean | NA |
| | | 100%* | 80% | | |
| | | 100%* | 100% | | |
| Full and semi-isolation rooms, pre-isolation rooms | 22 | 2.5 (air from corridor 100%) | 2.5 | Not clean | 2.5 |
| Communicable disease ward rooms | 20 | 80 cubic m/h per hospital bed 100% | | Not clean | - |
| Pre-delivery, admission, examination, dressing, manipulation, pre-surgery and infant rooms | 22 | 2 | 2 | Clean | 2 |
| Sterilization rooms | 18 | - | 3 | Not clean Clean | 2 |
| Minor surgical procedure rooms | 22 | 10 | 5 | Clean | 1 |
| Staff room | 20 | From corridor | 1 | Clean | 1 |
| Functional diagnostic room | 22 | - | 3 | Not clean | 2 |
| Physical treatment room | 20 | 2 | 3 | Not clean | 2 |
| Physical treatment (radiation treatment, radiotherapy, ultraviolet radiation) room | 20 | 4 | 5 | Not clean | NA |
| Storage room for used bedding, cleaning materials and disinfection substance | 18 | - | 5 | Not clean | 3 |
| Restrooms | 20 | - | 50 cubic m/h per flush toilet, 20 cubic m/h per urinal | Not clean | 3 |

*In-flowing air shall be filtered

4.4.3 Temperature and air exchange frequency for other rooms shall be defined in accordance with construction norms and rules.

4.4.4 Operation theatre, post-surgery, anaesthesia, delivery, reanimation, intensive care unit rooms, ward room for patients with burns or premature infants, therapeutic pressure chamber and laboratory rooms shall be equipped with mechanical or automated ventilation system. Filters of automated ventilation systems shall be cleaned and replaced in accordance with the manufacturer's instructions.

4.4.5 Air flow in health facilities shall be organized so that unclean air flow is prevented from entering clean rooms.

4.4.6 Tuberculosis ward rooms, full and semi-isolation rooms and procedure rooms in communicable disease wards shall be equipped with mechanical ventilation system to remove exhaust air from the room, and ventilation pipe shall be located on the roof.

4.4.7 Ward room for sputum positive tuberculosis patient shall have negative air pressure, and its doors shall close automatically when opened.

4.4.8 In order to prevent infected air to enter the corridor when the isolation room door is opened, entrance area shall have positive pressure.

4.4.9 Relative humidity and air movement speed in health facility rooms shall be planned in accordance with the requirements in Table 5.

Relative humidity and air movement speed

| Room type | Relative humidity, % | Air movement, m/sec |
|--|----------------------|---------------------|
| Surgical ward rooms | 55-60 | 0.15 |
| Anaesthesia, post-surgery, intensive care unit rooms, ward room for 1-2 patients with burns, ward rooms for newborn or premature infants | 55-60 | 0.15 |
| Adult or paediatric ward rooms | 35-55 | 0.2 |

4.4.10 The maximum content of drugs in the air of operational theatre, delivery room, intensive care unit, reanimation, dressing, procedure and other similar rooms shall be kept in accordance with the requirements outlined in Table 6.

Maximum content of dangerous drugs in the air of health facility rooms and their danger grading

| Drug | Max allowable content mg/cubic meter | Danger grade |
|--|--------------------------------------|--------------|
| Ampicillin | 0.1 | IIA |
| Aminazin (Dimethylaminopropyl-3-chlorphenothiazinchlorhydrate) | 0.3 | IIA |
| Benzylpenicillin | 0.1 | IIA |
| Diethyl ether | 300 | IV |
| Inhalan (1,1-difluoro-2,2-dichlorethylmethyl ether) | 200 | IV |
| Nitrogen monoxide | 5 | |
| Oxacillin | 0.05 | IA |

| | | |
|------------------|-----|-----|
| Streptomycin | 0.1 | IA |
| Tetracycline | 0.1 | IIA |
| Trichlorethylene | 10 | |
| Halothane | 20 | III |
| Florimycin | 0.1 | IIA |
| Formaldehyde | 0.5 | IIA |
| Ethyl chloride | 50 | IV |

4.4.11 Acceptable number of bacteria, maximum content of pathogenic bacteria and fungi, and air pollution grading levels shall be kept in accordance with the requirements outlined in Table 7.

