

Ministry of Health & Family Welfare
Government of India

Swachhhta Guidelines for Public Health Facilities





सत्यमेव जयते



एक कदम स्वच्छता की ओर



Ministry of Health & Family Welfare
Government of India

Swachhhta Guidelines for Public Health Facilities



जगत प्रकाश नड्डा
Jagat Prakash Nadda



स्वास्थ्य एवं परिवार कल्याण मंत्री
भारत सरकार
Minister of Health & Family Welfare
Government of India



Message

The level of cleanliness of public spaces in our country including in health facilities is a cause for concern. Cleanliness is important not only from the point of view of aesthetics, but also because lack of cleanliness and hygiene are a major cause of ill-health. With the launch of the Swachh Bharat Abhiyaan on Gandhi Jayanthi, the Prime Minister reiterated our social responsibility as citizens to help fulfill Gandhiji's vision of Clean India. For those of us who hold the stewardship of public health facilities, the Swachh Bharat Abhiyaan presents a unique opportunity to initiate action and demonstrate our commitment by launching an all out effort to ensure the highest standards of cleanliness in our health facilities.

An oft cited reason for choice of private health facilities is often not necessarily that they offer better treatment but that the physical state of our public health facilities is a deterrent. Cleanliness and hygienic surroundings are visible parameters based on which patients and visitors judge the quality of care they are likely to receive. We need to make wise use of our resources, harness the public spirit, bring users in as important stakeholders, and muster the will to execute actions that will make our public health facilities good models of affordable and quality health care delivery. I urge state governments to make this a public campaign and champion the effort through vigorous advocacy. We should also enter into partnerships with charitable and non government organizations as well as the corporate sector to participate in this endeavour and share the responsibility for cleanliness and hygiene of the entire facility or even part of the facility.

These guidelines have been developed for States to use in maintaining cleanliness in their health facilities. Quality in public health facilities encompasses much more than hygiene and cleanliness. Nevertheless this is a crucial parameter, often being the deciding factor in choosing a facility for health care. Earlier guidelines issued by this Ministry provide a road map for states on Quality Assurance in all public health facilities that address both technical and service quality. The newly announced awards scheme for clean hospitals is intended to inculcate quality practices, including cleanliness and hygiene, as key contributors to patient safety and outcomes and recognize such efforts. Together these guidelines, awards and Quality Assurance Framework are an endeavor to ensure high standards of cleanliness and quality in our public health facilities. I hope states rise to the challenge and make this initiative a priority.

(Jagat Prakash Nadda)

348, ए-स्कंध, निर्माण भवन, नई दिल्ली-110011
348, A-Wing, Nirman Bhawan, New Delhi-110011

Tele : (O) 011-23061647, 23061661, 23061751, Telefax : 23062358, 23061648

E-mail : hfwminister@gov.in

भानु प्रताप शर्मा
सचिव
B.P. SHARMA
Secretary



भारत सरकार
स्वास्थ्य एवं परिवार कल्याण विभाग
स्वास्थ्य एवं परिवार कल्याण मंत्रालय
Government of India
Department of Health and Family Welfare
Ministry of Health and Family Welfare



12th May, 2015

MESSAGE

The perception of patients and the public regarding the level of cleanliness and ambience of a facility directly affects the level of confidence they have in the health care offered in a facility. Low levels of cleanliness in our public hospitals are a deterrent to use by people. Lack of cleanliness is also a contributor to hospital acquired infections. The Swachh Bharat Abhiyaan provides us with an opportunity for targeted focus on corrective action within our hospitals so that we meet quality standards.

Implementing the Swachh Bharat Abhiyaan in hospitals also provides us with an opportunity to educate the public about personal responsibility for cleanliness in the spaces they occupy. The key message of our education efforts should be that the hospital should ensure the highest standards of cleanliness, each patient and hospital visitor has a social responsibility to practice and propagate cleanliness. The role of influence in adopting hygiene practices is well known. Patients and attendants, who see a clean health facility, will be more motivated to adopt healthy practices. All public health facilities can make hospitals an area of patient education on healthy and hygienic practices and ensure the responsibility of patients and their attendants in keeping hospitals clean.

These guidelines have been developed in order to support the states to implement the Swachh Bharat Abhiyaan in their facilities. The guidelines are part of the series of Operational Guidelines for Quality Assurance in Public Health facilities, with an emphasis on ensuring clean and hygienic facilities. The awards scheme announced by the Honourable Minister for Health, is intended to enable states to encourage their facilities to not only aim for the goal post and obtain recognition, but also to institutionalize practices to sustain these practices. A campaign has a limited life and it is the post campaign effort that can sustain the behaviour change induced by a campaign. The Swachh Bharat Abhiyaan and the awards scheme both reinforce our commitment to high quality care. I call upon states to expedite the dissemination and effective utilization of these guidelines down to sub district levels, so that clean public health facilities soon become a reality.

(B.P. Sharma)



C. K. Mishra, IAS

Additional Secretary &
Mission Director, NHM
Telefax : 23061066, 23063809
E-mail : asmd-mohfw@nic.in



भारत सरकार
स्वास्थ्य एवं परिवार कल्याण मंत्रालय
निर्माण भवन, नई दिल्ली - 110011
Government of India
Ministry of Health & Family Welfare
Nirman Bhavan, New Delhi - 110011



MESSAGE

The level of cleanliness in a facility is a measure of the quality of service provided to the people who use it. It also reflects the empathy of providers to patients and the concern of facility managers towards consumer patient perceptions. Cleanliness and hygiene in health facilities are part of a continuum of the entire gamut of quality parameters.

Given that the caseloads in public hospitals are increasing and are likely to go up in view of rising investments made by states and through central funding, a critical imperative to continuing use by the poor and vulnerable sections of society is to ensure clean surroundings and facilities to inculcate a sense of dignity, pride and ownership by staff and patients alike. Cleanliness reflects patient experience and the message a clean hospital gives in appearance, action and practices is that they care about people.

Issues of patient care and patient safety are part of the National Quality Assurance Framework (NQAF). States are currently undertaking the process of assessing and scoring their facilities to achieve accreditation. This is a work in progress and will take a while to achieve completion. However attention to cleanliness, which contributes to patient safety, is a matter that can be initiated immediately by every public hospital using existing resources.

These guidelines, which should be seen as a part of the series of guidebooks for quality assurance in various levels of health facilities provide a detailed roadmap towards clean health care facilities with information to help facility managers with planning, use of products and procedures for hospital cleanliness, frequency of cleaning, disposal of waste including bio-medical waste and monitoring. The awards scheme is a companion initiative to these guidelines. Winning the Awards is important for recognition and motivation but using the opportunity to set in place systems to strive to win is just as important.

Funding for this effort would be made available through the National Health Mission. States could seek supplementary funding for this endeavour as part of the Project Implementation Plan (PIP). I trust the States will find these guidelines useful as they embark on this campaign and prepare to institutionalise the processes for cleanliness so that the movement for cleanliness is sustained as a habit.

(C.K. Mishra)

12.5.2015
New Delhi



Manoj Jhalani, IAS

Joint Secretary

Telefax : 23063687

E-mail : manoj.jhalani@nic.in



भारत सरकार
स्वास्थ्य एवं परिवार कल्याण मंत्रालय
निर्माण भवन, नई दिल्ली - 110011

GOVERNMENT OF INDIA
MINISTRY OF HEALTH & FAMILY WELFARE
NIRMAN BHAVAN, NEW DELHI - 110011



MESSAGE

There is no more visible parameter about Quality than cleanliness in public health facilities. It is one by which most patients and visitors judge the quality of care they will receive. A clean environment in a health facility is essential to the dignity and comfort of patients. A clean facility reflects a culture of concern for patients and respect for staff and visitors.

While it is true that patients and visitors should also be involved in maintaining cleanliness, the hospital staff should lead by example. These guidelines lay out in considerable detail, processes for implementation of cleaning practices, in providing a safe and clean environment.

These guidelines are not a stand-alone document but are part of the spectrum of policies and protocols envisaged in the National Quality Assurance Framework and detailed in the operational guidelines for quality assurance in public health facilities. They reflect the philosophy that patient experience and technical quality are distinct yet seamless. Active engagement of State and District Quality Assurance Committees would be critical in the effort to impress upon providers and public that effort at improving hygiene can make a difference to patient outcomes.

Cleanliness of the hospital environment is extremely important to patient safety. Hospital associated infections are a huge problem throughout the country and cost both money and lives. The Honourable Minister has just announced the award scheme for the Swachh facilities in each category, to be judged using a rigorous multistep process on a range of parameters including cleanliness and hygiene. These Awards and commendations would recognise the hard work of the health facility team and motivate them in the direction of both technical quality and patient satisfaction.

The Rogi Kalyan Samitis would play a pivotal role in this by mobilising community/resources and supervising the implementation of these guidelines. I urge states to ensure that while guidelines are being disseminated to all facilities, a special effort is made to sensitize members of the RKS so that they become the stewards and torch-bearers of the Swachh Initiative for public health facilities.

MANOJ JHALANI

Table of Contents



I. Introduction -----	1
II. Planning for Cleanliness Drive -----	5
III. Hospital Cleaning Products, Machines & Procedures -----	9
IV. Ensuring Cleanliness -----	13
V. Frequency of cleaning -----	17
VI. Method of cleaning -----	21
VII. Disposal of Waste -----	25
VIII. Monitoring -----	27
Annexure ‘A’ -----	29
Composting & Vermicomposting -----	29
Annexure ‘B’ -----	30
Disinfection and sterilisation -----	30
Annexure ‘C’ -----	32
Sensitisation & Training -----	32
Annexure ‘D’ -----	34
Suggested TORs for Outsourced Services -----	34
Appendix ‘I’: Schedule of Cleaning Activities -----	38
Appendix ‘II’: Sample Check-lists -----	39
Appendix ‘III’: Performance & Fine -----	40
Annexure ‘E’ -----	41
Fumigation -----	41
Annexure ‘F’ -----	43



Preparation of Chlorine Solution -----	43
Annexure ‘G’ -----	44
Management of spills: Body fluid, Chemicals & Mercury -----	44
Annexure ‘H’ -----	46
Safety precautions -----	46
Annexure ‘I’ -----	49
Cleaning of Operation Theatre -----	49
Annexure ‘J’ -----	51
Cleaning of Labour Room -----	51
Annexure ‘K’ -----	52
Infectious disease wards -----	52
Annexure ‘L’ -----	53
Laundry services -----	53
Annexure ‘M’ -----	55
Clean Kitchen -----	55
Annexure ‘N’ -----	59
Miscellaneous -----	59
Annexure ‘O’ -----	61
Biomedical Waste Management: Key Activities -----	61
Annexure ‘P’ -----	65
Score Card for Clean Hospital -----	65
Annexure ‘Q’ -----	67
Tools for scoring of hospital -----	67
List of Abbreviations -----	92
References -----	93
List of Contributors-----	94





I

Introduction

- 1.1 One of the key dimensions of Quality of Care is cleanliness of health facilities. One of the keys indicators of patient's satisfaction relates to her/his perception of cleanliness in health care facilities. Maintenance of the hygiene and cleanliness of health facilities is not only related to aesthetics and patient satisfaction, but it also reduces the incidence of Hospital Acquired Infections (HAI). Keeping a hospital clean requires an active participation of all the personnel of hospitals along with the patients and their visitors.
- 1.2 Maintaining cleanliness in a health care facility differs from the conventional cleaning. Health facilities are required to maintain utmost cleanliness for minimizing the growth of infective organisms, which can spread between patients, visitors and hospital staff. Public health facilities are generally perceived to be unpleasant and unhygienic with poorly maintained buildings, over-flowing drains, grazing cattle within the campus, presence of dogs/cats/rodents inside the hospital and patient care areas&often dirty / non-functional toilets.

Key factors that contributed to these problems usually are:

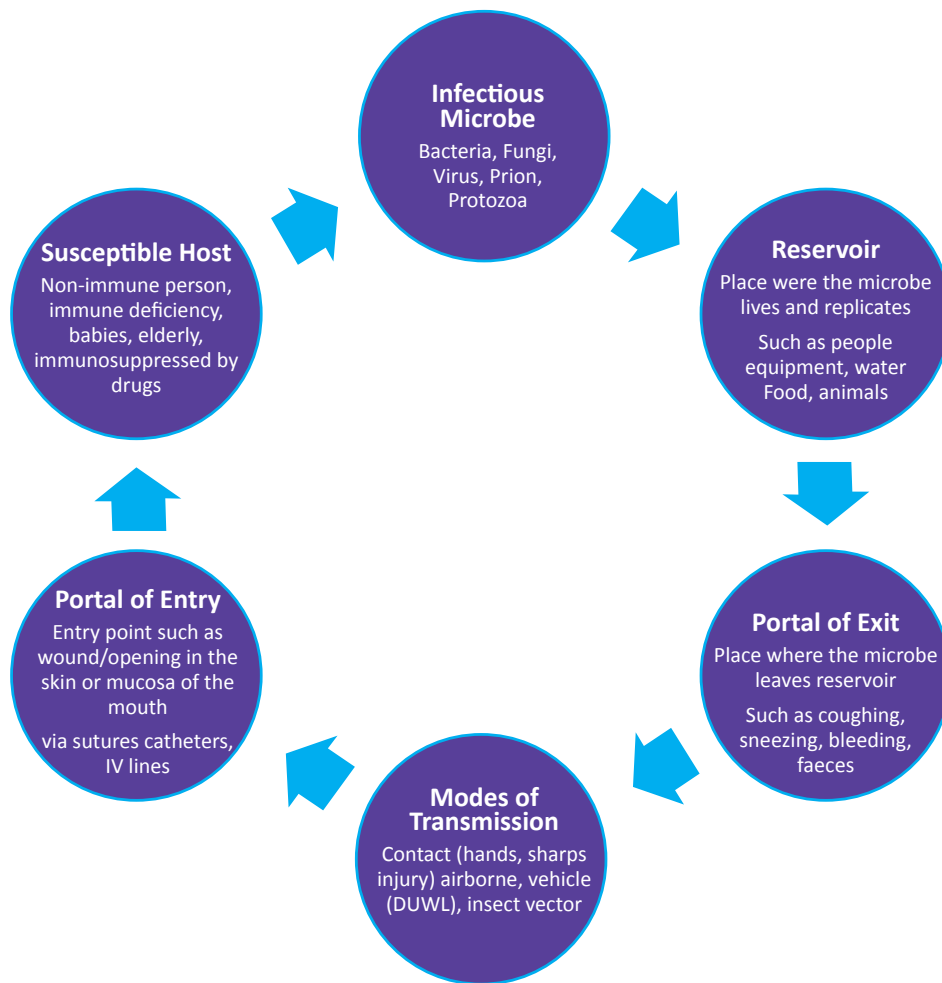
1. Gaps in human resources intended to maintain cleanliness- relates to numbers as well attitudes and motivation level.
2. Obsolete Equipment, consumables and erratic supplies.
3. Inappropriate facility design.
4. Poor infrastructure, non-availability of 24*7 water & power supply.
5. Lack of community ownership of the facility for the upkeep & maintenance.

Cleanliness is both the abstract state of being clear and free from dirt and unwanted items and the process of achieving and maintaining that state

“According to the World Health Organization, an average of Rs. 6500 per person has been an additional cost borne by Indian Government due to lack of cleanliness and hygiene. Swachh Bharat would make a significant impact on public health and in safeguarding income of the poor, ultimately contributing to the national economy.”



Figure 1: Hospital Acquired Infection



Note: Often, many of contagious/ communicable diseases spread by more than one route. The figure shows only a few of the many diseases that may be transmitted in a health facility.

- 1.3 The aim of these guidelines is to enable the hospital management to address various aspects of facility cleanliness, sensitize staff and users regarding hospital cleanliness issues and enable cleanliness practices to be practiced by the health care providers for providing safe and effective care. It also serves as an implementation guidebook which contains guidelines and protocols for ensuring cleanliness as a key quality parameter. These guidelines also include tools for an objective assessment of health facilities and allowing for comparison of two or more facilities. Finally, it serves to support the health facilities in attaining the National Quality Standards.
- 1.4 As the Swacch Bharat movement gets rolling, public health facilities could lead the way in demonstrating themselves as pillars/ road maps of achieving cleanliness by the efforts of teamwork.
- 1.5 A health facility has many stakeholders - hospital staff, community, patients, health department & district administration. Their sensitization would be vital for improving the cleanliness of the health facilities. The fact that the facility is meant “for the people” must be appreciated by and supported “by the people”.



Patients and other visitors visiting health facility can contribute by following hospital norms:

Do's

- Use Public Convenience
- Use Waste bins
- Wash Hands before and after visiting facility
- Follow hospital norms

Don't's

- Don't Spit
- Don't Litter
- Don't Smoke



Health Care workers have a major role in implementation of these guidelines.

1. Follow Waste disposal techniques.
2. Keep hospital premises also clean.
3. Adhere to Infection prevention protocols.
4. Take Ownership & spread awareness about benefit of cleanliness.

The facility administration facilitates maintenance of cleanliness by providing right material, at right location in right quantity AND by supporting the spread of awareness to the community at large

"The very first requirement in a hospital is that it should do the sick no harm"

Florence Nightingale





II Planning a Cleanliness Drive

Cleanliness is a habit not an act. However starting a campaign or drive highlights the issue, builds champions and brings focus on the task at hand. This also further leads to internalizing and inculcating cleanliness as a matter of habit and routine.

1. The Hospital In-charge should decide on a date for starting and managing a 'Swachh Hospital Abhiyan'. The cleanliness drive can be started with a Swacch Hospital Week wherein the focus is on an intensive effort spread over a week to clean the facility followed by maintenance and further improvements.
2. Key steps for implementing Cleanliness Drive include - An internal meeting to be held in the facility with all the staff to explain the aims, objectives, key activities and develop a plan which includes gaps, key areas of attention and actions required. This would be undertaken for each department of the facility.
3. Actions would be categorized as those for which resources could be mobilized internally and second set of activities for which support would be needed from the Rogi Kalyan Samiti (RKS) and those actions which would require additional resources.
4. The facility in charge should allocate responsibility within the team, in which individuals are accountable for actions in their designated areas.
5. A meeting in coordination with the District Administration and Local Municipal Body may be scheduled to obtain support and commitment, provide visibility which will enable participation of other departments such as PWD, Horticulture, Public Health Engineering Department, Local Municipal Body/ PRI. External agencies like municipality and out-sourced organisations managing the biomedical waste disposal should be contacted and their presence is ensured during and after the drive to ensure that the waste is cleared from the hospital dumps and disposed properly.
6. Compost pit of appropriate size should be dug as per standard norms given in **Annexure A**. The facility may plan to have Vermi-compost as well, which yields rich manure.
7. IEC Material should be displayed to highlight the work, its importance and methodology. IEC Material should also include educational posters for the patients and other visitors and on how they can help in keeping the area clean.
8. The cleaning staff is provided with necessary equipment like brooms, bins, mop cloths, personal protection equipment, detergents, etc.
9. For the cleanliness drive support should be mobilized from hospital staff, visitors and community at large to undertake 'shram daan' or voluntary labour during the week/ month in order to publicize the effort and get the community actively engaged in the task.