Bacterial content and air quality grading requirements for health facility rooms

| Air pollution grade | Room type | Number of bacteria per 1 cubic meter of air | | Number of S. aureus per 1 cubic meter of air | | Number of fungi per 1 cubic meter of air | |
|---------------------|--|---|-------------------|--|-------------------|--|-------------------|
| | | Before work shift | During work shift | Before work shift | During work shift | Before work shift | During work shift |
| Extremely clean (A) | Operational theatre, delivery room, sterile rooms of blood banks, rooms for premature infants, sterile rooms of pharmacies, sterilization room, bacteriological laboratory, ward rooms for patients with burns | Less than 200 | Less than 500 | None | None | None | None |
| Clean (B) | Dressing, procedure, pre-surgery, reanimation, paediatric ward room, breastmilk collection and sterilization room, bacteriological and clinical laboratory | Less than 500 | Less than 750 | None | None | None | None |
| Relatively clean | Patient rooms in surgery and communicable disease wards, corridor, examination room and storage room for clean bedding | Less than 750 | Less than 1000 | None | Less than 2 | None | None |
| Polluted (P) | Corridor, administration rooms, staircases, sanitary amenities, storage room for used bedding | No norm | | No norm | | No norm | |

4.5 Hospital lighting requirements

4.5.1 Health facilities shall have alternate power supply source.

4.5.2 Treatment and care rooms and corridors shall have natural and artificial lighting. Artificial lighting (fluorescent lamps) shall comply with respective hygienic requirements.

4.5.3 Hospital wards shall have bedside and portable lighting for the purposes of providing treatment and care during night time with the minimal disturbance to other patients.

4.5.4 Lighting of operating room, operating table, hospital ward and examination room shall be 1500-3000, 3000-6000, 60 and 100 lux, respectively. Overheating proof (fluorescent) lamps shall be used.

4.5.5 Mortuary shall have wall-mounted 30-40 Watt lighting. Route from hospital to pathology unit shall be properly lit.

4.5.6 Natural lighting of health facility rooms shall be planned in accordance with the requirements shown in Table 8.

| Room type | Direction windows shall face | |
|---|--|------------|
| | Most desirable | Acceptable |
| Surgery, reanimation, delivery and isolation rooms | N, NE, NW | E |
| Bacteriology, reception for infected materials, forensic examination room | N, NE, NW, SE, E | S |
| Tuberculosis and other communicable disease ward rooms | S, SE, E, NE, NW | NE |
| Paediatric rooms, intensive care unit, indoor playgrounds | Shall not face West; intensive care unit rooms shall not face West or South-West | |

Note: N – North, E – East, S – South, W - West

4.6 Noise requirements

4.6.1 Environmental noise levels around health facility shall comply with the norms shown in Table 9.

| Room type | Noise level, dB(A) |
|--|----------------------------------|
| Operational theatre, post-surgery and other ward rooms | Not more than 35, during daytime |
| | 30, at night |
| Examination room | 40 |

5 Water quality and safety

5.1 Health facility shall be connected to centralized or local water supply system.

5.2 Drinking and domestic water in health facilities shall comply with the requirements of relevant standards.

5.3 Drinking water sources shall have hygienic protection area established, and protection regimen shall be followed.

5.4 Minimum water use requirements in health facilities shall comply with the requirements shown in Table 10.

Minimum water use requirements in health facilities

| Water use category | Minimum water requirement |
|--|---------------------------|
| Outpatient examination | 5 L/examination |
| Inpatient case | 40-60 L/patient/day |
| Surgery and delivery ward | 100 L/procedure |
| Kitchen for inpatients | 30 L/patient/day |
| Cholera treatment unit | 60 L/patient/day |
| Isolation room for acute respiratory cases | 100 L/patient/day |
| Viral haemorrhagic fever unit | 300-400 L/patient/day |

5.5 Water, water purification equipment and sinks shall be easily accessible for patients and in sufficient numbers.

5.6 Surgery, delivery, intensive care unit and similar wards shall be equipped with washbasins with sensors.

5.7 Amenities for hand washing shall be provided in case health facility is not connected to the centralized water supply system.