10. The DM/CMO/facility-in-charge should also pro-actively identify and seek participation from charitable and faith based organizations, community organizations, corporates etc. for cleanliness and upkeep of the facility.
11. Care should be taken that in areas where there is potential for injury, contamination or exposure to infections, the public is kept away, and cleaning is undertaken by trained hospital personnel.
12. In public health facilities, often large spaces are occupied by un-serviceable equipment, broken furniture and old vehicles. Intensive efforts are required to be undertaken to clear such spaces. Those items which can be repaired should be sent for repairing and put in use as soon as possible. Those beyond economic repair (BER) should be disposed off as per procedures and protocols of the state.
13. Special areas such as water tanks, fire tank, etc. should also be cleaned by following laid down procedure. Assistance of other department may be taken to achieve this.
 - ◇ A special drive should be started to keep all stray dogs and animals out of the campus. Methods will be used to discourage the animals from coming back, Phenyl can be sprinkled in areas where they usually sit / rest / feed.
 - ◇ Waste bins with appropriate liners should be placed wherever required and a schedule is laid down for removal of waste and cleaning of the bins.
 - ◇ Segregation of general waste into biodegradable and recyclable should be done at the point of generation to facilitate disposal.
 - ◇ Segregation of the biomedical waste should be done at the point of generation of waste.
14. Before starting of the cleanliness drive, 'As-Is' status of the facility should be assessed on the tools, given in the **Annexure 'Q'**. Photographs can also be taken & kept as a record for comparison with the result of the cleanliness. This can be used to motivate the staff and encourage them to continue with their efforts to keep the hospital clean.
15. Training of the staff on the under-mentioned topics may be carried out during the drive:
 - ◇ 5-'S' methodology
 - ◇ Hand-washing techniques
 - ◇ Segregation of waste
 - ◇ Handling and treatment of biomedical waste
 - ◇ Cleaning of special areas - OT, Labour Room, Nursery ,ICU, Emergency.
16. Follow up actions: After the successful completion of the intensive cleaning drive a systematic and periodic follow-up is required for maintaining the achieved level of the cleanliness. Such short intensive drives can be implemented on a quarterly / as required basis to augment routine efforts. This will help in emphasizing the importance of process and the result will enable a change in the mindset of the stakeholders.



5 S Methodology

There are five 5S phases: They can be translated from the Japanese as “sort”, “straighten”, “shine”, “standardize”, and “sustain”.

Seiri (Sort)

- Remove unnecessary items and dispose them properly
- Make work easier by eliminating obstacles
- Reduce chance of being disturbed with unnecessary items
- Prevent accumulation of unnecessary items
- Evaluate necessary items with regard to cost or other factors
- Remove all parts not in use
- Segregate unwanted material from the workplace
- Need fully skilled supervisor for checking on regular basis

Seiton (Systematic Arrangement)

- Can also be translated as “set in order”, “straighten” or “streamline”
- Arrange all necessary items so they can be easily selected for use
- Prevent loss and waste of time
- Make it easy to find and pick up necessary items
- Ensure ‘first-come-first-served’ basis
- Make workflow smooth and easy
- All above work should be on regular base

Seiso (Shine)

- Can also be translated as “sweep”, “sanitize”, “shine”, or “scrub”
- Clean your workplace completely
- Use cleaning as inspection
- Prevent machinery and equipment deterioration
- Keep workplace safe and easy to work
- keep work place clean

Seiketsu (Standardize)

- Standardize the best practices in the work area.
- Maintain high standards of housekeeping and workplace organization at all times.
- Maintain orderliness. Maintain everything in order and according to its standard.
- Everything in its right place.(Chilled totes in chilled area, Dry totes in dry area.)
- Every process has a standard

Shitsuke (Sustain)

- To keep in working order
- Also translates as “do without being told” (though this doesn’t begin with S)
- Perform regular audits
- Training and Discipline
- Training is goal oriented process. Feedback on the impact of training is necessary monthly.





III

Hospital Cleaning Products, Machines & Procedures

In a health facility, there are a wide range of chemicals and disinfectants used for various clinical, nursing, laboratory and radiological procedures. For cleanliness following groups of the chemical compound are in use.

- a. Iodophors
- b. Phenolics
- c. Chlorine releasing agents
- d. Quats
- e. Miscellaneous

3.1 Iodophors - Iodophors group of disinfectants have iodine base. Though they kill large range of microorganism, their cost is high. Since these compounds have low pH, their detergent action is limited. In a hospital, they are often used for 'part-preparation' prior to surgery or any invasive procedure. When used on floor, discolouration of the floor may happen.

3.2 Phenolics – These groups of disinfectant chemicals have carboic acid base, derived from coal tar. Chlorinated fraction and petroleum residues are added to improve their cleansing and physical properties. Usually they are Black or White fluids. They are more potent than iodophors. They are irritant to skin and mucosa and corrosive to metal surface. White fluids are emulsified suspension and precipitate on surface and makes subsequent cleaning difficult.

3.3 Chlorine – Chlorine releasing chemicals are cheap and effective at low concentration. They act by releasing nascent chlorine. However, freshly prepared chlorine solution remains active for 6 to 8 hours after its constitution. It has advantage of being effective against wide variety of microorganism such as viruse, fungi, bacteria and spores. Chlorine solution gets inactivated by organic matters (e.g. pus, dirt, blood, etc.) and it damages plastics, rubber, some metals and fabrics. They are not compatible with some detergents and acidic fluids including urine and liberate free chlorine which is harmful in a confined space.



3.4 Quats – Quaternary Ammonium Compounds have antimicrobial properties. Certain quaternary ammonium compounds, especially those containing long alkyl chains, are used as antimicrobials and disinfectants, such as Benzalkonium Chloride, Benzethonium Chloride, Cetylpyridinium Chloride, Cetrimide, etc. They are found to be effective against Fungi, Amoeba, and certain types of Viruses. Quats are not active against endospores, *Mycobacterium tuberculosis* and few varieties of viruses. Their activity reduces in presence of organic substance, and also in hard water.

3.5 Miscellaneous –

- a. **Alcohol** - Ethyl and Isopropyl Alcohol in higher concentration (60 – 70%) are fast acting effective disinfectant. Alcohol also has an advantage of leaving skin dry. However, they do not have penetrative power. They are active against *Mycobacterium* but not against spores and few viruses such as poliovirus. Alcohol impregnated wipes may be used for rapid disinfection of smooth clear surfaces, e.g. trolley tops, thermometer, probes, steel table tops, etc.
- b. **Hydrogen Peroxide** - Hydrogen peroxide is popularly used in disinfecting equipment and environmental surfaces in few countries such as UK. It is effective against virus.
- c. **Detergents** – Loosely defined Soaps, alkalis and synthetic agents are detergents. Often we use the words “soap” and “detergent” interchangeably, but really they’re different. A detergent is a chemical substance that is used to break up and remove grease and grime, while soap is simply one kind of clearing agent

3.6 Choosing a Disinfectant for Health Care Facility – A disinfectant for a health facility should have following properties –

- a. Fast Activation on reconstitution
- b. Works well with relatively hard water or water with high salt content
- c. It should be compatible with commonly used commercial detergents or washing powders
- d. User does not need special protective equipment other than mask and normal gloves
- e. Does not corrode metal surface
- f. Preferably bactericidal disinfectant rather than having those with bacteriostatic properties

3.7 Floor Cleaning Equipment –

The mechanised cleaning equipment is costly compared to the traditional cleaning devices (Bucket, mop, wiper, etc.). They require regular specialized maintenance and repair. However, depending upon the resource availability, some cleaning equipment should be added to the inventory and used regularly.



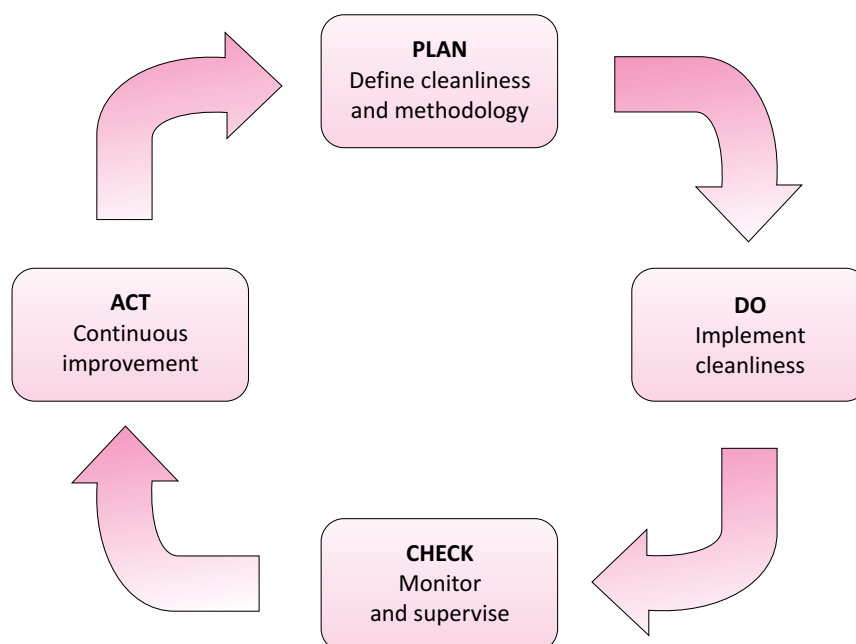
- 3.7.1 Carts** – Cleaning carts are available with different options - with or without shelves, doors, trash receptacles, or with or without shelves for mop buckets. A cart with a lockable door would be preferred in Paediatrics Ward.
- 3.7.2 Floor Machines** - While purchasing floor machines, ease of operations, safety features, strength of the motor, availability of spare parts and after-sale service must always be considered. Commonly the floor machines are available in sizes from 12 inches to 23 inches. Smaller diameter machine should be preferred for cleaning of crowded OPD, patient care area, narrower corridors, etc.
- 3.8 The consumables like mops, soap, chemicals and disinfectants should be standardized. The BIS standards can be used as a reference for procurement of Detergents & Disinfectants. This should include the personal protection equipment / gear. The Administration needs to ensure that regular supply of the equipment and consumables is maintained with provision of 20% reserve stock.
- 3.9 Disinfection & Sterilisation are an integral part of the hospital procedures. Commonly used methods are given in **Annexure 'B'**.



IV

Ensuring Cleanliness

The best way for improving the cleanliness at health facilities would be to follow conventional time tested approach of PDCA cycle -



The Medical Superintendent or the Head of Facility must plan as to what he / she wants and then work on the how to implement the processes.

4.1 Human resources

5.1.1 **Number of sanitary staff** : Though the IPHS Guidelines have recommended number of staff for this purpose, actual requirement would be dependent on case load of the facility.

A single person can manually clean upto 250 sq. m per work shift.¹ The more important issue is that the staff should be available on 24 x 7 basis as per requirement.

The standard recommended by the IPHS for a 100 - 200 bedded hospital is 15 sanitary workers + 7 for the emergency OT (3) and main OT(4) put together + 1 for the blood store. (Total of 23 workers) pooled into a central pool corresponds to the general recommendation of 01 sanitary worker for 10 beds with a 10 % leave relief.

¹source : www.unep.org/ietc/Portals/136/SWP-Vol I



Rotation of staff in critical areas like OT, Laboratory, ICU & Wards may be kept at minimum.

4.1.2 **Responsibility and accountability** : An in-house Housekeeping in-charge should be appointed with a direct reporting to the Facility In-charge or the Nursing In-charge. In case of the sanitary staff's number is more than 30, an additional sanitary supervisor (01) can be appointed for every additional 15 sanitary workers. The housekeeping responsibility should be delegated through the in-house supervisor to the contractor's supervisor to maintain single chain of control thus ensuring better supervision and accountability. However it must be emphasized that the responsibility of keeping an area / department clean lies with the in-charge of that area / department. He / she should co-ordinate with the Housekeeping supervisor for deputing the staff for their respective departments.

The common areas should be directly supervised by the Housekeeping supervisor.

4.1.3 **Skills and competency** : The housekeeping / safai staff deployed in health care facilities must be sensitized for the importance of a clean hospital and its surroundings and also to the requirements specific to such facilities. They must also be sensitized to the fact that they are also vulnerable to Hospital Acquired Infections (HAI) & Occupational hazards and must be adequately trained on prevention and reporting of them.

Guidelines on sensitisation and training on cleanliness topics are given in **Annexure 'C'**.

4.1.4 **Rational Deployment**: Rational deployment of the sanitary staff in shifts must be planned prior and implemented properly so that the cleanliness is maintained continuously. Areas with no or very minimal patient interaction and visitors like the office and stores can be cleaned once a day and can be grouped with other such areas whereas the critical areas are required to be cleaned more frequently.

4.2 Infrastructure - issues of design and inadequacy

- a. Poor design of the facility and toilets are often not conducive for cleanliness with poor drainage and sewage facilities. Attempts should be made to correct the civil infrastructure over a period of time e. g. gradient of drains, installation of overhead tank in each block, de-silting and repair of septic tank, etc.
- b. A facility should have an adequate number of toilets and bath facilities, which would largely depend upon the case load. Suggestive scale of toilets and Baths are given in table No. 5.1.



Table No. 4.1: Requirement of Amenities in Hospital

1.	Water Closet	1 for every 8 beds (male) 1 for every 6 beds (Female)
2.	Ablution Taps	1 for each water closet plus 1 water tap with drainage arrangement in the vicinity of water closet.
3.	Urinals	1 for every 12 beds (Male Only)
4.	Wash Basin	1 for every 12 beds
5.	Baths	1 bath with shower for every 12 beds
6.	Bed pan washing sink	1 for each ward in dirty utility and sluice room
7.	Cleaner's sinks and sinks/ slab for cleaning mackintosh	1 for each ward in dirty utility and sluice room
8.	Kitchen sinks	1 for each ward in ward dishwashers pantry

4.3 Adequate water supply must be ensured for the cleaning activities. Requirement of an average hospital is given in table no 4.2.

Table 4.2: Water Requirement of Health Facilities

Number of beds	Amount of water in litres per day per bed
25-100	350
101-300	400
301-750	450

4.4 Outsourcing of Housekeeping Services:

4.4.1 Outsourcing of the housekeeping service should be considered . A comparison shows that for bigger facilities with more staff, outsourcing of the services will be more useful. A comparison of both approaches is given in Table 4.3.

Table 4.3: Comparison of in-house vs outsourced service

Issue	In-house	Outsourced
1. Number	Fixed as per the authorization	Can vary depending on workload
2. Control	Direct control	Through contractor
3. Discipline	Long drawn administrative process	Responsibility of contractor
4. Continuity of staff	Assured hence standard of service can be more stable	Staff can keep on changing hence standard of service can vary
5. Leave / Availability of staff	No leave relief	Contractor provides leave relief if so specified in the TORs
6. Job description	As laid down by authorities	As per the TORs of contract
7. Ensuring quality	At times difficult to maintain	Deliverables should be clearly spelt out with inbuilt penalties for poor performance
8. Decision making – whether in-house or outsourced	Less than 10 staff are required	More than 10 staff are required



4.4.2 The TORs for the outsourcing of the service should be clear and unambiguous rather than laying down just the number of staff required. It should include the standards of service, methodology, deliverables, monitoring practises and penalties for deficient services. A template for TOR including model checklists and scoring system is given in **Annexure 'D'**.

4.5 Patients and visitors to the facility - For maintaining high standards of cleanliness, involvement and cooperation of patients and the visitors would be of paramount importance. This could be achieved by appropriate BCC & IEC activities. Help of non-governmental RKS members, PRI members, NGOs and local body members should be taken in spreading awareness among patients and visitors.



V

Frequency of cleaning

Following general cleaning activities are recommended in a hospital :

Detailed Frequency of cleaning

S. No.	Activity	Frequency	Agents Used
OPERATION THEATRE / ICU / LABOUR ROOM / NICU / ISOLATION WARDS			
1	Garbage Removal	Thrice a day and more when bags are 3/4 th full	As per the BMW guidelines
2	Cleaning of Instruments	After every procedure	Soap & water followed by sterilization
3	Cleaning of clean areas and corridors of complex	Twice a day/ as & when required	Damp Mop with detergent and water/ 0.5% chlorine
4	Mopping. (Care to be taken in case of special epoxy flooring)	Thrice a day and after each procedure	Damp mop with detergent and water / 0.5% chlorine
5	Cleaning of equipments like anesthesia machines, monitors, ventilators, infant warmers/ baby cribs etc	Twice a day/ as & when required	Damp Mopping , dry, Disinfect with 70% isopropyl alcohol / 2% glutaraldehyde (For endoscopes & reusable items) details attached in 'Annexure I'
6	Fumigation	Once a month/ After Infected case surgery	Formal dehyde (Please refer ' Annexure E'
7	Cleaning of OT table and OT stretcher	Twice a day/ after each surgery	0.5% chlorine /70% Isopropyl alcohol
8	Doctor's / nurses / technician room	Twice a day	Detergent & water
9	Washroom & wash basins cleaning	Thrice a day and as & when required	Wash with Soap & water, then dry, wipe 0.5% chlorine
10	Washing of slippers	once a day and when required	Soap & water
11	Collection of soiled linen and sluicing	As and when required	Soak in clean water with bleaching powder 0.5% for 30 minutes. Wash again with detergent and water to remove the Bleach. OR launder in hot water (70- 80 degree C) if possible.



S. No.	Activity	Frequency	Agents Used
12	Cleaning of Mops	After every use	Soak in clean water with bleaching powder 0.5% for 30 minutes. Wash again with detergent and water to remove the bleach.
MODERATE RISK AREA WARDS			
1	Garbage Removal	Twice a day and more / when bags are 3/4th full	As per the BMW guidelines
2	Mopping of floor	Once a day	Damp mop with detergent and water
3	Washrooms & Wash basin	Thrice a day and as & when required	Wash with Soap & water, then dry, wipe with 0.5% chlorine.
4	Dusting / Cleaning of Equipment	Once a day	Damp Mopping , dry, Disinfect with 70% isopropyl alcohol
5	Collection of soiled linen and sluicing	As and when required	Soak in clean water with bleaching powder 0.5% for 30 minutes. Wash again with detergent and water to remove the Bleach. OR launder in hot water (70-80 degree C) if possible
CANTEEN AND KITCHEN			
1	Garbage Removal	Thrice a day and more when bags are 3/4th full	As per the BMW guidelines
2	Mopping of floor	Once a day	Damp mop with detergent and water
3	Washrooms & Wash basin	Once a day	Wash with Soap & water, then dry, wipe with 0.5% chlorine
4	Dusting	Once a day	Duster
PUBLIC AREA WASHROOM			
1	Cleaning	Every 2nd hourly	Damp mop with detergent and water
2	Washrooms & Wash basin	Thrice a day	Wash with Soap & water, then dry, wipe with 0.5% chlorine.
LOBBY & OPD AREA			
1	Garbage Removal	Thrice a day and more when bags are 3/4th full	As per the BMW guidelines



S. No.	Activity	Frequency	Agents Used
2	Mopping of floor	Once a day	Damp mop with detergent and water
3	Washrooms & Wash basin	Once a day	Wash with Soap & water, then dry, wipe with 0.5% chlorine
4	Dusting	Once a day	Duster
STORES (MEDICAL SURGICAL, NON - MEDICAL)			
1	Garbage Removal	Thrice a day and more when bags are 3/4th full	As per the BMW guidelines
2	Dusting	Once a day	Duster
3	Mopping of floor	Once a day	Damp mop with detergent and water
MORTUARY			
1	Garbage Removal	Thrice a day and more when bags are 3/4th full	As per the BMW guidelines
2	Dusting	Once a day	Duster
3	Mopping of floor	Once a day	Damp mop with detergent and water
4	Cleaning of autopsy table	Once a day and after every procedure	0.5% chlorine / 70% isopropyl alcohol
5	Drains	Once a day	Soap & Water
ADMINISTRATION RECORD / ENGINEERING OFFICE			
1	Garbage Removal	Thrice a day and more when bags are 3/4th full	As per the BMW guidelines
2	Dusting	Once a day	Duster
3	Mopping of floor	Once a day	Damp mop with detergent and water
4	Dry Mopping	Once a day	Soft brush
5	Washrooms & Wash basin	Once a day	Wash with Soap & water, then dry, wipe with 0.5% Chlorine
CSSD / LAUNDRY			
1	Garbage Removal	Thrice a day and more when bags are 3/4th full	As per the BMW guidelines
2	Dusting	Twice a day	Duster
3	Mopping & Washing of floor	Twice a day	Damp mop with detergent and water
4	Mopping (CSSD) sterile areas	Once a day	0.5% chlorine/ 70% Isopropyl alcohol



S. No.	Activity	Frequency	Agents Used
5	Fumigation	Once a month/ as an when required	Formal dehyde (Please refer ' Annexure E'
6	Washrooms & Wash basin	Once a day	Wash with Soap & water, then dry, wipe with 0.5% chlorine
RADIOLOGY & LABORATORY			
1	Garbage Removal	Thrice a day and more when bags are 3/4th full	As per the BMW guidelines
2	Dusting of infrastructure	Once a day	Damp duster, dry , then wipe with
3	Cleaning of equipments	Once a week	Damp cleaning , dry , 70% isopropyl alcohol
4	Mopping & Washing of floor	Twice a day	Damp mop with detergent and water
5	Washing of Slippers	Once a week	Detergent & water
6	Washrooms & Wash basin	Once a day	Wash with Soap & water, then dry, wipe with 0.5% chlorine

Note : A neutral detergent and warm water solution should be used for all routine and general cleaning. When a disinfectant is required for surface cleaning, e.g. after spillage or contamination with blood or body fluids, the manufacturer's recommendations for use and occupational health and safety instructions should be followed.