6. Liquid waste management

6.1 Health facility shall be connected to centralized sewage system.

6.2 Health facility shall have proper local liquid waste treatment system or pit in case it is not connected to centralized sewage system. Sewage in the pit shall be disinfected and transported to a designated treatment plant using proper transportation.

6.3 Sewage from communicable disease hospital shall be disinfected before being released into the centralized sewage system.

6.4 Water released from sewage treatment plant shall comply with the requirements of relevant standards.

6.5 Latrine for the severely ill, the disabled, and the elderly and pregnant women shall be convenient to use, designed to prevent falls, and have proper size dimensions.

6.6 In case health facility is not connected to centralized sewage system, latrines shall be located so as to prevent soil and deep water contamination, and damage from flooding.

6.7 Outdoor sanitary amenities shall be located not more than 30 meters away from the health facility building, have proper lighting and paved path, and be maintained in clean and safe condition.

7. Laundry and cleaning

7.1 Cleaning

7.1.1 For cleaning purposes departments and units of the health facility shall be divided into the following three zones:

- Low risk zone or C zone
- Medium risk zone or B zone
- High risk zone or A zone

7.1.2 Low risk or C zone includes administration offices, corridor, storage rooms, training facilities and staff rest area, and shall be cleaned daily with detergent solution.

7.1.3 Medium risk or B zone includes reception, waiting hall, outpatient clinic, diagnostic cabinets, examination rooms, non-communicable disease inpatient wards, staff offices, rooms for patient custodians, rehabilitation treatment cabinets, pharmacy, kitchen and laundry, and shall be cleaned at least twice daily (or as required when soiled) with detergent and disinfectant solutions.

7.1.4 High risk or A zone includes operational theatre, dressing and procedure rooms, departments of endoscopy, obstetrics, newborn and paediatric care, and haemodialysis, intensive care unit, ER, communicable disease wards, pharmaceutical preparation room, laboratory, centralized sterilization

unit, reception area for used laundry, waste collection room and sanitary amenities, and shall be cleaned at least 3 times daily (or as required when soiled) with detergent and disinfectant solutions.

7.1.5 The following principles shall be adhered to during cleaning:

Daily cleaning shall be scheduled taking into account the department or unit's operation schedule. General cleaning shall be done every 14 days.

General cleaning shall involve cleaning of all surfaces (walls, ceiling and floors), doors, windows, stairs, door knobs, pipes, furniture and equipment used in treatment and care.

- In case of spill of biological liquids (blood, vomit, urine etc.) disinfectants shall be used for disinfection and cleaning.
- Hospital beds and bedside furniture shall be disinfected and cleaned immediately after the patient discharge.
- There shall be separate towels and buckets for cleaning furniture, walls, floor, washbasins and septic tanks, which shall be color-coded to prevent mixing.
- Disinfectants for cleaning shall be prepared, stored and used in accordance with the instructions.
- Cleaning shall be scheduled in accordance with the health facility by-laws taking into account the facility's operation schedule and patient load.
- Service personnel are prohibited from touching patient bed or belongings without permission, taking break in patient rooms or making excess sound while cleaning.
- Service personnel shall sign cleaning checklists placed in visible areas,

7.2 Laundry

7.2.1 Health facility shall have centralized department or unit for laundry of soft furnishings and staff uniform depending on the number of hospital beds and service capacity.

7.2.2 Laundry department or unit shall have necessary human resources, supplies, equipment and physical facilities.

7.2.3 Laundry of soft furnishings and staff uniform is prohibited in areas other than the laundry department or unit, such as other departments, wards or other places.

7.3 Requirements for cleaning service staff

7.3.1 Service staff shall follow approved infection prevention and control regulations as they are at risk of being exposed to infected materials and sharps.

7.3.2 Staff shall have prophylactic examinations and testing semi-annually in accordance with the relevant regulations, and shall be transferred to appropriate position in case of chronic carrier status.

7.3.3 Staff shall put on protective work clothing (pants, jacket, footwear, cap, face mask and gloves) before starting the cleaning work.