Source : Practical guidelines of Infection Control By WHO





VI Method of cleaning

- 6.1 The method of cleaning of various areas is given in the annexures and can be adapted to the facility's requirements. The methods described are essentially based on the common practice of manual cleaning using brooms and mops.
- 6.2 Cleaning using mechanical equipment has made great inroads in the health facilities across the world. However it is capital intensive and trained manpower is required to handle the equipment, but cleaning is more efficient and a bigger area can be cleaned in lesser time. It will be worth procuring mechanical cleaning equipment especially in the larger facilities.

6.3 Preparation for cleaning

Different areas require different levels of cleanliness, e.g. the OPD and waiting areas do not require a very high level of cleanliness as compared to that of the Operation theatre or the ICU.

As far as possible wet mopping is preferred over dry sweeping to avoid kicking up and circulation of dust and allergens.

A. Preparation

- i. Put gumboots or disposable shoe covers
- ii. Hand-Gloves must always be borne by all personnel engaged in cleaning of Health Facility
- iii. Wear cap, mask, apron / gown
- iv. Prepare germicidal cleaner (phenyl) in clean water as per the dilution directions mentioned on the product label, both in the wringer bucket as well as plastic pail.
- v. Move cots and furniture as per the directions of the supervisor to one side.
- vi. Use a blunt knife to remove any dried up or sticky soil on the floor.
- vii. Use a treated dry mop or nylon push broom and dust pan to clear the loose soiling on the floor.

B. Performance

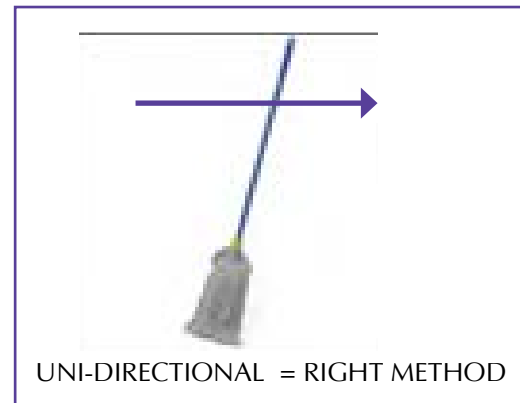
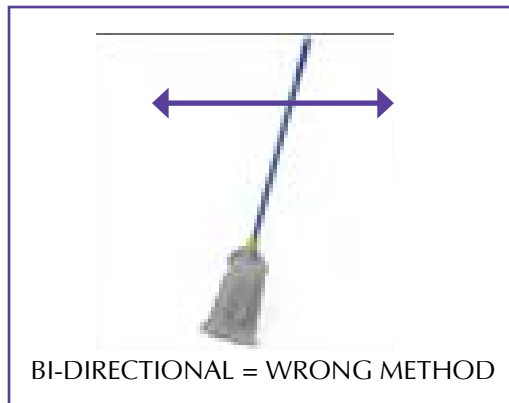
- i. Sweep the dust -in case the quantity is large- to the door way and collect it in the dust pan and discard into the trash.



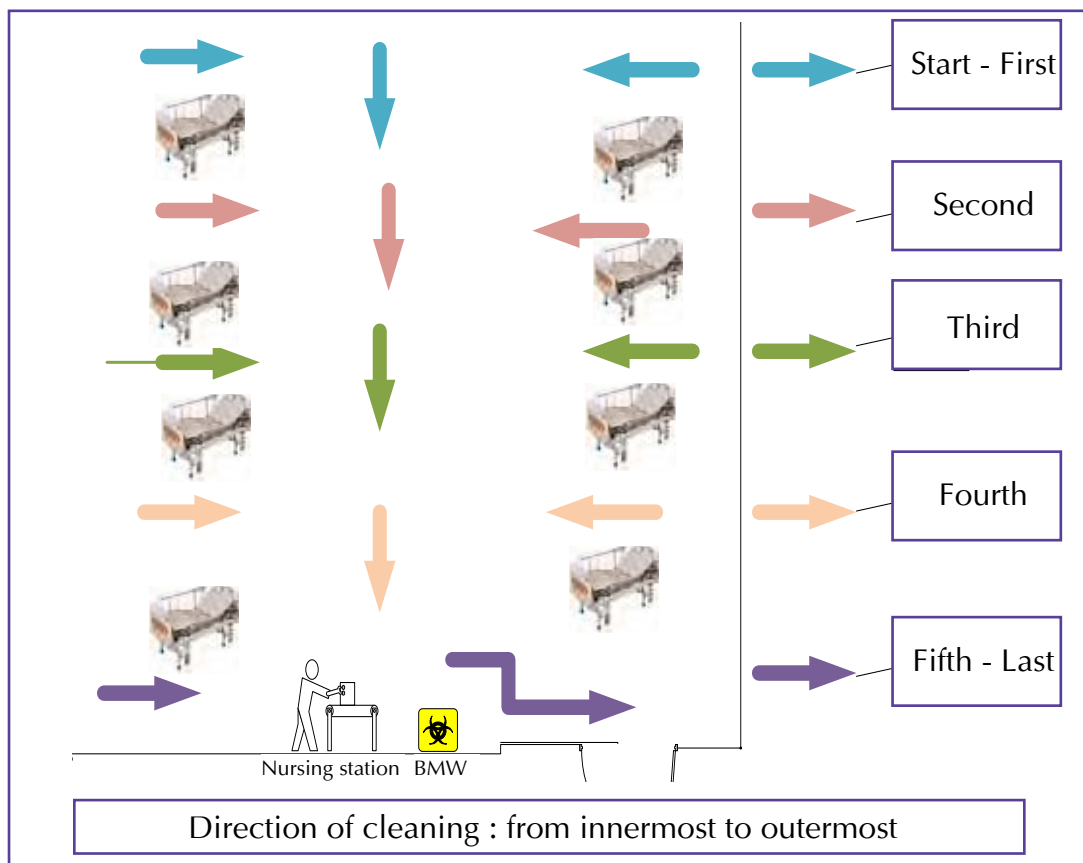
- ii. Wet the mop in the germicidal solution (phenyl) and wring it gently so that the mop holds enough solution for necessary disinfection of the floor.
- iii. Wet mop the floor in one direction and ideally from the centre outwards toward the door. Change of mopping water should be done frequently especially when it is noticed that it is noticed dirty

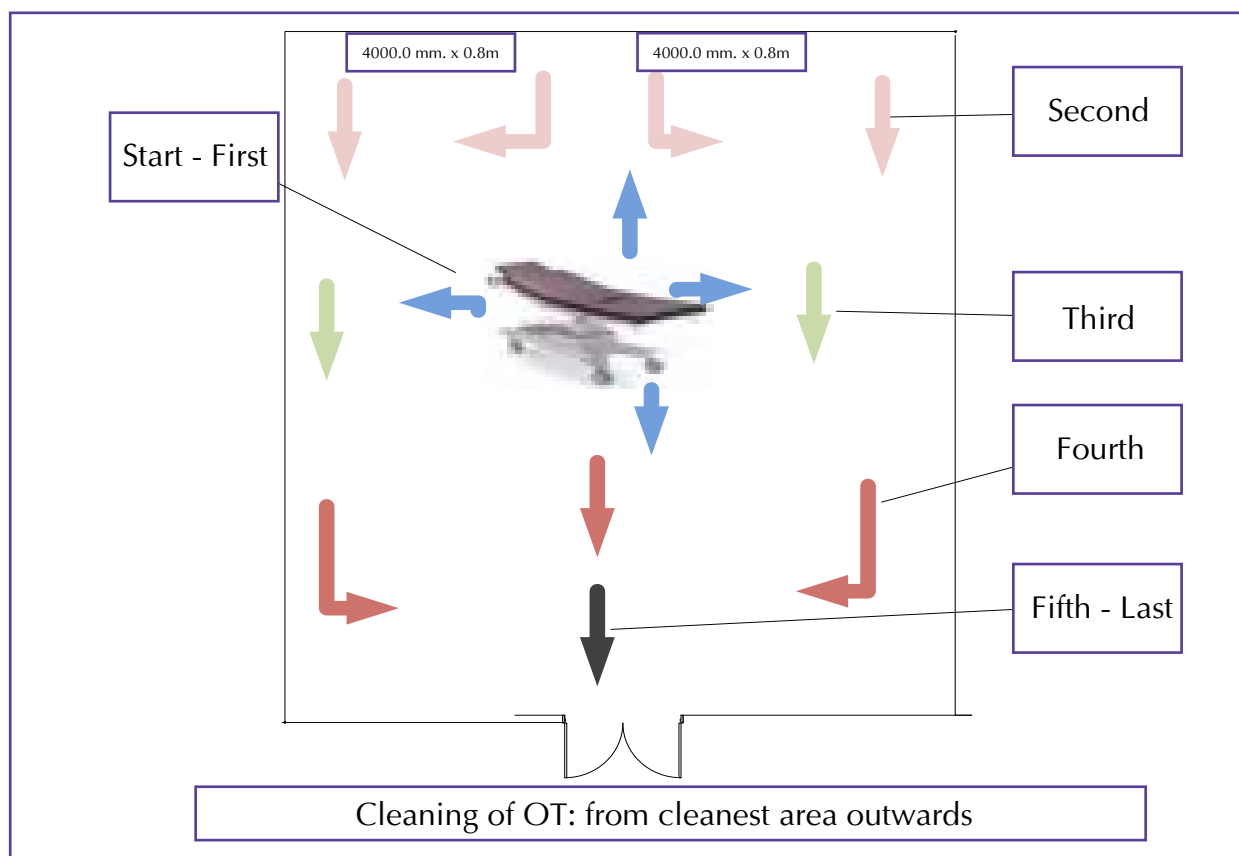
C. Direction of cleaning

- i. The sweeping movement should be unidirectional



- ii. The direction of cleaning in healthcare facilities must be from the clean to the dirty area. In closed spaces like a ward the direction should be from within outwards.





- i. Clean the furniture and cot castors with a clean duster using the germicidal solution prepared in the plastic pail, directly or with a spray bottle.
- ii. Put the tables and cots back in position.
- iii. Take out all your cleaning equipment and tools out of the door
- iv. Scan the room to ensure that cleaning is done thoroughly and none of personal belonging / cleaning equipment left behind in the operation room.
- v. Keep your equipment and tools to designated place, after rinsing in fresh germicidal solution.
- vi. Remember to clean the doorstoppers and the door handles and latches which are usually left or not attended to.

D. Finishing:

- i. De-gown carefully, wash and let them dry.
- ii. Remove your cap and mask wash and let them dry.
- iii. Remove the gloves wash and let them dry.
- iv. Wash your hand as per six steps Explained in **Annexure C**.

E. Practical suggestions

- i. All loose particles and litter should be removed before dealing with any stubborn stains/dirt.



- ii. Use lighter cleaning methods before attempting stronger methods.
 - iii. Before any implement or cloth is used, make sure they are clean and dry.
 - iv. If possible, use a **double bucket system** when mopping the floors so that dirty water is not reused while mopping. The first bucket contains clean water while the second bucket is used to squeeze out the water from the dirty mop following which the mop is dipped in the clean water and mopping done.
 - v. The **Three bucket system** should be ideally practised and that the first bucket contains water with detergent used in the beginning. The mop is then rinsed in the second bucket and dipped in the third bucket which can also contain a disinfectant and the mopping done again.
 - vi. Abrasives should be used as a last resort as they can damage the surface.
 - vii. Use an agent that is least offensive in smell if alternatives are available.
 - viii. When cleaning a surface, be cautious of marring the surroundings area, e.g. finger prints on walls, grazing other articles, etc.
 - ix. Use methods that are least inconvenient to patients. Disturbance can be caused by noise or obstacles placed in public areas.
 - x. Be sure that during the process of cleaning areas do not become accident-prone, e.g. wet, slippery floors, etc. If required, cautionary sign can be put.
 - xi. Cleaning should be carefully planned to make efficient use of time
- 6.4 In a Health Facility, Chlorine Solution is used often for disinfection of surfaces, plastic waste, etc. Commonly source of the Chlorine is either bleaching powder or commercially available Hypochlorite solution. Following points must be considered, whenever Chlorine Solution is being used –
- a. The solution should be freshly prepared.
 - b. Effectiveness of solution decreases with passage of time and presence of organic matter.
- Guidelines for preparing Chlorine Solution is given in **Annexure 'F'**.
- 6.5 There is often spill of body fluids & mercury in Health Facilities. Such spillage requires careful cleaning and disinfection as mentioned in **Annexure 'G'**.
- 6.5 Safety precautions are of utmost importance for the staff and visitors. The model precautions are given in **Annexure 'H'**.
- 6.5 Guidelines for cleaning of following areas of Health Facility are given in the Annexures.
- a. Operation Theatre – **Annexure 'I'**
 - b. Labour Room – **Annexure 'J'**
 - c. Infectious Disease Ward - **Annexure 'K'**
 - d. Laundry Services – **Annexure 'L'**
 - e. Hospital Kitchen – **Annexure 'M'**
 - f. Misc. - Desert Coolers, Water Cooler, Lift, Ambulance, Water Tank, etc. – **Annexure 'N'**





VII Disposal of Waste

- 7.1 The responsibility of the disposal of hospital waste lies with the head of the facility to ensure the disposal is done properly and it does not harm to human health and environment. Simple in-house steps like composting of non-infected biodegradable waste which is much environment friendly, should be adopted. It is important that segregation of waste is done at the point of generation as per guidelines contained in BMW (management & handling) Rules 1998. Categories of Waste, scheme for segregated collection, and practical approach to BMW management are contained in **Annexure 'O'**.
- 7.2 The general waste may also be disposed of through the local municipality waste management system. Alternatively, it may be taken for the composting or vermi-compost, as detailed in **Annexure 'A'**.
- 7.3 Waste water must also be disposed effectively since it can serve as a breeding ground for mosquitoes. People may also slip and fall in muddy puddles, and children may play in them and risk waterborne illness.
- 7.4 Health facilities in small towns and villages may dispose the general waste by deep burial / composting. Such burial areas should preferably be situated away from populated areas and water points (wells, hand-pump) etc. They should be enclosed to prevent its access by animals.
The area should be kept clean and planting of trees and plants should be encouraged.
- 7.5 Burning of plastic wastes is hazardous to human health and must not be practiced. Plastic bags must be segregated and recycled. If plastic is coming out of the patient care area, it needs to be disinfected by Chlorine Solution, and mutilated to prevent its re-circulation by unscrupulous element.
- 7.6 Biomedical waste disposal should be done by an agency so authorised by the government. In case such a facility does not exist then the hospital authorities must install plant to have an environmentally sound waste disposal plan, which is compliant to BMW Rules 1998.





VIII Monitoring

Systematic and sustained monitoring of the cleaning effort must be done. The use of checklists will ensure that the workdone is appropriate and on time. They can also be used for documenting deficiencies and form the basis of the penalties imposed on out-sourced organizations.

The state and district can assess the facilities to score level of cleanliness. Score card for health facilities is given at **annexure 'P'** tools for the scoring of health facilities is given at **Annexure 'Q'**



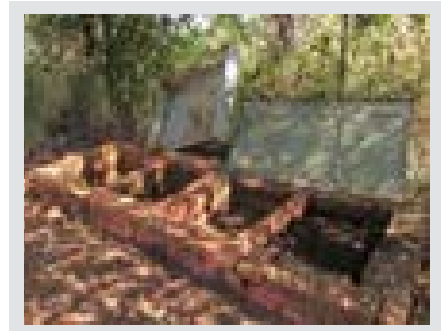
Composting & Vermicomposting

I. Construction of compost Pit

- ◆ A two-tank system for garden and general waste is recommended.
- ◆ A small tank of 1m x 1m x 1m is made above ground under may be a shade.
- ◆ The tank may be divided into two equal halves units vertically by a wall containing vents.
- ◆ Twigs wigs and small branches are put on the floor.
- ◆ The waste is deposited over this layer and spread in the tanks.
- ◆ After a layer of 15 to 20 cm dry/green leaves is formed ,a thin layer of soil is used to cover it.
- ◆ Water is sprinkled over it This process of alternate layers of waste and mud is followed till the tank is about $\frac{3}{4}$ full following which the other tank is used.
- ◆ The contents of the first tank are to be left alone for about two months and the contents can then be used as manure.



Incorrect Disposal of Hospital Refuse



Two Tank System

II. Vermi-composting : an alternate method

Vermi-composting has gained popularity during last few years. In this method, few species of Earth-worms (*Eudrilus eugeniae* or *Eisenia foetida* and *Perionyx excavates*) are added to the compost. These help to break the waste and the added excreta of the worms makes the compost very rich in nutrients.

- ◆ To make a compost pit, a covered / selected site is selected.
- ◆ Preferably the pit should be lined with granite or brick to prevent nitrite pollution of the subsoil water.
- ◆ Each time when organic matter is added to the pit, it should be covered with a layer of dried leaves or a thin layer of soil which allows air to enter the pit.
- ◆ Usually after 6 to 8 weeks the rich pure organic matter is ready to be used.



Vermicomposting



Disinfection and sterilisation



Electric Steriliser



Vertical Autoclave



Horizontal Steriliser

1. Methods of sterilisation

The various methods of sterilisation of practical use in a public health facility are

- a. **Exposure to Sunlight:** direct and continuous exposure to sunlight (ultraviolet rays) is destructive to many disease producing organisms . Articles such as linen , bedding and furniture may be disinfected by exposure to direct sunlight for several hours.
- b. **Air:** Exposure to open air acts by drying or evaporation of moisture which is lethal to most bacteria.
- c. **Burning / incineration** is an excellent method of disinfection but is limited in use due to environmental pollution it causes.
- d. **Sterilisation** of instruments can be done in an emergency situation by exposing the instrument to a spirit lamp flame.
- e. **Hot Air :** Useful for sterilising articles such as glassware, syringes, swabs, dressings, sharp instruments, etc.
- f. **Boiling:** boiling for 10–15 minutes kill bacteria but not viruses and spores. Electrical steriliser can be used for small instruments.
- g. **Autoclave:** A vertical high pressure single / double drum sterilizer should be ideally used by small facilities to ensure that instruments and linen are sterilised properly. The efficiency of the sterilisation can be monitored by heat sensitive steri-strips. Big horizontal high pressure autoclave Machines (HSSD) should be used at bigger facilities like a district hospital.



2. Timing of Autoclave Process

RECOMMENDED TIMINGS AND SETTINGS FOR AUTOCLAVE PROCESS				
Item	Glass	Bins and trays	Rubber	Linen
Time	3-5 minutes	35-40 minutes	5 minutes	35-40 minutes
Temperature	121-125° C	121-125° C	121-125° C	121-125° C
Pressure	20 –24 lbs	20 –24 lbs	20 –24 lbs	20 –24 lbs
Dryer	10 minutes	25 minutes	20 minutes	30 minutes
Release	5 minutes slow exhaust pressure release	5 minutes slow exhaust pressure release	5 minutes slow exhaust pressure release	5 minutes slow exhaust pressure release

2. Pressure cooker cannot be used for sterilization by of instruments as 15 pounds of temperature is required for sterilization whereas only 5 pounds pressure is generated in pressure cooker.



3. Chemical sterilisation: Chemical sterilisation can be done by immersing Fibre-optic endoscopes in “Glutaraldehyde”. Reusable catheters are also sterilised in this manner. After removal the item is cleaned thoroughly with boiled and cooled water / distilled water. The date of activation of the agent (Glutaraldehyde) must be recorded and the chemical should be used within 14 days. ETO sterilisers can also be used in bigger district hospitals with advanced clinical facilities.



Sensitisation & Training

1. All stakeholders must be sensitized on the importance of maintaining a high level of hygiene and cleanliness in their area of work. The healthcare workers should repeatedly be made aware that the healthcare facility is a destination of ill and sick persons (those who are unable to take care of themselves), in such a scenario clean & hygienic surrounding helps in healing other than protecting their own health.
2. The following topics should be covered in the training.

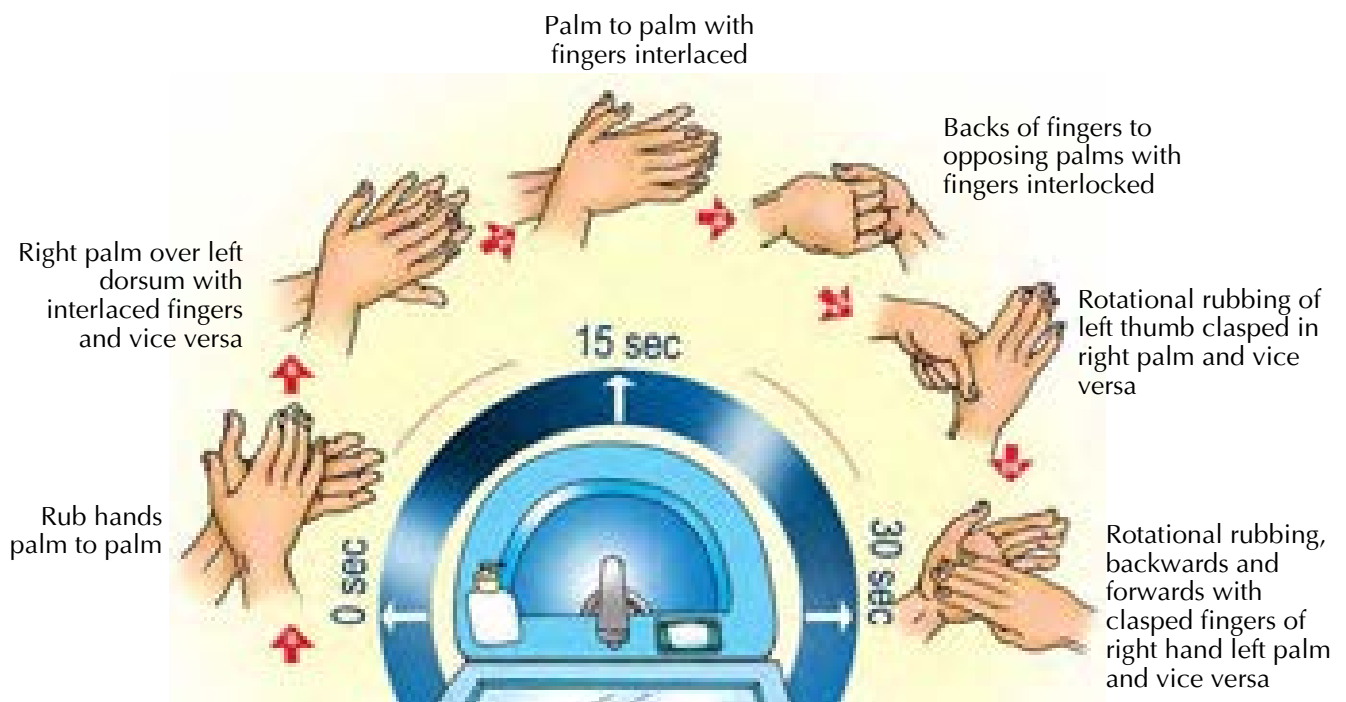
- ◆ Occupational hazards at the work place
- ◆ Personal protection
- ◆ Method of cleaning in general areas of the hospital
- ◆ Method of cleaning in special areas like the OT, Labour room, ICU, Laboratory etc.
- ◆ Management of body fluid, mercury spills, etc.
- ◆ Handling of biomedical waste
- ◆ Carriage and final disposal of waste
- ◆ Disinfection and fumigation
- ◆ Hospital Infection Control Policy
- ◆ 5S methodology

3. The community and visitors must also be sensitized and educated on the importance of keeping the health facility clean. The fact that this is a public facility and caters to the need of members of the very same community must be emphasized
4. Sensitisation on Personal hygiene - The facility workers should be sensitised to maintain a high level of personal hygiene as suggested below



PERSONAL HYGIENE	
General neatness and cleanliness	<ul style="list-style-type: none"> ❖ Personal cleanliness. ❖ Body odours should be prevented by Daily bath. ❖ Finger nails should be kept clean and short.
Hand wash	<ul style="list-style-type: none"> ❖ Washing of hands with soap and water is very effective in reducing transmission of infection and must be done frequently.
Hair	<ul style="list-style-type: none"> ❖ Hair should always be neatly combed. ❖ Women should use hairnets to prevent hair from falling out of place during work.
Cosmetics	<ul style="list-style-type: none"> ❖ Makeup should be avoided. ❖ Usage of Jewellery, anklets, etc. should be avoided.
Uniform	<ul style="list-style-type: none"> ❖ All staff should wear uniform as per hospital dress code.
General	<ul style="list-style-type: none"> ❖ Care should be taken to eliminate accident / hazards. ❖ Safety regulations should be followed for protection from risk of injury/ infection. ❖ They should wear gloves and masks and other PPE.

5. Maintenance of hand hygiene is of paramount importance. Steps on hand hygiene need to be emphasized.



6. Sensitization on following behavioral change strategies would be required –
- a. Usage of Alcohol based hand rub
 - b. Routine Hand Wash for 15 -20 Seconds
 - c. Preparing for Aseptic Procedures – 1 minute
 - d. Surgical Wash – 3 – 5 minutes



Suggested TORs for Outsourced Services

1. Definition of work area

All open and covered area within the boundary of the Health facility including roof and basement (if any) will be within the scope of housekeeping services to be provided by the contractor it includes all of the Hospital rooms of all the departments, stores, canteen/ kitchen (if not outsourced), consultants chambers, wards, ICUs, Operation Theatres, CSSD, Laundry, Labs, Blood Bank, all corridors and all covered spaces and premises. It does not include cleaning of residential quarters, which are situated within the hospital premises.

2. Objectives and general rules

- a. The main objective of the outsourced service is to provide a high level of a neat, clean, hygienic and presentable look to the entire area. The contracting organisation and their team will supervise the work listed in the TORs.
- b. The contracting organisation will ensure that the staffs deployed are dressed in neat and clean uniform, which is approved by the Health Facility.
- c. Housekeeping / cleaning services should be provided round the clock on all days including holidays, so that all areas are neat and clean all the time. Working hours should be adjusted in such a manner that cleaning work in the morning should be completed half an hour before the start time of normal work.
- d. Apart from housekeeping services as described below, the Housekeeping staff shall also assist the hospital nursing staff in day-to-day patient care such as receiving and dropping patients at the entrance, taking patients to diagnostic / laboratory, sending blood / stool / urine samples to laboratories etc.

3. Detailed scope of Housekeeping Services include but not limited to the following

- a. Schedule of cleaning to be observed by the staff is given in the **Appendix 'I'** to this ToR.
- b. Behaviour of contractor & his staff with hospital personnel, patients and visitors would be courteous and respectful. The staff would maintain confidentiality of information, which they may access during the course of their duty in the hospital.
- c. Cleaning, scrubbing and disinfecting bathrooms, toilets, wash basins, sanitary fittings, floors etc. of all the areas including Wards, ICUs, OT and all other departments at regular intervals on daily basis.



- d. Vacuum cleaning of all carpets and upholstered furniture on weekly basis.
- e. Cleaning and disinfecting kidney trays, urinals, bed pans, sputum cup, humidifiers, suction bottles and emptying urine and drain bags whenever required.
- f. Cleaning blood spills and others such as human excrement, urine, vomitus, unsterile body fluids as & when required.
- g. Cleaning, dusting electrical switch boards, light fixtures, fans, air conditioner vents, name plates, door mats, firefighting equipment, computer systems, phones, doors, windows, furniture, window glasses, grills, curtains etc.
- h. Cleaning of dust bins, waste paper baskets, cobwebs etc. and disposing off all collected refuse on daily basis at regular intervals. The dust bins shall be washed and garbage bags need to be placed in all garbage bins to avoid stains and clear them when it is 3/4 full.
- i. Collect garbage in specified colour coded bags from all dust bins and garbage bins existing inside the premises and disposed at the designated area within the hospital.
- j. Refilling, replacing and emptying of sharp containers at all stations.
- k. Offering and assisting the patient with kidney tray, urinals, bed pans, sputum cups when required and disposing the contents in the sluice room, clean, disinfect and keep it ready for next use.
- l. Cleaning the patients who have soiled themselves with stool, urine, vomitus with assistance of Patient attendant / nursing orderly / staff nurse / nursing sister.
- m. Sluicing linen which are soiled by urine, vomitus, faeces and others with 1% chlorine solution and send to laundry.
- n. Spraying room fresheners in all rooms on daily basis at regular intervals.
- o. Assist in transporting dead bodies to mortuary and disposal of amputated limbs or other parts to bio medical waste collection point.
- p. Assist in fumigation as per schedule.
- q. Cleaning, mopping, disinfecting OT floors, walls, ceilings / OT lights in morning before starting the case as per instruction & direction of OT In charge.
- r. Clean the patients' bed, lockers, trolleys, wheel chairs and surrounding areas twice a day or when patient is discharged or when soiling occurs.
- s. Cleaning and carbolization of ICU beds, OT beds as per instruction.
- t. Washing of slippers in ICUs, OT, dialysis etc.
- u. Scrubbing / cleaning of toilets, wash basins, sanitary fittings, glasses, toilets, floors etc.



- v. All the garbage collected at the designated points spread over the health facility premises as well as the Hospital general waste which does not require incineration should be cleared on daily basis to municipality defined yards outside health facility campus.
- w. It is the responsibility of the contractor's deployed housekeeping staff to clear the choking of sinks, wash basins, floor traps, Rain water pipes, sewer chamber & sewer lines.
- x. Cleaning of all open areas between the building and boundary including sweeping of roads, lawns, paths, cleaning open drains, common areas of Residential Buildings, Pump Rooms, Pump House, AC Plants, Electrical Substation, Nurse Hostel, Main gate etc. as directed by the designated nodal officer of the health facility.

4. Waste Disposal Management (Including Bio-Medical Waste)

The following general instructions will be followed

- a. All collection, storage, transportation and disposal of hospital waste shall be in accordance with Bio-Medical Waste (Management and Handling) Rules, 1998 and any other amendments or notification of the state pollution control board.
- b. A detailed Hospital Waste Management Plan shall be prepared. The plan would be approved by the nodal officer of the health facility's authorities before start of work.
- c. All infected, chemical, Radiation, Cytotoxic Health care waste shall be segregated, collected, stored, transported and disposed in accordance with set guidelines of safety, ensuring that at no stage it gets mixed with general waste. Unscientific burning shall not be undertaken. Different coloured bags/containers namely red, yellow, black, blue and puncture proof or stainless steel, lead containers shall be used depending on the category of waste.
- d. The waste shall be carefully secured or pre -treated for transportation to a common facility for disposal.
- e. Waste shall not be transferred from one bag to another. Bags should be tied when three fourths full and then placed in a bigger bag / container for transporting.
- f. Covered Trolleys or containers should be used for transportation. Before final disposal/ treatment waste should be kept in specified location and in specific liners and containers.
- g. The scope includes segregation, collection, storage, transportation within and outside the Hospital until final disposal. All statutory rules and regulations and legal requirements are to be followed at each stage.



5. Documentation

The following general requirements and documentation will be followed / maintained

- a. Organisational structure with local supervisor and line of authority with job description of each category of housekeeping staff.
- b. Housekeeping manual and all SOP (Standard Operating Procedures).
- c. List of equipment deployed at the health facility.
- d. On job training and documentation
- e. Vaccination record of all staff
- f. Maintaining records of the following
 - i. Weekly duty roster and Attendance
 - ii. Needle stick injuries
 - iii. Amount of biomedical waste going out to outsourced agency
 - iv. Memorandum of understanding
 - v. Complaint book
 - vi. Check-list would be displayed in each area of work, as given in Appendix 'II'.
- g. Maintaining logs and checklist.
- h. Ensure that both male and female staff should be posted in areas like wards, ICUs, Casualty and OPD, CCU & Wards (wherever applicable)
- i. Female patients should be attended by female staff only.
- j. Immediate replacement of staff on leave.
- k. Rotation of staff if required but the staff of critical areas should not be rotated too frequently.

6. Monitoring and penalties

The work of the housekeeping staff will be monitored on continuous basis. Penalties would be imposed for work which is incomplete / not done. Penalties would be imposed on the housekeeping staff for improper dress or misbehaviour with staff / patients / visitors. Sample check list for the penalty is given *Appendix 'III'*.



Appendix 'I': Schedule of Cleaning Activities

S. NO	ACTIVITY	FREQUENCY	AGENTS USED
Operation Theatre / ICU / Labour Room / NICU / Isolation wards			
1	Garbage Removal	Thrice a day and more when bags are 3/4th full	As per the BMW guidelines
2	Cleaning of Instruments	After every procedure	Soap & water followed by sterilization
3	Cleaning of clean areas and corridors of complex	Twice a day/ as & when required	Damp Mop with detergent and water/ 0.5% Chlorine
4	Mopping. (Care to be taken in case of special epoxy flooring)	Thrice a day and after each procedure	Damp mop with detergent and water / 0.5% Chlorine
5	Cleaning of equipments like anesthesia machines, monitors, ventilators, infant warmers/ baby cribs etc	Twice a day/ as & when required	Damp Mopping , dry, Disinfect with 70% isopropyl alcohol / 2% glutaraldehyde (For endoscopes & reusable items)
6	Fumigation	Once a month/ After Infected case surgery	Formaldehyde (Please refer ' Annexure E'
7	Cleaning of OT table and OT strecher	Twice a day/ after each surgery	0.5% chlorine /70% Isopropyl alcohol
8	Doctor's / nurses / technician room	Twice a day	Detergent & water
9	Washroom & wash basins cleaning	Thrice a day and as & when required	Wash with Soap & water, then dry, wipe with 0.5% chlorine
10	Washing of slippers	once a day and when required	Soap & water
11	Collection of soiled linen and sluicing	As and when required	Soak in clean water with bleaching powder 0.5% for 30 minutes. Wash again with detergent and water to remove the Bleach. OR launder in Hot water (70-80 Degree C) if possible.
12	Cleaning of Mops		Soak in clean water with bleaching powder 0.5% for 30 minutes. Wash again with detergent and water to remove the bleach.



Appendix 'II': Sample Check-lists

Cleaning Time	Cleaner Name	Checking Time	Supervisor Signature	Remarks
07:00 AM				
08:00 AM				
09:00 AM				
10:00 AM				
11:00 AM				
12:00 PM				
01:00 PM				
02:00 PM				
03:00 PM				
04:00 PM				
05:00 PM				
06:00 PM				
07:00 PM				
08:00 PM				
09:00 PM				

Sample checklist for Pest control activities

S. No.	Department	Date & Time	Details of Action taken	Name and signature of staff	Signature of supervisor



Appendix 'III': Performance & Fine

CUMULATIVE DAILY ASSESSMENT OF PERFORMANCE AND FINE OF THE HOSPITAL HOUSEKEEPING STAFF @ RS ----- PER ISSUE PER DEPARTMENT FOR THE MONTH OF :									
Date	Improperly dressed	Finding of dirt / litter / cobwebs in wards / departments	Dirty furniture	Dirty toilets / bathrooms	Unclean areas near dustbins	Waste lying outside the bins in the central waste point	Presence of cigarette ends / paper lying around	Presence of dogs and other animals	Total fine for day
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									



Fumigation

1. Fumigation of the OT shall be done in the following circumstances:
 - a. Newly constructed / repair activity undertaken recently in that area
 - b. In any other circumstances where need to fumigation is felt e.g. after surgery on infectious cases or major body spills like faecal matter.
 - c. Routinely: once a month depending on the nature of civil infrastructure, no of surgical case load and movement of staff and equipment.
2. In all circumstances proper cleaning, carbolization and spraying should be carried out. For effective fumigation, humidity of the area to be fumigated shall be very high
3. Before fumigation:
 - ◇ Remove any contamination with 1% chlorine solution and any other article that is likely to be damaged by fumigation
 - ◇ Clean OT properly by washing the room (floor and walls) with soap and water.
 - ◇ Then fumigate

Method of fumigation:

Step 1: Preparation

- ◇ Clean the area (windows, doors floor, walls, surgery table and all washable equipments)thoroughly by with soap and water
- ◇ Close windows and ventilators tightly. If any openings found seal it with cellophane tape or other material to avoid the leak of fume.
- ◇ Switch off all lights, A/C and other electrical & electronic items.
- ◇ Calculate the room size (surgical theatre only) in cubic feet (LxBxH) and calculate the required amount of formaldehyde as given in step 3.

Step 2: Precaution

1. Adequate care must be taken by wearing cap, mask, foot cover, spectacle etc.,
2. Formaldehyde is irritant to eye & nose; and it has also been recognized as a potential carcinogen.
3. So the personnel undertaking the fumigation must be provided with the personal protective equipment (PPE).
4. Paste a warning notice on the front door indicating fumigation is in progress.



Step 3: Fumigation

1. Electric Boiler Fumigation Method (Recommended): For Each 1000 cubic feet, 500 ml of formaldehyde (40% solution) added in 1000 ml of distilled water (if not available use tap water) in an electric boiler. Switch on the boiler, leave the room and seal the door. After 45 minutes (variable depending to volume present in the boils apparatus/ its heating proficiency) switch off the boiler without entering in to the room (Switch off the main electrical supply from outside).
2. After the initiation of formaldehyde vapor, immediately leave the room and seal it for at least 12 to 24 hours.