7.3.4 Protective work clothing shall not be carried out of the health facility, and staffs are prohibited from wearing the work clothing outside the health facility.

7.3.5 Staff shall properly wash their hands after cleaning, and shall take shower at the end of the working day.

7.3.6 Staff is prohibited from taking break, eating or leaving the duty station during the cleaning before the work is completed, or taking off the gloves without disinfection.

7.3.7 Infection control staff, head of the unit and epidemiologist shall be notified in case of infection exposure or manifest communicable disease.

7.3.8 Staff if prohibited from engaging in cleaning services in case of open wound or ulceration in exposed body parts.

8.1 General requirements

8.1.1 Kitchen shall be equipped with necessary appliances and supplies, protected from insects and rodents, and have appropriate technologic flow.

8.1.2 Kitchen walls, floor and ceiling shall be made of easy to clean materials, occupational safety requirements shall be followed, and properly functioning automated air conditioning system shall be installed.

8.1.3 Kitchen shall have separate storage rooms for raw materials, dry food and meat.

8.1.4 Kitchen safety and hygiene rules shall be followed, and safe food shall be served.

8.1.5 Kitchen shall be staffed with professional cook, food manufacturing technologist, diet specialist and hygienist.

8.1.6 Staff involved in processing, manufacturing, transportation and distribution of food raw materials and food products, as well as staff working with appliances used in food chain shall undergo preventive health examination and testing.

8.1.7 Drinking water used in cooking shall comply with the requirements of relevant standards.

8.1.8 Treatment meals shall be prepared in compliance with approved guidelines, regulations and technological instructions, and shall be served at least 3 times daily.

8.1.9 Kitchen facilities for patient custodians shall have necessary equipment, appliances and supplies.

8.1.10 Food from kitchen shall be transported in proper containers complying with hygienic requirements using wheel-trays and designated elevators in order to prevent contamination and cooling.

8.1.11 Cloakrooms, shower and sanitary amenities for kitchen staff shall be provided.

8.2 Internal inspection

8.2.1 Kitchen staff shall have 2-3 sets of protective work clothing, and shall follow occupational safety rules and regulations.

8.2.2 Staff in direct or indirect contact with food shall be provided with facilities to wash their hands before starting work and in cases of contamination.

8.2.3 Kitchen staff is prohibited from getting in contact with food in cases of open wound, abnormal secretions from nose, eyes or ears, diarrhea or vomiting.

8.2.4 Samples from prepared food shall be taken immediately upon preparation, kept in refrigerator for 48 hours, and a registry of sample taking and destruction shall be maintained.

9. Waste management

9.1 Health facility waste shall be sorted out, collected, stored, transported, disinfected and disposed in accordance with the relevant regulations.

10. Control of vector-borne diseases

10.1 Health facility shall contract a licensed professional agency to carry out pest control and deratization at least twice annually or as required in cases of increased distribution of insects or rodents.

10.2 Pest control and deratization shall be performed by a professional agency using officially registered toxic substances in compliance with the safety instructions.

10.3 Species, location (distribution), number and resistance to chemicals of insects and rodents in the health facility shall be monitored, and the effectiveness of pest control and deratization shall be assessed.

10.4 Health facility building shall be protected from insects and rodents, and shall have no holes or cracks.

10.5 Corridors, storage rooms, waste disposal areas, ventilation pipes and other similar areas shall be cleaned and disinfected according to guidelines in order to prevent insects or rodents from lurking.

10.6 Windows shall have screens to prevent mosquitoes and flies from entering inside the health facility.

10.7 IEC activities to prevent from vector-borne infections shall be conducted.

11 Training and education on hygiene

11.1 Training on infection prevention and control shall aim at ensuring health staff and client safety.

11.2 Health facility shall have approved guidelines, curriculum and plan of training on prevention of hospital-borne infections. Refresher and continuous trainings shall be planned.

11.3 Training shall be conducted separately for health staff and clients.

11.4 Newly recruited health staff and interns shall undergo infection prevention and control training.

11.5 Health facility shall organize regular IEC on infection prevention for clients using visual aids, information boards, videos and posters.