Step 4: Neutralization

1. Before neutralization, formaldehyde fumigation system should be taken out from the surgical theatre. Then the toxicity of formaldehyde vapor should be neutralized with ammonia solution.
2. Place a cotton ball and pour 300 ml of 10% ammonia (for each 500 ml of formaldehyde used) on the floor of surgical theatre, at least 4 hours before the "Sterility Test".
3. Formaldehyde gas reacts with ammonia gas and produce Hexamine (synonym Hexamethylene tetramine) which is a harmless substance.
4. Switch on the A/C, at least 2 hours before (09 a.m.) the "Sterility Test".

4 Preparation of formalin

PREPARATION OF CHEMICALS FOR FUMIGATION		
Agent & method	Preparation	Neutralisation of fumes
Formalin with vapo-riser	500 ml of 40 % formalin (commercial) is added to every 1 litre of water for every 1000 cu ft. of space (10 x10 x 10 ft.)	Neutralise formalin fumes with ammonia in the ratio of 150 ml of 10 % ammonia (commercial preparation) for every 500 ml of formalin used and exposure time 3 hours. Otherwise open the windows and doors till the fumes disappear
Formalin with KMnO ₄	500 ml of 40 % formalin for every 1000 cu ft. of space is added to 450 gms of KMnO ₄ in a single/divided in multiple heat resistant bowls.	



Preparation of Chlorine Solution

1. Preparation of Chlorine solution using Hypochlorite Solution

Concentration of commercially available hypochlorite solution	Required chlorine Concentration	To prepare 1000 ml	
		Solution in ml	Add water in ml
5%	2%	400	600
	1%	200	800
	0.50%	100	900
10%	0.50%	50	950
	1%	100	900
	2%	200	800

2. Preparation Chlorine Solution using Bleaching powder Solution

PREPARATION OF DILUTE SOLUTIONS OF BLEACHING POWDER			
Strength of SBP (stable bleaching powder)	Volume of water	Desired concentration	Bleaching powder in grams per litre
20%	1 litre	0.50%	25
		1%	50
		2%	100
		5%	250
		10%	500
25%	1 Litre	0.50%	20
		1%	40
		2%	80
		5%	200
		10%	400
30%	1 Litre	0.5%	17
		1%	33
		2%	67
		5%	167
		10%	333

Note: Bleach solution becomes unstable rapidly, hence it needs to be freshly prepared daily or changed on becoming dirty/turbid. Chlorine bleach can be corrosive. Protect metal instruments by thoroughly rinsing them with water after soaking for 10 minutes.



Management of spills: Body fluid, Chemicals & Mercury

1 Cleaning of body fluids / chemical spills

1.1 Small volumes of Body fluids must be managed by following actions

- ◆ Cover the spill with a newspaper, blotting paper / paper towel or dry mud.
- ◆ Pour 5 % phenyl or freshly prepared hypochlorite solution having 1% chlorine on it and wait for 30 minutes for contact.
- ◆ Wear gloves and collect it with a plastic scoop and put it in a plastic container.
- ◆ Wet mop the area with Phenyl .

1.2 Large volumes of Body fluids must be managed by following actions

- ◆ Wear gloves
- ◆ Mop with absorbent cotton / gauze and discard it in the infectious waste bin
- ◆ Cover the spill with a newspaper , blotting paper / paper towel or dry mud.
- ◆ Pour 5 % phenyl or freshly prepared hypochlorite solution having 1% free chlorine on it and wait for 30 minutes for contact.
- ◆ Wet mop the area with phenyl .

2. Handling of mercury spills

2.1 In the event of any mercury spillage due to breakage of instrument the following measures are to be taken: -

Do's

- ◆ Remove people and pets from the spill area.
- ◆ Close all interior doors to the spill area.
- ◆ Turn off heating and air conditioning systems.
- ◆ Open all exterior windows and doors.

Don'ts

- ◆ Remove people and pets from the Do not touch the mercury. Never vacuum; it will release mercury vapour into the air.
- ◆ Never use a broom; it will break up the mercury.
- ◆ Never pour mercury down the drain.
- ◆ Never walk around in contaminated clothing or shoes.
- ◆ Never put mercury-contaminated items in the washing machine.



2.2 Clean-up Instructions – Mercury Spill Management

- ◆ Remove all jewellery, mercury, binds with the metal.
- ◆ Put on rubber or latex gloves.
- ◆ Pick up broken glass carefully; wrap in a paper towel, and place in a glass container with 5 to 10 ml of water.
- ◆ Use a regular syringe for sucking the mercury droplets. Left out small beads are to be gathered with two cardboards and then scooped.
- ◆ Place in water in a glass container.
- ◆ Locate any remaining mercury with the flashlight; the beads will reflect the light making them easier to locate.
- ◆ Pick up any remaining beads and place in water in the glass container.
- ◆ Seal the glass container and label as “mercury waste” and place in a safe corner.
- ◆ Place all materials used in the clean-up, including gloves, in a trash bag.
- ◆ Seal the trash bag with tape and label as “mercury waste”.
- ◆ Wash the area with mercury neutralizing agents like 20% calcium sulphide or sodium thiosulphate solution (if the chemicals are available.)
- ◆ Wash your hands, face, and any other areas of your body exposed to the mercury.
- ◆ Keep the room ventilated for a minimum of 48 hours.

2.3 Method of final disposal of mercury: The mercury should be then disposed of by handing it over to the appropriate agency for recycling



Safety precautions

1. Safety precautions while cleaning

Safety / accident prevention measures should be implemented to avoid accidental fall among patients and visitors, as well as protecting the staff. Few such measures are mentioned below -

- a. The ideal time to clean the facility is when patients/visitors are not present. If however this is not possible then they should be requested, to step aside or wait outside for the duration of the cleaning.
- b. Avoid wet and slippery floors.
- c. Use appropriate / cautionary signage
- d. Arrange furniture for easy movements of the patients to avoid accidents.
- e. Pay attention while cleaning the electrical switchboards. Do not sprinkle water / liquids on the electrical connections.



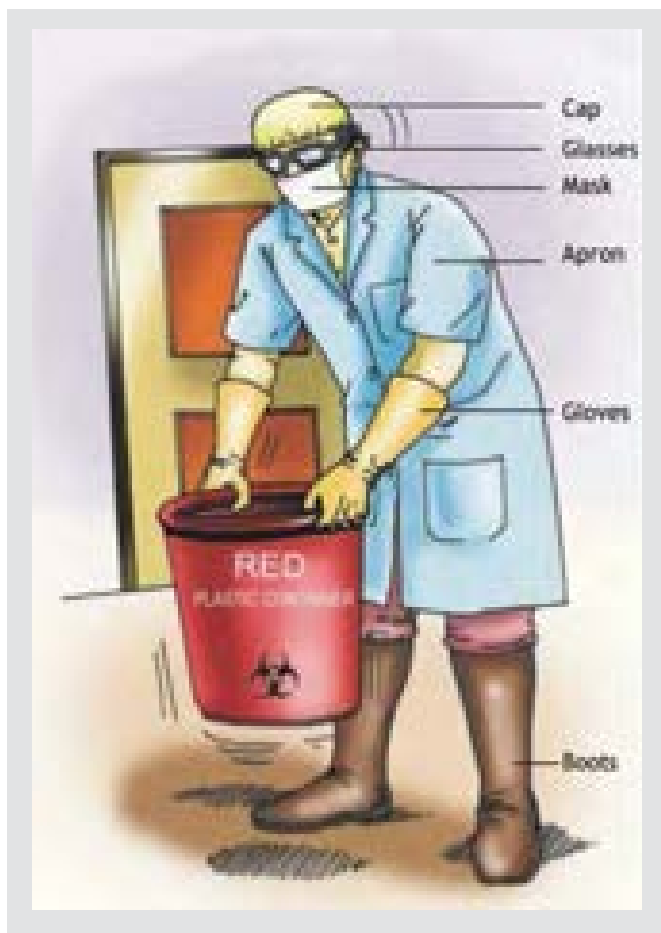
2. Storage of housekeeping articles / material

- a. Storage place for housekeeping materials should be earmarked to enable easy accessibility to the housekeeping staffs. The daily usable supplies should remain in the closets provided in that area which should be maintained clean, odour free and dry. The equipment and storage closet should be cleaned every week.
- b. The toilet cleaning materials should be stored in a separate place. Store the disinfectants and cleaning chemicals separately.
- c. This should be controlled by the housekeeping supervisor who must check the store once a week if not daily with the aim of checking the stock and serviceability of the equipment / chemicals and should replace / replenish them respectively if required.
- d. The used wet mops and cleaning cloths should be washed every day and dried. They should not be left soiled and wet.
- e. Brooms are best left standing upside down on its handle so that the water drains away from the bristles.



3. Personal protection equipment / gear to be worn by the housekeeping staff

Healthcare workers, more so the facility's housekeeping staff, must take precautions and use personal protection in the hospital to counter the risk of contracting disease.



Ideally personal protection will include a plastic apron failing which a cloth apron can be used.

The following personal protection equipment should be used by the housekeeping staff:

- a. Clothing – wearing of aprons over the personal clothing and / or dungarees to protect direct skin contact with the waste. Rubber aprons should be worn wherever liquid waste is being handled.
- b. Wearing of masks when exposed to dust and allergens. Cloth masks should be used since they can be washed and reused and are more economical in the long run.
- c. Water proof gloves / Heavy duty gloves should be worn specially when handling biomedical and potentially infectious waste.
- d. Gumboots or rubber shoes should be worn when handling biomedical / wet waste.
- e. Protective eye goggles should be worn to avoid the splashing of eyes with infectious / body fluids.
- f. The specifications of various protective items as laid down by the BIS are as follows :



4. Specifications of Personal Protective Equipment

Article	BIS standards	Remarks	When Used
Gloves rubber	IS 6994 (Pt 1):1973	Household utility gloves can also be used	Handling disinfectant cleaning
Gum boots / rubber shoes	IS 13695 : 1995		Cleaning patient areas, Cleaning heavily contaminated areas Handling or disposing waste
Apron Cloth	IS 5029: 1979		When spills or splashes are expected
Apron Rubber	IS 4892:1987 / ISO 5235:1977 Synthetic rubber aprons (reinforced) for drafting systems (first revision)	Alternatively Rubber aprons for labour rooms can be used. IS 4501: 1981	
Face mask	IS 6190: 1971		
Respiratory full face masks	IS 14166 : 1994	For continuous exposure at waste disposal sites / plants	



Cleaning of Operation Theatre

1. Wet mopping must be done before surgery

- ◇ Every morning: OT is to be cleaned with 0.5% chlorine solution before start of the first surgery.
- ◇ All equipment, OT tables, walls and floors have to be cleaned & sterilized.

Equipment not to be carbonized :

- ◇ Monitors
- ◇ Anaesthesia machine
- ◇ Electro cautery
- ◇ Laproscopes

2. After Surgery

- a. The OT is an area, where body fluids spills are common. Such spills must be handled very carefully as per guideline contained in Annexure 'G'.
- b. Collect linen and waste material in color-coded bags according to hospital waste disposal protocol.
- c. Soiled linen is collected separately and taken outside the theatre to the dirty utility room. It is disinfected by sluicing / soaking in clean water with 0.5% bleaching powder solution for 30 minutes or if feasible laundered in hot water (70-80 degree C) and sent to central point.
- d. Collect sharps and sponges separately in colour-coded bags according to hospital waste disposal protocol.
- e. The OT table is mopped clean with water and then carbonized with 0.5 chlorine / 70% isopropyl alcohol.
- f. Wipe equipment with a wet cloth giving special attention to the foot switches. Equipment can be disinfected by wiping with 70% isopropyl alcohol.



- g. All gloves used for the surgery should be cut with scissors and kept in Chlorine solution for 30 minutes before collecting them into coloured bag and sent for final disposal.
- h. For Laproscopes / Endoscopes - Immediately after use, gently wipe the laparoscope, fibrotic light source, and cable and plastic tubing with luer lock using a cloth soaked in 60–90% ethyl or isopropyl alcohol to remove all blood and organic material. Laparoscopes and accessories should be sterilized or should undergo high level disinfection (HLD) using the chemical method by soaking in 2% glutaraldehyde solution for 20 minutes. For the disinfection to be effective, all parts of the laparoscope must be fully immersed and the disinfectant must touch all the surfaces of the instrument. Rinse twice with HLD water (water boiled for 20 minutes and cooled) to remove all traces of the disinfectant.



Cleaning of Labour Room

Other than following Standard Practice for cleaning, following issues need special attention

1. Kit for managing body fluid and blood spills should be readily available and used.
2. Chlorine Solution should be prepared at least thrice in a day.
3. Cotton, gauze and sanitary pads soaked in blood must be placed in the Yellow coloured bags and disposed of by incineration / burial.
4. Facility for sluicing should be available next door.
5. Waste should be removed at least thrice daily.
6. Placentae must be carried in a closed box / bag and disposed of by deep burial / incineration.
7. A special need in the labour room is the disposal of abortus and dead foeti. Abortus must be disposed by incineration or by deep burial after placing in a bag and adding lime / phenyl to discourage animal scavengers.

Dead foeti / still born must be buried as per religious norms in cemeteries.



Infectious disease wards

1. The room is to be washed with soap and water followed by cleaning with 0.5% chlorine solution. The walls if tiled is also washed with soap and water followed by disinfection with 0.5% chlorine and left to dry with the doors and window open.
2. The room can be fumigated with formaldehyde and kept sealed for at least 12 hours before opening the windows and doors to let the vapours evaporate. During fumigation the bed, mattress and pillow can be left inside the room.
3. The bed linen to be cleaned with 0.5% bleaching solution followed by cleaning with plain water & detergent or laundered in hot water (70-80 degree C) to remove bleach and sent separately for washing/ dry cleaned.
4. The blanket, mattress and pillow can be washed with detergent and water and then kept in the sun to dry before reuse.
5. The housekeeping staff working in the isolation ward must wear personal protection gear and take all the necessary precautions to prevent contracting disease.

Diseases requiring isolation	
1. Severe influenza cases	2. SARS
3. Open case of tuberculosis	4. Anthrax
5. C. diphtheria	6. Pertussis
7. Chicken pox	8. Pneumonic plague
9. Patients suffering from multi-drug resistant pathogens	10. Patients with low immunity



Laundry services

1. The laundry services can be in house or outsourced. As a rule only following items may be cleaned in the laundry: -
 - a. Hospital patients linen
 - b. Hospital curtains
 - c. Hospital Kitchen linen
 - d. Hospital staff uniforms
 - e. Other authorized items like blankets, mattresses and pillowsStaff personal clothing is not cleaned in the hospital laundry.
- 2 Segregation and Collection of soiled linen
- 3 All linen after use will be collected in each department / ward and segregated into potentially infective and not potentially infected. The former will include all linen which has been soiled with body fluids and will be kept separately.
- 4 Personnel working in the receiving and sorting area are required to wear a long gown, mask and gloves. He should keep his hands away from his or her mouth and eyes and thoroughly wash his or her hands when leaving the receiving and sorting area. No eating and drinking is allowed in this area.
- 5 Sluicing / Treatment of soiled / infected linen
 - a. All infected linen / linen soiled with body fluids will be soaked in 0.5% bleaching solution for 30 mins then washed with water & detergent to remove bleach before handing over for washing.
 - b. Handing taking over of linen with the laundry staff. The soiled linen is tied into bundles and an entry made. The infected linen is accounted and handed over separately. If possible all linen is inspected for tears and damage at this point to avoid dispute.
6. The linen is washed, dried and ironed by the laundry staff. Infected linen is washed separately. The linen is returned to the health facility where it is properly taken over and a record made of the same. Repairs will be carried out on torn linen.
7. Clean linen should be stored in a dry place on racks. Clean linen is transported on a clean trolley.
8. Laundered linen is issued to the patient at the time of admission and taken back at the time of discharge. Linen if soiled by body fluids is frequently changed.



9. Blankets can be dry cleaned or hand washed. Hand-washing can be done by first soaking for 15 minutes in lukewarm water. The soap suds are squeezed through the blanket and then rinsed in cold water at least twice. The blanket should not be twisted or wrung. It should be dried by spreading it on a clean surface.
10. Pillows and mattresses can be washed with soap and water and left to dry in the sun.
11. Blankets pillows and mattresses can be fumigated if required by keeping them in a closed room and the room is then fumigated.
12. Linen soiled with faeces pus and blood should be sluiced in 0.5% Bleaching solution in the ward or central storage area for 30 mins followed by washing with clean water & detergent before handing in the laundry it should be washed separately then subjected to boiling with frequent stirring. The addition of 0.3% Washing soda enhances the effect of boiling.



Clean Kitchen

This service may be outsourced but the cleanliness guidelines should be laid down for the contractor

1. Receiving

- a. All items are received by Hospital store / kitchen.
- b. The Department store verifies the quality and quantity of goods received as per the purchase requisition request.
- c. Supplies such as fresh vegetables/fruits except banana, potato and onions, are preferably washed at the receiving area.

2. Storage

- a. The objective is to maintain good quality food at temperature and conditions to ensure retention of quality and safe condition.
- b. Dairy products, fruits, dry items (pulses, wheat etc.) are stored separately.
- c. The food products in store should be ventilated and temperature controlled, where appropriate (temperature not below 50 o F or above 80 o F).
- d. Storage of Dry goods:
 - i. Food must be stored on shelves 1 foot above floor level
 - ii. Sacks are stored on pallets and never directly on the floor
 - iii. Pallets should be removed weekly and cleaned
 - iv. Any spillages must be cleaned immediately
 - v. Bread must be stored in a well ventilated, cool area these items should be stored
 - vi. Flours and cereals are stored in sacks in a damp free environment and inspected regularly for infestation.
- e. Storage of Fresh Items
 - i. Fruits and vegetables are stored in a dry room
 - ii. Fruit and salad items should be stored in such a way to allow air to circulate
 - iii. Potatoes must be stored in crates in a dry room
 - iv. Milk, dairy products and cream must be kept separate from all raw products in refrigerator
- f. Store foods such as uncooked vegetables away from food which is already cooked



- g. Refrigerators should be sited away from heat source and running temperature should to be checked & documented twice a day regularly.

3. Preparations

- a. Fresh vegetables are washed prior to pre-processing.
- b. All preparation surfaces must be kept clean.
- c. Raw food is to be kept separately from cooked food
- d. Salad items must be thoroughly washed in a salad wash
- e. Food which is at a high risk to getting infected (e. g. Sweets) should not be prepared much in advance
- f. Separate utensils are used for raw and cooked foods
- g. Ready food must be covered and kept under the right temperature before use.
- h. Kitchen waste must be collected and disposed off properly.

4. General cleaning

- a. Adequate and suitable cleaning equipment are available such as mops, mop buckets, disinfectants, detergents, brushes as required, scouring cloths, deck brushes and cleaning cloths.
- b. Cleaning supplies are stored separate from food items.
- c. Mop heads are changed at least once in two weeks or as per needs.
- d. Chopping Boards are washed after each use and once washed should be allowed to dry in an area where the air circulates freely.

5. Cleaning of refrigerators - Weekly

The following procedure can be applied to work-in and reach-in refrigerators.

- a. Switch off the unit and remove all food items, ensuring that these are covered in the appropriate manner and are kept safe during the cleaning process.
- b. Remove all shelves and clean in lukewarm water with detergent solution mixed.
- c. In case of upright refrigerator remove mobile food trolley.
- d. Clean the fridge base and wipe the interior walls with the detergent solution mixed with water. Scrub all shelves rinse and dry (if required) otherwise wipe with damp cloth.
- e. Remove all condensation from drip trays (if applicable) and wipe down all walls with a clean cloth.
- f. Replace all shelves
- g. Switched on the unit.

6. Personal hygiene in the kitchen

It must be emphasized that personal hygiene is important within the kitchen and is applicable to all staff of kitchen.



- ◆ **Employees are clean in person and wear clean uniforms**
- ◆ **Employees perform following personal hygiene practices while at work.**
 - Hand washing & general safety rules
 - Hand washing, before beginning of the work
 - Hand washing, after each toilet use
 - Hand washing, between handling cooked and uncooked food
 - Hair coverings are worn during cooking/pre-processing / food servicing/tray line operation.
 - Aprons are promptly changed as and when required basis.
 - Fingernails are maintained clean and trimmed.
 - Signs are posted conspicuously within all areas of food and beverage department directing personal to wash their hand appropriately

7. Pest control

- a. The objective is to maintain a sanitary environment, preventing contamination/ spread/transmission of disease by insects or rodents or any other crawling insects.
- b. Routine spraying is done in such areas as baseboards, backs of large equipment, cabinets and lower level storage areas with insecticide, traps are put out for rodents.
- c. Any evidence of pests found by the staff is reported immediately.

8. Medical check-up and health of food handlers

All personal working in the kitchen and handling food must undergo periodic health checks in the under-mentioned manner and a record kept of each individual:



At the time of joining

- ◇ General physical examination
- ◇ Routine blood tests like Hb TLC and DLC,
- ◇ Stool Routine examination
- ◇ Chest X-ray
- ◇ Widal Test
- ◇ Manteaux / tuberculin test

Yearly

- ◇ General physical examination
- ◇ Routine blood tests like Hb TLC and DLC,
- ◇ Stool Routine examination
- ◇ Chest X-ray
- ◇ Widal Test

Monthly

- ◇ General physical examination
- ◇ Routine stool examination

9. Method of disposal of kitchen waste

Disposal of kitchen waste is very important otherwise this becomes a prime source of fly, cockroach and rat breeding and their potential hazards. Kitchen waste is to be segregated into wet and dry wherein the dry waste essentially consists of glass and tin items. Wet items can be taken for composting.



1. Cleaning of Water coolers / drinking water facilities

- a. Water coolers must be kept clean and covered at all times. They must be emptied completely at least once a month and the tank cleaned. The water should ideally be filtered through a purifier. There should be drainage for the spill over.
- b. The area surrounding must be kept dry.
- c. The electric wire and plugs must be checked monthly to ensure that they are in good condition.

2. Desert coolers and air conditioners

- a. Desert coolers should be emptied every week to prevent mosquito breeding.
- b. Drainage should be provided for the spill over of water.
- c. The electric wire and plugs must be checked monthly to ensure that they are in good condition.
- d. Air conditioners should be cleaned every month. The electric wire and plugs must be checked monthly to ensure that they are in good condition.

3. Generator / engineering rooms

- a. The generator / engineering room must be swept dry on a daily basis. Oil spills are common here and should be cleaned by sprinkling dry mud on the spill and then scraping the mud and disposing it by burial.
- b. Cleaning with water if done should be after ensuring that the electricity has been switched off and that no water splashes on to the electrical and motor parts.

4. Ambulance / patient transport

1. The ambulance or patient transport vehicles must be cleaned daily and after each patient evacuation. It must be cleaned if it has been used to carry a dead body / a case of infectious disease.
2. Park the ambulance away from the public area and switch off the motor / AC. Open the doors and windows.
3. Remove all curtains and equipment and keep in a secure area. Curtains are washed once in a month. Equipment to be dusted and surface cleaned with a wet cloth ensuring that no water enters the equipment and damage them during the cleaning process.



4. Inside dusting followed by clean damp mopping should be practiced. In case of body fluid spills, wash the vehicle with soap and water and allow to dry.
5. Freshly prepared 0.5% chlorine/ 70% isopropyl alcohol solution can be used to disinfect the inside of the ambulance especially if an infected case had been carried.
6. Special care must be taken that the electronic and other medical equipment are not damaged during the cleaning process.
7. Allow it to dry, keeping the doors and windows open.
8. Replace all equipment and curtains.

5. Cleaning of lifts

- a. Lifts are maintained by the Maintenance Department but operated by the Housekeeping staff.
- b. Clean the lifts by sweeping and wet mopping every evening. The lifts can be washed and cleaned every week / month depending on the usage and dirt accumulated. Cleaning is done by wet mopping and then being allowed to dry. The walls of the lift must be cleaned with a wet cloth and allowed to dry
- c. Cleaning in case of transfer of infected patient or body fluids spills :
 - i. The lift should be shut for use by the public / staff whenever an infected patient is transported. It should be washed with soap and water and after drying then mopped / swiped with freshly prepared 0.5% chlorine.
 - ii. In case of body fluid spills , a newspaper or blotting paper should be placed over the spill to absorb the same. Freshly prepared 5% hypochlorite solution is then sprinkled over this. This should then be scooped up and the area swept clean. The material scooped up will then be disposed of as infectious waste.

6. Cleaning of water tanks

- a. Water tanks should be cleaned once every quarter.
- b. The Tanks must be emptied completely. The inside of the tank should be scrubbed with detergent / soap and water with a brush and then repeatedly rinsed / flushed with water to ensure that the detergent / soap has been washed away. Special care must be taken of cleaning of the corners and joints to ensure that the soap / dirty water do not remain. The tank is allowed to dry before filling and reusing the tank.
- c. If the tank was found to be very dirty with a lot of algae and sediment then the tank is should be disinfected by using chlorine. After allowing an exposure time of 1 hour the tank should be emptied and flushed with normal water to remove the residual chlorine.





ANNEXURE

Biomedical Waste Management: Key Activities

1. Categories of Biomedical Waste

Option	Waste Category	Treatment & Disposal
Category No. 1	Human Anatomical Waste (human tissues, organs, body parts)	incineration@/deep burial*
Category No. 2	Animal Waste (animal tissues, organs, body parts carcasses, bleeding parts, fluid, blood and experimental animals used in research, waste generated by veterinary hospitals colleges, discharge from hospitals, animal houses)	incineration@/deep burial*
Category No. 3	Microbiology and Biotechnology Waste (wastes from laboratory cultures, stocks or specimens of micro-organisms live or attenuated vaccines, human and animal cell culture used in research and infectious agents from research and industrial laboratories, wastes from production of biological, toxins, dishes and devices used for transfer of cultures)	local autoclaving/ microwaving /incineration@
Category No. 4	Waste sharps (needles, syringes, scalpels, blades, glass, etc. that may cause puncture and cuts. This includes both used and unused sharps)	disinfection (chemical treatment@01/ autoclaving/ microwaving and mutilation / shredding##
Category No. 5	Discarded Medicines and Cytotoxic drugs (wastes comprising of outdated, contaminated and discarded medicines)	incineration@/destruction and drugs disposal in secured landfills
Category No. 6	Solid Waste (items contaminated with blood, and body fluids including cotton, dressings, soiled plaster casts, lines, beddings, other material contaminated with blood)	incineration@ autoclaving/ microwaving
Category No. 7	Solid Waste (wastes generated from disposable items other than the waste sharps such as tubing, catheters, intravenous sets, etc.).	disinfection by chemical treatment@@ autoclaving/ microwaving and mutilation/shredding##
Category No. 8	Liquid Waste (waste generated from laboratory and washing, cleaning, house-keeping and disinfecting activities)	disinfection by chemical treatment@@ and discharge into drains.
Category No. 9	Incineration Ash (ash from incineration of any bio-medical waste)	disposal in municipal landfill
Category No. 10	Chemical Waste (chemicals used in production of biological, chemicals used in disinfection, as insecticides, etc.)	chemical treatment@@ and discharge into drains for liquids and secured landfill for solids

@@ Chemicals treatment using at least 1% 1% bleaching powder solution / hypochlorite solution or any other equivalent chemical reagent. It must be ensured that chemical treatment ensures disinfection.

Mutilation/shredding must be such so as to prevent unauthorised reuse.

@ There will be no chemical pre-treatment before incineration. Chlorinated plastics shall not be incinerated.

* Deep burial shall be an option available only in towns with population less than five lakhs and in rural areas.

Source : Bio-Medical Waste (Management and Handling) Rules, 1998 - Schedule I



2. Segregated collection of Biomedical Waste as Schedule II of the BMW Rule 1998

Colour Coding	Type of Container and Waste Category	Treatment options as per Schedule I
Yellow	Plastic bag Cat. 1, Cat. 2, and Cat. 3, Cat. 6.	Incineration/deep burial
Red	Disinfected container/plastic bag Cat. 3, Cat. 6, Cat.7.	Autoclaving/Microwaving/ Chemical Treatment
Blue/White translucent	Plastic bag/puncture proof Cat. 4, Cat. 7. Container	Autoclaving/Microwaving/ Chemical Treatment and destruction/shredding
Black	Plastic bag Cat. 5 and Cat. 9 and Cat. 10. (solid)	Disposal in secured landfill

Notes:

1. Colour coding of waste categories with multiple treatment options as defined in Schedule I, shall be selected depending on treatment option chosen, which shall be as specified in Schedule I.
2. Waste collection bags for waste types needing incineration shall not be made of chlorinated plastics.
3. Categories 8 and 10 (liquid) do not require containers/bags.
4. Category 3 if disinfected locally need not be put in containers/bags.

(Source : Bio-Medical Waste (Management and Handling) Rules, 1998 - Schedule II)



Always segregate the waste at source. Always use the appropriate coloured bags for the waste.

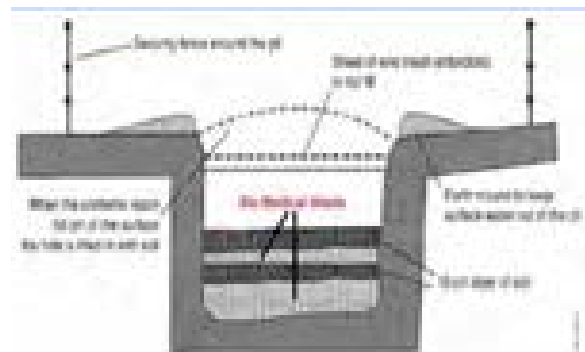


3. Transportation within the health facility

The biomedical waste should be transported within the health facility in covered buckets preferably on wheels so that the bags do not come into contact with the floor.

4. Standards for Deep-burial

- ◆ A pit or trench should be dug about 2 meters deep. It should be half filled with waste, then covered with lime within 50 cm of the surface, before filling the rest of the pit with soil.
- ◆ It must be ensured that animals do not have any access to burial sites. Covers of galvanised iron/wire meshes may be used.
- ◆ On each occasion, when wastes are added to the pit, a layer of 10 cm of soil shall be added to cover the wastes.
- ◆ Burial must be performed under close and dedicated supervision.



- ◇ The deep burial site should be relatively impermeable and no shallow well should be close to the site.
- ◇ The pits should be distant from habitation, and sited so as to ensure that no contamination occurs of any surface water or ground water. The area should not be prone to flooding or erosion.
- ◇ The location of the deep burial site will be authorised by the prescribed authority.
- ◇ The institution shall maintain a record of all pits for deep burial.

5. Disposal of liquid waste

- 5.1 Ideally all hospitals must install and utilise an in-house ETP for management of liquid waste.
- 5.2 Standard for liquid waste:

The effluent generated from the hospital should conform to the following limits

Parameters Permissible Limits

- ◇ PH 63-9.0
- ◇ Suspended solids 100 mg/l
- ◇ Oil and grease 10 mg/l
- ◇ BOD 30 mg/l
- ◇ COD 250 mg/l
- ◇ Bio-assay test 90% survival of fish after 96 hours in 100% effluent.
- ◇ These limits are applicable to those, hospitals which are either connected with sewers without terminal sewage treatment plant or not connected to public sewers. For discharge into public sewers with terminal facilities, the general standards as notified under the Environment (Protection) Act, 1986 shall be applicable



Clean Hospital

Reference No.	Criteria	Weightage
A.	Hospital Upkeep	100
A1	Pest & Animal Control	10
A2	Landscaping & Gardening	10
A3	Maintenance of Open Areas	10
A4	Hospital Appearance – Painting Whitewashing	10
A5	Infrastructure Maintenance	10
A6	Illumination	10
A7	Maintenance of Furniture & Fixture	10
A8	Removal of Junk Material	10
A9	Water Conservation	10
A10	Work Place Management	10
B.	Sanitation & Hygiene	100
B1.	Cleanliness of Circulation Area	10
B2	Cleanliness of Wards	10
B3	Cleanliness of Procedure Areas (Labour Room OT)	10
B4	Cleanliness of Ambulatory Area (OPD, Emergency, Lab)	10
B5	Cleanliness of Auxiliary Areas	10
B6	Cleanliness of Toilets	10
B7	Use of standards materials and Equipment for Cleaning	10
B8	Use of Standard Methods for Cleaning	10
B9	Monitoring of Cleanliness Activities	10
B10	Drainage and Sewage Management	10
C.	Hospital Support Services	50
C1	Laundry Services and Linen Management	10
C2	Water Sanitation	10
C3	Kitchen Services	10
C4	Security Services	10
C5	Outsource Services Management	10



D.	Waste Management	100
D1	Segregation of Biomedical Waste	10
D2	Collection and Transportation of Biomedical Waste	10
D3	Sharp Management	10
D4	Storage of Biomedical Waste	10
D5	Disposal of Biomedical waste	10
D6	Management Hazardous Waste	10
D7	Solid General Waste Management	10
D8	Liquid Waste Management	10
D9	Equipment and Supplies for Bio Medical Waste Management	10
D10	Statuary Compliances	10
E.	Infection Control	100
E1	Hand Hygiene	10
E2	Personal Protective Equipment	10
E3	Personal Protective Practices	10
E4	Decontamination and Cleaning of Instruments	10
E5	Disinfection & Sterilization of Instruments	10
E6	Spill Management	10
E7	Isolation and Barrier Nursing	10
E8	Infection Control Program	10
E9	Hospital Acquired Infection Surveillance	10
E10	Environment Control	10
F.	Hygiene Promotion	50
F1.	Community Monitoring & Patient Participation	10
F2.	Information Education and Communication (I.E.C.)	10
F3.	Leadership and Team work	10
F4.	Training and Capacity Building	10
F5.	Staff Hygiene and Dress Code	10





Thematic Scores

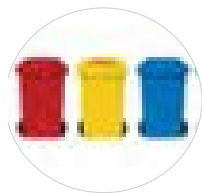


Hospital
Upkeep



Sanitation &
Hygiene

Waste
Management

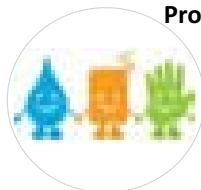


Support
Services

Infection
Control



Hygiene
Promotion



- Means of Verification –
- OB – Direct Observation
 - SI – Staff Interview
 - PI – Patient (/Relatives) Interview
 - RR – Review of records & documents



Ref. No.	Criteria	Assessment Method	Means of Verification	Compliance
A.	HOSPITAL/ FACILITY UPKEEP			
A1	Pest & Animal Control			
A1.1	No stray animals within the facility premises	OB/SI	Observe for the presence of stray animals such as dogs, cats, cattle, pigs, etc. within the premises. Also discuss with the facility staff	
A1.2	Cattle-trap is installed at the entrance	OB	Check at the entrance of facility that cattle trap has been provided. Also look at the breach, if any, in the boundary wall	
A1.3	Pest Control Measures are implemented in the facility	SI/RR	Ask the facility administration about pest control measures to control rodents and insect. Check records of engaging a professional agency for the same	
A1.4	Anti-termite Treatment of the wooden furniture and fixtures is undertaken periodically	RR/SI	Check if the facility has a scheduled programme for anti-termite treatment at least once in a year	
A1.5	Measures for Mosquito free environment are in place	OB/SI /PI	Check for a. Usage of Mosquito nets by the patients b. Availability of adequate stock of Mosquito nets c. Wire Mesh in windows d. Desert Coolers (if in use) are cleaned regularly/ oil is sprinkled e. No water collection for mosquito breeding within the premises	
A2	Landscaping & Gardening			
A2.1	Facility's front area is landscaped	OB	Frontage of the facility has been maintained with grass beds, trees, Garden, etc. and it has an aesthetic appearance	
A2.2	Green Areas/ Parks/ Open spaces are well maintained	OB	Check that wild vegetation does not exist. Shrubs and Trees are well maintained. Over grown branches of plants/ tree have been trimmed regularly. Dry leaves and green waste are removed on daily basis	
A2.3	Internal Roads, Pathways, waiting area, etc. are uneven and clean	OB	Check that pathways, corridors, courtyards, waiting area, etc. are clean and land landscaped	



Ref. No.	Criteria	Assessment Method	Means of Verification	Compliance
A2.4	Gardens/ green area are secured with fence	OB	Barricades, fence, wire mesh, Railings, Gates, etc. have been provided for the green area	
A 2.5	Provision of Herbal Garden	OB/SI	Check if the facility maintains a herbal garden for the medicinal plants	
A3	Maintenance of Open Areas			
A3.1	There is no abandoned / dilapidated building within the premises	OB	Check for presence of any 'abandoned building' within the facility premises	
A3.2	No water logging in open areas	OB	Check for water accumulation in open areas because of faulty drainage, leakage from the pipes, etc.	
A 3.3	No thoroughfare / general traffic in Facility premises	OB/ SI	Check that the facility premises are not being used as 'thoroughfare' by the general public	
A3.4	Open areas are well maintained	OB	Check that there is no over grown shrubs, weeds, grass, potholes, bumps etc. in open areas	
A3.5	There is no unauthorised occupation within the facility, nor there is encroachment on Hospital/Facility land	OB/SI	Check for hospital/Facility premises and access road have not been encroached by the vendors, unauthorized shops/ occupants, etc.	
A4	Hospital/ Facility Appearance			
A4.1	Walls are well-plastered and painted	OB	Check that wall plaster is not chipped-off and the building is painted/ whitewashed in uniform colour and Paint has not faded away	
A4.2	Interior of patient care areas are plastered & painted	OB	Interior walls and roof of the outdoor and indoor area are plastered and painted in soothing colour. The Paint has not faded away	
A4.3	Name of the Facility is prominently displayed at the entrance	OB	Name of the Facility is prominently displayed as per state's policy and convenience of beneficiaries. The name board of the facility is well illuminated in night	



Ref. No.	Criteria	Assessment Method	Means of Verification	Compliance
A4.4	Uniform signage system in the Facility	OB	All signages (directional & departmental) are in local language and follow uniform colour scheme	
A 4.5	No unwanted/Outdated posters	OB	Check that, Facility's external and internal walls are not studded with irrelevant and out dated posters, slogans, wall writings, graffiti, etc.	
A5	Infrastructure Maintenance			
A5.1	Facility Infrastructure is well maintained	OB	No major cracks, seepage, chipped plaster & floors in the Facility	
A5.2	Facility has a system for periodic maintenance of infrastructure at pre-defined interval	SI/RR	Check the records for preventive maintenance of the building. It should be done at least annually	
A5.3	Electric wiring and Fittings are maintained	OB	Check to ensure that there are no loose hanging wires, open or broken electricity panels,	
A5.4	Facility has intact boundary wall and functional gates at entry	OB	Check that there is proper boundary wall of adequate height without any breach. Wall is painted in uniform colour	
A.5.5	Adequate facility exists for parking of vehicles	OB	Check that there is a demarcated space for parking of the vehicles as well as for the Ambulances and vehicles are parked systematically	
A6	Illumination			
A6.1	Adequate illumination in Circulation Area	OB	Check for Adequate lighting arrangements through Natural Light or Electric Bulbs	
A6.2	Adequate illumination in Indoor Areas	OB	Check for Adequate lighting arrangements through Natural Light or Electric Bulbs. The illumination should be 150-300 Lux at Nursing station and 100 Lux in the wards	
A6.3	Adequate illumination in Procedure Areas (Labour Room/ OT)	OB	Check for Adequate lighting arrangements The illumination should be 300 Lux in procedure areas. Toilets should have at least 100 lux light	
A6.4	Adequate illumination in front of facility and on its access road	OB	Check that, Facility front, entry gate and access road are well illuminated	



Ref. No.	Criteria	Assessment Method	Means of Verification	Compliance
A6.5	Use of energy efficient bulbs	OB	Check that Facility uses energy efficient bulb like CFL or LED for lighting purpose within the Facility Premises	
A7	Maintenance of Furniture & Fixture			
A7.1	Window and doors are maintained	OB	Check, if Window panes are intact, and provided with Grill/ Wire Meshwork. Doors are intact and painted /varnished	
A7.2	Patient Beds & Mattresses are in good condition	OB	Check that Patient beds are not rusted and are painted. Mattresses are clean and not torn	
A7.3	Trolleys, Stretchers, Wheel Chairs, etc. are well maintained	OB	Check that Trolleys, Stretcher, wheel chairs are intact, painted and clean. Wheels of stretcher and wheel chair are aligned and properly lubricated	
A7.4	Furniture at the nursing station, staff room, administrative office are maintained	OB	Check condition of furniture at nursing station, duty room, office, etc. The furniture is not broken, painted/polished and clean	
A7.5	There is a system of preventive maintenance of furniture and fixtures	SI/RR	Check, if Facility has an annual preventive maintenance programme for furniture and fixtures, at least once in a year	
A8	Removal of Junk Material			
A8.1	No junk material in patient Care areas	OB	Check, if unused/ condemned articles, and outdated records are kept in the Nursing stations, OPD clinics, wards, etc.	
A8.2	No junk material in Open Areas and corridors	OB	Check, if unused/ condemned equipment, vehicles, etc. are kept in the corridors, pathways, under the stairs, open areas, roof tops, balcony, etc.	
A8.3	No junk material in critical service area	OB	Check, if unused articles, and old records are kept in the Labour room, OT, Injection room, Dressing room, etc.	
A8.4	Facility has demarcated space for keeping condemned junk material	OB/SI	Check for availability of a demarcated & secured space for collecting and storing the junk material before its disposal	
A8.5	Facility has documented and implemented Condemnation policy	SI/RR	Check, if Facility has drafted its condemnation policy or have got one from the state. Check whether they are complying with it	



Ref. No.	Criteria	Assessment Method	Means of Verification	Compliance
A9	Water Conservation			
A9.1	Water supply is adequate in Quantity & Quality	OB/SI/RR	Check the quantity of water including reservoir and record of its quality	
A9.2	Water supply system is maintained in the Facility	OB	Check for leaking taps, pipes, over-flowing tanks and dysfunctional cisterns	
A9.3	There is a system of periodical inspection for water wastage	OB	Check, if staff have been assigned duty for periodical inspection of leaking taps, etc.	
A9.4	The Facility promotes water conservation	SI/OB	Check, if IEC material is displayed for water conservation, and staff & users are made aware of its importance	
A 9.5	Facility has a functional rain water harvesting system	OB/SI	Check, if Facility Infrastructure and drain system are fitted with rain water harvesting system with sufficient storage capacity	
A10	Work Place Management			
A10.1	Staff periodically sort useful and unnecessary articles at work station	SI/OB	Ask the staff, how frequently they sort and remove unnecessary articles from their work place like Nursing stations, work bench, dispensing counter in Pharmacy, etc. Check for presence of unnecessary articles	
A10.2	The Staff arrange the useful articles, records in systematic manner	SI/OB	Check, if drugs, instruments, records are not lying in haphazard manner and kept near to point of use in arranged manner. The place has been demarcated for keeping different articles	
A10.3	Staff label the articles in identifiable manner	SI/OB	Check that drugs, instruments, records, etc. are labelled for facilitating easy identification	
A10.4	Work stations are clean and free of dirt/dust	SI/OB	Check nursing station, dispensing counter, lab benches, etc. are clean and shining	
A10.5	Staff has been trained for work place management	SI/RR	Check, if the facility staff has got any formal/hands on training for managing the workplace (e. g. 5's')	



Ref. No.	Criteria	Assessment Method	Means of Verification	Compliance
B	SANITATION & HYGIENE			
B1	Cleanliness of Circulation Area			
B1.1	No dirt/Grease/Stains in the Circulation area	OB	Check floors and walls of Corridors, Waiting area, stairs, roof top for any visible or tangible dirt, grease, stains, etc.	
B1.2	No Cobwebs/Bird Nest/ Dust on walls and roofs of corridors	OB	Check roof, walls, corners of Corridors, Waiting area, stairs, roof top for any Cobweb, Bird Nest, etc.	
B1.3	Corridors are cleaned at least twice in the day with wet mop	SI/RR	Ask cleaning staff about frequency of cleaning in a day. Verify with Housekeeping records	
B1.4	Corridors are rigorously cleaned with scrubbing / flooding once in a month	SI/RR	Ask the staff about cleaning schedule and activities	
B1.5	Surfaces are conducive of effective cleaning	OB	Check if surfaces are smooth enough for cleaning	
B2	Cleanliness of Wards			
B2.1	No dirt/Grease/ Stains/ Garbage in wards	OB	Check floors and walls of indoor department for any visible or tangible dirt, grease, stains, etc.	
B2.2	No Cobwebs/Bird Nest/ Dust/ Seepage on walls and roofs of wards	OB	Check roof, corners of ward for any Cobweb, Bird Nest, Dust, etc.	
B2.3	Wards are cleaned at least thrice in the day with wet mop	OB	Ask cleaning staff about frequency of cleaning in a day. Verify with the Housekeeping records	
B2.4	Patient Furniture, Mattresses, Fixtures are without grease and dust	OB	Check for visible dirt, dust, grease etc. Check if the items are wiped/ dusted daily	
B2.5	Floors, walls, furniture and fixture are thoroughly cleaned once in a week.	OB	Ask cleaning staff about frequency of cleaning in a day. Verify with Housekeeping records if available	
B3	Cleanliness of Procedure Areas			
B3.1	No dirt/Grease/ Stains/ Garbage in Procedure Areas	OB	Check floors and walls of Labour room, OT, Dressing room for any visible or tangible dirt, grease, stains etc.	



Ref. No.	Criteria	Assessment Method	Means of Verification	Compliance
B3.2	No Cobwebs/Bird Nest/ Seepage in OT & Labour Room	OB	Check roof, walls, corners of Labour Room, OT, Dressing Room for any Cobweb, Bird Nest, Seepage, etc.	
B3.3	OT/Labour Room floors and procedures surfaces are cleaned at least twice a day / after every surgery	SI/RR	Ask cleaning staff about frequency of cleaning in a day. Verify with Housekeeping records	
B3.4	OT & Labour Room Tables are without grease, body fluid and dust	OB	Check Top, side and legs of OT Tables, Dressing Room Tables, Labour Room Tables for dirt, dried human tissue, body fluid etc.	
B3.5	Floors, walls, furniture and fixture are thoroughly cleaned once in a week.	SI/RR	Ask cleaning staff about frequency of cleaning day. Verify with Housekeeping records if available	
B4	Cleanliness of Ambulatory Area (OPD, Emergency, Lab)			
B4.1	No dirt/Grease/Stains / Garbage in Ambulatory Area	OB	Check floors and walls of OPD, Emergency, Laboratory, Radiology for any visible or tangible dirt, grease, stains, etc.	
B4.2	No Cobwebs/Bird Nest/ Seepage on walls and roofs of ambulatory area	OB	Check roof, walls, corners of OPD, Emergency, Laboratory, Radiology for any Cobweb, Bird Nest, Dust, Seepage, etc.	
B4.3	Ambulatory Areas are cleaned at least thrice in the day with wet mop	SI/RR	Ask cleaning staff about frequency of cleaning in a day. Verify with Housekeeping records	
B4.4	Furniture, & Fixtures are without grease and dust and cleaned daily	OB/SI	Observe and ask the staff about frequency for cleaning	
B4.5	Floors, walls, furniture and fixture are thoroughly cleaned once in a week.	SI/RR	Ask staff about schedule of cleaning and verify with records	
B5	Cleanliness of Auxiliary Areas			
B5.1	No dirt/Grease/ Stains/ Garbage in Auxiliary Area	OB	Check floors and walls of Pharmacy, Kitchen, Laundry, Mortuary, Administrative offices for any visible or tangible dirt, grease, stains, etc.	
B5.2	No Cobwebs/Bird Nest/ Seepage on walls and roofs of Auxiliary Area	OB	Check roof, walls, corners of Pharmacy, Kitchen, Laundry, Mortuary, Administrative offices for any Cobweb, Bird Nest, Seepage, etc.	



Ref. No.	Criteria	Assessment Method	Means of Verification	Compliance
B5.3	Auxiliary Areas are cleaned at least twice in the day with wet mop	SI/RR	Ask cleaning staff about frequency of cleaning in a day. Verify with Housekeeping records	
B5.4	Furniture & Fixtures are without grease and dust and cleaned daily	OB/SI	Observe and ask the staff about frequency for cleaning	
B5.5	Floors, walls, furniture and fixture are thoroughly cleaned once in a month	SI/RR	Ask staff about schedule of cleaning and verify with records	
B6	Cleanliness of Toilets			
B6.1	No dirt/Grease/Stains/ Garbage in Toilets	OB	Check some of the toilets randomly in indoor and outdoor areas for any visible dirt, grease, stains, water accumulation in toilets	
B6.2	No foul smell in the Toilets	OB	Check some of the toilets randomly in indoor and outdoor areas for foul smell	
B6.3	Toilets have running water and functional cistern	OB	Ask cleaning staff to operate cistern and water taps	
B6.4	Sinks and Cistern are cleaned every two hours or whenever required	SI/RR	Ask cleaning staff for frequency of cleaning and verify it with house keeping records	
B6.5	Floors of Toilets are Dry	OB	Check some of the toilets randomly for dryness of floors and without residue water accumulation	
B7	Use of standards materials and Equipment for Cleaning			
B7.1	Availability of Detergent Disinfectant solution / Hospital Grade Phenyl for Cleaning purpose	SI/OB/RR	Check for good quality Hospital cleaning solution preferably a ISI mark. Composition and concentration of solution is written on label. Check with cleaning staff if they are getting adequate supply. Verify the consumption records	
B7.2	Cleaning staff uses correct concentration of cleaning solution	SI/RR	Check, if the cleaning staff is aware of correct concentration and dilution method for preparing cleaning solution. Ask them to demonstrate. Verify it with the instruction given solution bottle	
B7.3	Availability of carbolic Acid/ Baciloid for surface cleaning in procedure areas- OT, Labour Room	SI/RR	Check for adequacy of the supply. Verify with the records of stock outs, if any	



Ref. No.	Criteria	Assessment Method	Means of Verification	Compliance
B7.4	Availability of Buckets and carts for Mopping	SI/RR	Check, if adequate numbers of Buckets and carts are available. General and critical areas should have separate bucket and carts	
B7.5	Availability of Cleaning Equipment	SI/OB	Check availability of mops, brooms, collection buckets etc. as per requirement. Hospital Facility with a size of more than 300 beds should have mechanized mopping machine	
B8	Use of Standard Methods Cleaning			
B8.1	Use of Three bucket system for cleaning	SI/OB	Check, if cleaning staff uses three bucket system for cleaning. One bucket for Cleaning solution, second for plain water and third one for wringing the mop. Ask the cleaning staff about the process	
B8.2	Use unidirectional method and out word mopping	SI/OB	Ask cleaning staff to demonstrate the how they apply mop on floors. It should be in one direction without returning to the starting point. The mop should move from inner area to outer area of the room	
B8.3	No use of brooms in patient care areas	SI/OB	Check, if brooms are stored in patient care areas. Ask cleaning staff if they are using brooms for sweeping in wards, OT, Labour room. Brooms should not be used in patient care areas	
B8.4	Use of separate mops for critical and semi critical areas and procedures surfaces	SI/OB	Check, if cleaning staff is using same mop for outer general areas and critical areas like OT and labour room. The mops should not be shared between critical and general area. The clothes used for cleaning procedure surfaces like OT Table and Labour Room Tables should not be used for mopping the floors	
B8.5	Disinfection and washing of mops after every cleaning cycle	SI/OB	Check, if cleaning staff disinfect, clean and dry the mop before using it for next cleaning cycle	
B9	Monitoring of Cleanliness Activities			
B9.1	Use of Housekeeping Checklist in Toilets	OB/RR	Check Housekeeping Checklist is displayed in Toilet and updated. Check Housekeeping records if checklists are daily updated for at least last one month	



Ref. No.	Criteria	Assessment Method	Means of Verification	Compliance
B9.2	Use of Housekeeping Checklist in Patient Care Areas	OB/RR	Check that Housekeeping Checklist is displayed in OPD, IPD, Lab, etc. Check Housekeeping records if checklists are daily updated for at least last one month	
B9.3	Use of Housekeeping Checklist in Procedure Areas	OB/RR	Check Housekeeping Checklist is displayed in Labour room, OT Dressing room etc. Check Housekeeping records if checklist are daily updated for at least last one month	
B9.4	A person is designated for monitoring of Housekeeping Activities	SI/RR	Check, if a staff-member from the hospital/Facility has been designated to monitor the housekeeping activities and verify them with counter signature on housekeeping checklist	
B9.5	Monitoring of adequacy and quality of material used for cleaning	SI/RR	Check, if there is any system of monitoring that adequate concentration of disinfectant solution is used for cleaning. Hospital/Facility administration take feedback from cleaning staff about efficacy of the solution and take corrective action if it is not effective	
B10.	Drainage and Sewage Management			
B10.1	Availability of closed drainage system	OB	Check, if there is any open drain in the hospital/ Facility premises. Hospital/Facility should have a closed drainage system. If, the hospital/Facility's infrastructure is old and it is not possible create closed draining system, the open drains should properly covered	
B10.2	Gradient of Drains is conducive for adequate for maintaining flow	OB	Check that the drains have adequate slope and there is no accumulation of water or debris in it	
B10.3	Availability of connection with Municipal Sewage System/ or Soak Pit	OB/SI	Check, if Facility sewage has proper connection with municipal drainage system. If access to municipal system is not accessible, Facility should have a septic tank with-in the premises	
B10.4	No blocked/ over-flowing drains in the facility	OB	Observe that the drains are not overflowing or blocked	



Ref. No.	Criteria	Assessment Method	Means of Verification	Compliance
B10.5	All the drains are cleaned once in a week	SI/RR	Check with the cleaning staff about the frequency of cleaning of drains. Verify with the records	
C	WASTE MANAGEMENT			
C1	Segregation of Biomedical Waste			
C1.1	Anatomical waste is segregated in Yellow Bin	OB/SI	Check in departments like Labour room and OT that anatomical waste is put in yellow colour bin	
C1.2	Soiled and Solid infectious waste (plastic) are segregated properly as per states guidelines, which are in compliance to options for segregation given the BMW (management & handling) rules 1998	OB/SI	Check soiled cotton and bandages are segregated as per appropriate coloured bin Solid waste e.g., Tubing, Catheter, Syringes are put in designated bins as per state's protocol for segregation	
C1.3	General and Infectious waste are not mixed	OB	Check that general waste like medicine boxes, paper, food, kitchen waste are not mixed with infected wastes	
C1.4	Display of work instructions for segregation and handling of Biomedical waste	OB	Check for instructions for segregation of waste in different colour coded bins are displayed at point of use	
C1.5	Check if the staff is aware of segregation protocols	SI	Ask staff about the segregation protocol	
C2	Collection and Transportation of Biomedical Waste			
C2.1	Biomedical waste bins are not over filled	OB	Check that bins meant for Biomedical waste are not filled beyond 2/3 capacity	
C2.2	Biomedical waste bins are covered	OB	Check that bins meant for bio medical waste are covered with a lid	
C2.3	There is a defined schedule for collection of Biomedical waste from point of generation	SI/RR	Ask staff how frequent bio medical waste is collected from the patient care areas. It should be collected at least twice a day or when bin is 2/3 filled	
C2.4	Transportation of biomedical waste is done in closed container/trolley	OB/SI	Check, if transportation of waste from clinical areas to storage areas is done in covered trolleys / Bins. Trolleys used for patient shifting should not be used for transportation of waste	



Ref. No.	Criteria	Assessment Method	Means of Verification	Compliance
C2.5	Route of transportation of biomedical waste should be away from the general traffic in the Facility	OB/SI	Check route of transportation of waste. It should be done through the dirty corridor, not used by patients and visitors. If separate route is not available in the Facility, the waste should be transferred during the lean period - Early morning or late night	
C3	Sharp Management			
C3.1	Staff uses needle cutters for cutting the syringe hub	OB/SI	Observe that needle cutters are being used for cutting and disposing syringes and are not idle. Observe the procedure and containers for storing the SHARPS and syringes	
C3.2	Disinfection of sharp before disposal	OB/SI	Check if SHARPS are put in a disinfectant solution (1.0% Chlorine Solution or any other suitable disinfectant as per Facility's policy)	
C3.3	Staff uses safe method for processing and transportation of sharp	OB/SI	Check that the staff uses either double bin with sieves or puncture proof container for transportation of the sharps	
C3.4	Staff knows what to do in condition of needle stick injury	SI/RR	Ask staff about post exposure prophylaxis (PEP) after a needle stick injury - immediate first aid, reporting format, and follow-up	
C3.5	Post exposure prophylaxis is available in the Facility	SI/RR	Check, if valid PEP kit is available in the Facility and the staff is aware of them. PEP protocol is prominently displayed at work stations	
C4	Storage of Biomedical Waste			
C4.1	Dedicated Storage facility is available for biomedical waste	OB	Check, if Facility has dedicated room for storage of Biomedical waste before disposal/handing over to Common Treatment Facility	
C4.2	Storage facility is located away from the patient area and is secured	OB	Check that the BMW storage is situated away from the main building and is kept in lock and key	
C4.3	No Biomedical waste is stored for more than 48 Hours	SI/RR	Verify that the waste is being disposed / handed over to CTF within 48 hour of generation. Check the record especially during holidays	



Ref. No.	Criteria	Assessment Method	Means of Verification	Compliance
C4.4	General waste is not stored with biomedical waste	OB	Check that General waste is not mixed bio medical waste in storage area	
C4.5	Biohazard sign is prominently displayed at storage area	OB	Observe the display of Biohazard symbol at storage areas	
C5	Disposal of Biomedical waste			
C5.1	Facility has adequate facility for disposal of Biomedical waste	RR/OB	Check that the Facility has a valid contract with a Common Treatment facility for disposal of Bio medical waste. In absence of access to CTF, the facility should have Deep Burial Pit and Sharp Pit within premises of Facility	
C5.2	Facility disinfects and mutilates the Plastic waste before disposal	OB/SI	Gloves are cut, Plastic Syringe are shredded and disinfected with chlorine solution (prepared within 6 - 8 hours) before disposal to prevent its reuse	
C5.3	Anatomical waste is disposed as per guidelines	SI/RR	Check either anatomical waste is handed over to CTF incineration or disposed in deep burial pit (in towns with less than 5.0 Lakh Population)	
C5.4	Deep Burial Pit is constructed as per BMW (management & handling) Rules 1998	OB/RR	Located away from the main Facility building and water source, At least two meter deep. Closed when half filled. Secured from animals. If waste disposed through CTF, then a deep burial pit is not required	
C5.5	Sharp Pit constructed as per guidelines	OB/SI	Constitute structure with a funnel inlet. If Sharp are disposed through CTF give full compliance	
C6	Management Hazardous Waste			
C6.1	Staff is aware of Mercury Spill management	SI	Ask staff what he/she would do in case of Mercury spill	
C6.2	Availability of Mercury Spill Management Kit	OB	Check that Mercury spill management kit is readily available	
C6.3	Disposal of Radiographic Developer and Fixer	SI/RR	Check how X-ray department disposes developer and fixer. It should be handed over to authorized agency and not drained in sewage	
C6.4	Disposal of Disinfectant solution like Glutaraldehyde	SI	Should not be drained in sewage untreated	



Ref. No.	Criteria	Assessment Method	Means of Verification	Compliance
C6.5	Disposal of Lab reagents	SI/RR	As per instructions of manufacturer	
C7	Solid General Waste Management			
C7.1	Recyclable and Bio degradable waste are segregated	OB/SI	Check, if there are separate general waste bins for Recyclable and Bio degradable waste	
C7.2	Availability of Compost pit as per specification	OB/SI	Availability of compost pit for Bio degradable waste. If it is disposed through Municipal waste management system, give full compliance	
C7.3	Availability of waste disposal services	OB/SI	Check, if the Facility has access to solid waste disposal services through municipal or out-sourced agencies	
C7.4	There is no mixing of infectious and general waste	OB/SI	Check no infectious waste is disposed in general waste bin or storage area	
C7.5	General waste from Facility is removed daily by municipal/ outsourced agency	OB/SI/ RR	Ask staff/ verify with records for daily removal of waste. Check there is no sign of burning of waste within Facility's premises	
C8	Liquid Waste Management			
C8.1	Lab samples are discarded after treatment only	OB/SI	Treated with chlorine solution before disposal	
C8.2	Body Fluids, collection in suction apparatus, etc. are disposed after treatment	OB/SI	Treated with chlorine solution before disposal	
C8.3	Facility has treatment facility for infectious liquid waste	OB/SI	ETP or local Treatment with chlorine solution	
C8.4	Facility has septic tank as per specification	OB	If connected to sewage give full compliance	
C8.5	Septic tank is maintained as per guidelines	OB	Periodic removal of Sludge repair of septic tank	
C9	Equipment and Supplies for Bio Medical Waste Management			
C9.1	Availability of Bins for segregation of Biomedical waste at point of use	OB/RR	One set of bins at each point of generation	
C9.2	Availability of Bins for Collection of general waste	OB/RR	One at each point of waste generation	



Ref. No.	Criteria	Assessment Method	Means of Verification	Compliance
C9.3	Availability of Needle/ Hub cutter and puncture proof boxes	OB/SI	At each point of generation of sharp waste	
C9.4	Availability of Colour coded liners for Biomedical waste and general waste	OB/SI	Check all the bins are provided with chlorine free liners. Ask staff about adequacy of supply	
C9.5	Availability of trolleys for waste collection and transportation	OB/RR	As per the size of the Facility	
C10	Statuary Compliances			
C10.1	Facility has a valid authorization for Bio Medical waste Management from pollution control board	RR	Check for the validity of authorization	
C10.2	Facility submits Annual report to pollution control board	RR	Check the records that reports have been submitted before 31st January every year	
C10.3	Facility Keeps records of waste generated	RR	Check the records being maintained for amount of different categories of waste generated at facility	
C10.4	There is a designated person for monitoring for Bio Medical Waste Management	SI/RR	Check for who is designated and what is his role and responsibilities	
C10.5	Copy of Biomedical waste rules is available with Facility	RR	Check the records	
D	INFECTION CONTROL			
D1	Hand Hygiene			
D1.1	Availability of Sink and running water at point of use	OB	Check for washbasin with functional tap, soap and running water availability at all points of use including nursing stations, OPD clinics, OT, labour room, etc.	
D1.2	Display of Hand washing Instructions	OB	Check that Hand washing instructions are displayed preferably at all points of use	
D1.3	Adherence to 6 steps of Hand washing	SI	Ask facility staff to demonstrate 6 steps of normal hand wash	
D1.4	Availability of Alcohol Based hand rub	SI/OB	Check for availability alcohol based hand-rub. Ask staff about its regular supply	



Ref. No.	Criteria	Assessment Method	Means of Verification	Compliance
D1.5	Staff is aware of when to hand wash	SI	Ask staff about the situations, when hand wash is mandatory (5 moments of hand washing)	
D2	Personal Protective Equipment (PPE)			
D2.1	Use of Gloves during procedures and examination	SI/OB	Check, if the staff uses gloves during examination, and while conducting procedures	
D2.2	Use of Masks and Head cap	SI/OB	Check, if staff uses mask and head caps in patient care and procedure areas	
D2.3	Use of Heavy Duty Gloves and gumboot by waste handlers	SI/OB	Check, if the housekeeping staff and waste handlers are using heavy duty gloves and gum boots	
D2.4	Use of aprons/ Lab coat by the clinical staff	SI/OB	Check the usage of protective attire e.g. Apron by the doctor and nurses, lab coat by the lab technicians, gown in OT, etc.	
D2.5	Adequate supply of Personal Protective Equipment (PPE)	SI/RR	Check with staff whether they have adequate supply of personal protective equipment. Verify the records for any stock outs	
D3	Personal Protective Practices			
D3.1	The staff is aware of use of gloves, when to use (occasion) and its type	SI/OB	Check with the staff when do they wear gloves, and when gloves are not required. The Staff should also know difference between clean & sterilized gloves and when to use	
D3.2	Correct method of wearing and removing gloves	SI/OB	Ask the staff to demonstrate correct method of wearing and removing Gloves	
D3.3	Correct Method of wearing mask and cap	SI/OB	Check, if the staff knows correct method of wearing mask	
D3.4	No re-use of disposable personal protective equipment	SI/OB	Check that disposable gloves and mask are not re-used. Reusable Gloves and mask are used after adequate sterilization	
D3.5	The Staff is aware of Standard Precautions	SI	Ask the staff about five Standard Precautions	
D4	Decontamination and Cleaning of Instruments			
D4.1	Staff knows how to make Chlorine solution	SI/OB	Ask the staff how to make 1% chlorine solution from Bleaching powder and Hypochlorite solution	



Ref. No.	Criteria	Assessment Method	Means of Verification	Compliance
D4.2	Decontamination of operating and Surface examination table, dressing tables etc. after every procedures	SI/OB	Ask staff when and how they clean the operating surfaces either by chlorine solution or Disinfectant like carbolic acid	
D4.3	Decontamination of instruments after use	SI/OB	Check whether instruments are decontaminated with 0.5% chlorine solution for 10 minutes	
D4.4	Cleaning of instruments done after decontamination	SI/OB	Check instruments are cleaned thoroughly with water and soap before sterilization	
D4.5	Adequate Contact Time for decontamination	SI	Ask staff about the Contact time for decontamination of instruments (10 Minutes)	
D5	Disinfection & Sterilization of Instruments			
D5.1	Adherence to Protocols for autoclaving	SI/OB	Check about awareness of recommended temperature, duration and pressure for autoclaving Instruments - 121 degree C, 15 Pound Pressure for 20 Minutes (30 Minutes if wrapped) Linen - 121 C, 15 Pound for 30 Minutes	
D5.2	Adherence to Protocol for High Level disinfection	SI/OB	Check with the staff about process of High Level disinfection using Boiling or Chlorine solution	
D5.3	Use of Signal Locks for sterilization	OB/RR	Check autoclaving records for use of sterilization indicators (signal Loc)	
D5.4	Chemical Sterilization of instruments done as per protocol	Is/OB	Check, if the staff know the protocol for sterilization of laparoscope soaking it in 2% Glutaraldehyde solution for 10 Hours	
D5.5	Sterility of autoclaved pack maintained during storage	SI/OB	Check, if autoclaved instruments are kept in the clean area. Their expiry date is mentioned on the package. Instruments are not used later once instrument pack has been opened	
D6	Spill Management			
D6.1	Staff is aware of how manage small spills	SI/OB	Check for adherence to protocols	
D6.2	Availability of spill management Kit	SI/OB	Check availability of kits	



Ref. No.	Criteria	Assessment Method	Means of Verification	Compliance
D6.3	Staff has been trained for spill management	SI/RR	Check for the training records	
D6.4	Spill management protocols are displayed at points of use	OB	Check for display	
D6.5	Staff is aware of management of large spills	SI/OB	Check for adherence to protocol	
D7	Isolation and Barrier Nursing			
D7.1	Provision of Isolation ward	OB	Check if isolation ward is available in the Facility	
D7.2	Infectious patients are not mixed for general patients	OB/SI	Check infectious patients are admitted in infectious ward only	
D7.3	Maintenance of adequate bed to bed distance in wards	OB	A distance of 3.5 Foot is maintained between two beds in wards	
D7.4	Restriction of external foot wear in critical areas	OB	External foot wear are not allowed in labour room, OT, ICU, Burn ward, SNCU, etc.	
D7.5	Restriction of visitors to Isolation Area	OB/Is	Visitors are not allowed in critical areas like OT, ICU, SNCU, Burn Ward, etc.	
D8	Infection Control Program			
D8.1	Infection Control Committee is constituted and functional in the Facility	RR/SI	Check for the enabling order and minutes of the meeting	
D8.2	Regular Monitoring of infection control practices	RR/SI	Check, if there is any practice of daily monitoring of infection control practice like hand hygiene and personal protection	
D8.3	Antibiotic Policy is implemented at the facility	RR/SI	Check, if the Facility has documented Anti biotic policy and doctors are aware of it	
D8.4	Immunization of Service Providers	RR/SI	Facility staff has been immunized against Hepatitis B	
D8.5	Regular Medical check-ups of food handlers and housekeeping staff	RR/SI	Check for the records and lab investigations of Food handlers and housekeeping staff	
D9	Hospital/Facility Acquired Infection Surveillance			
D9.1	Regular microbiological surveillance of Critical areas	RR/SI	Check for the records of microbiological surveillance of critical areas like OT, Labour room, ICU, SNCU etc.	



Ref. No.	Criteria	Assessment Method	Means of Verification	Compliance
D9.2	Facility measures Surgical Site Infection Rates	RR/SI	Check for the records	
D9.3	Facility measures Device Related HAI rates	RR/SI	Check for the records	
D9.4	Facility measures Blood Related and Respiratory Tract HAI	RR/SI	Check for the records	
D9.5	Facility takes corrective Action on occurrence of HAIs	RR/SI	Check for the records	
D10	Environment Control			
D10.1	Maintenance of positive air pressure in OT and ICU	OB/SI	Check how positive pressure is maintained in OT	
D10.2	Maintenance of air exchanges in OT and ICU	OB/SI	At least availability of air conditioner	
D10.3	Maintenance of Layout in OT	OB/SI	Check for zoning of OT in protective, clean, sterile and disposal zones	
D10.4	Carbolization of OT and Labour Room	OB/SI	OT and Labour room are carbolized daily	
D10.5	General and patient traffic are segregated in Facility	OB/SI	Check for the layout and patient traffic. There should be no criss cross between general and patient traffic	
E	SUPPORT SERVICES			
E.1	Laundry Services & Linen Management			
E1.1	The facility has adequate stock (including reserve) of linen	RR/SI/PI	Check the stock position and its turn-over during last one year in term of demand and availability	
E1.2	Bed-sheets and pillow cover are stain free and clean	OB/SI/PI	Observe the condition of linen in use in the wards, Accident & Emergency Department, other patient care area, etc.	
E1.3	Bed-sheets and linen are changed daily	OB/SI/PI	Check, if the bedsheets and pillow cover have been changed daily. Please interview the patients as well	
E1.4	Soiled linen is removed, segregated and disinfected, as per procedure	SI/OB	Check, how is the soiled linen handled at the facility. It should be removed immediately and sluiced and disinfected immediately	



Ref. No.	Criteria	Assessment Method	Means of Verification	Compliance
E1.5	Patients' dress are clean and not torn	PI/SI	Check the patients' dresses - its cleanliness and condition	
E2	Water Sanitation			
E2.1	The facility receives adequate quantity of water as per requirement	RR/SI/PI	At least 200 litres of water per bed per day is available (if municipal supply) or the water is available on 24x7 basis at all points of usage	
E2.2	There is storage tank for the water and tank is cleaned periodically	RR	The Facility should have capacity to store 48 hours water requirement Water tank is cleaned at six monthly interval and records are maintained	
E2.3	Drinking Water is chlorinated	RR	Presence of free chlorine at 0.2 ppm is tested in the samples, drawn from the potable water	
E2.4	Quality of Water is tested periodically	RR	Periodically, the water is sent for bacteriological examination	
E2.5	Water is available at all points of use	OB/SI/PI	Water is available for hand-washing, OT, Labour Room, Wards, Patients' toilet & bath, waiting area	
E3	Kitchen Services			
E3.1	Facility kitchen is located in a separate building, away from patient care area and functions meticulously	OB	The Facility kitchen is functional in a separate building with proper lay out. Cooking takes place on LPG/ PNG. No fire-wood is used. Kitchen waste is collected separately and not mixed with the Biomedical waste	
E3.2	The Kitchen has provision to store dry ration and fresh ration separately.	OB	Dry ration is stored on pellet, away from wall in closed containers. Vegetables are stored at appropriate temperature. Milk, curd and other perishable items are stored in the fridge, which is cleaned and defrosted regularly	
E3.3	The Kitchen is smoke-free and fly-proofed	OB	There is proper ventilation in the kitchen. Doors and Windows are fly-proofed. No fly nuisance is noticed inside the kitchen	



Ref. No.	Criteria	Assessment Method	Means of Verification	Compliance
E3.4	Staff observes meticulous personal hygiene	OB	Check that the Staff uses cap and kitchen dress, while cooking. Nails & hair are trimmed. Ill staff is not allowed to work in kitchen. Toilet facilities are available for the staff. Nail brush is available	
E3.5	Food to patients is distributed through covered trolleys and patients utensils are not dented or chipped - off	OB	Check that adequate number of trolleys are available and are in use. Look for the condition of patients crockery and utensils	
E4	Security Services			
E4.1	The main gate of premises, Facility building, wards, OT and Labour room are secured	OB	Check for the presence of security personnel at critical locations	
E4.2	The security personal are meticulously dressed and smartly turned-out.	OB	Check if Security personnel themselves observe the commensurate behaviour such no spitting, no chewing of tobacco, non-smoker, etc.	
E4.3	There is a robust crowd management system.	OB	Crowd in OPD has waiting place, seats, etc. Dust bins are available and there is adequate ventilation for the patients and their attendants	
E4.4	Security personal reprimands attendants, who found indulging into unhygienic behaviour - spitting, open field urination & defecation, etc.	OB	Check, if security personnel watch behaviour of patients and their attendants, particularly in respect of hygiene, sanitation, etc. and take appropriate actions, as deemed	
E4.5	Un-authorized vendors are not present inside the campus. Waste storage is secured and there is no authorised collection of plastic items, card board, etc.	OB/SI/PI	Check, entry of vendors is controlled or not. Unauthorised entry of rag-pickers should not be there	
E5	Out-sourced Services Management			
E5.1	There is valid contract for out-sourced services, like house-keeping, BMW management, security, etc.	RR	Please check contract document of all out-sourced services	
E5.2	The Contract has well defined measurable deliverables	RR	Check the contract documents to see, whether the deliverables of the out-sourced organisation have been well defined in term of the work to be done and how it would be verified	



Ref. No.	Criteria	Assessment Method	Means of Verification	Compliance
E5.3	The contract has penalty clause and it has been evoked in the event of non-performance or sub-standard performance	RR/ SI/ Interview with vendor	Look for the penalty clause in the contract and how often it has been used	
E5.4	Services provided by the out-sourced organisation are measured periodically and performance evaluation is formally recorded.	RR	Check if Performance of the vendors have been evaluated and recorded	
E5.5	There is defined time-line for release of payment to the contractors for the services delivered by the organisation.	RR/ Interview with vendor	Check the record for the time taken in releasing the payment due to the out-sourced organisation	
F	HYGIENE PROMOTION			
F1	Community Monitoring & Patient Participation			
F1.1	Members of RKS and Local Governance bodies monitor the cleanliness of the Facility at pre-defined intervals	SI/RR	At least once in month	
F1.2	Local NGO/ Civil Society Organizations are involved in cleanliness of the Facility	SI	Discuss with Facility administration about involvement of local NGOs/ Civil society	
F1.3	Patients are counselled on benefits of Hygiene	PI	Check with patients, if they have been counselled for hygiene practices	
F1.4	Patients are made aware of their responsibility of keeping the health facility clean	PI/OB	Ask patients about their roles & responsibilities with regards to cleanliness. Patient's responsibilities should be prominently displayed	
F1.5	The Health facility has a system to take feed-back from patients and visitors for maintaining the cleanliness of the facility	SI/RR	Check if there is a feedback system for the patients. Verify the records	
F2	Information Education and Communication			
F2.1	IEC regarding importance of maintaining hand hygiene is displayed in Facility premises	OB	Should be displayed prominently in local language	
F2.2	IEC regarding Swachhata Abhiyan is displayed within the facilities' premises	OB	Should be displayed prominently in local language	
F2.3	IEC regarding use of toilets is displayed within Facility premises	OB	Should be displayed prominently in local language	



Ref. No.	Criteria	Assessment Method	Means of Verification	Compliance
F2.4	IEC regarding water sanitation is displayed in the Facility premises	OB	Should be displayed prominently in local language	
F2.5	Facility disseminates hygiene messages through other innovative manners	SI/OB	Hygiene Kiosk, Video Messages, Leaflets, IEC corners etc.	
F3.	Leadership and Team work			
F3.1	Cleanliness and Infection control committee is constituted at the facility	SI	Check constitution of committee and its functioning	
F3.2	Cleanliness and infection control committee has representation of all cadre of staff including Group 'D' and cleanings staff	RR/SI	Verify with the records	
F3.3	Roles and responsibility of different staff members have been assigned and communicated	SI/RR	Ask different members about their roles and responsibilities	
F3.4	Facility's leadership review the progress of the cleanliness drive on weekly basis	SI/RR	Check about regularity of meeting and monitoring activities regarding cleanliness drive	
F3.5	Facility's leadership identifies good performing staff members and departments	SI	Check with Facility administration if there is any such good practice	
F4	Training and Capacity Building and Standardization			
F4.1	Facility conducts training need assessment regarding cleanliness and infection control in Facility	RR	Verify with the records, if trg. need assessment has been done	
F4.2	Bio medical waste Management training has been provided to the staff	SI/RR	Verify with the training records	
F4.3	Infection control Training has been provided to the staff	SI/RR	Verify with the training records	
F4.4	Facility has documented Standard Operating procedures for Cleanliness and Upkeep of Facility	SI/RR	Check availability of SOP with the users	
F4.5	Facility has documented Standard Operating procedures for Bio-Medical waste management and Infection Control	RR	Check availability of SOP with respective users	



Ref. No.	Criteria	Assessment Method	Means of Verification	Compliance
F5	Staff Hygiene and Dress Code			
F5.1	Facility has dress code policy for all cadre of staff	SI/RR	Ask staff about the policy. Check if it is documented	
F5.2	Nursing staff adhere to designated dress code	OB	Observation	
F5.3	Support and Housekeeping staff adhere to their designated dress code	OB	Observation	
F5.4	There is a regular monitoring of hygiene practices of food handlers and housekeeping staff	SI	Check with the Facility administration	
F5.5	Identity cards and name plates have been provided to all staff	OB	Observation	



LIST OF ABBREVIATIONS

1	AC	Air Conditioner	29	IEC	Information, Education and Communication
2	Annx.	Annexure	30	IMEP	Infection Management and Environment Plan
3	AVG	Average	31	IPHS	Indian Public Health Standards
4	BCC	Behavioural Change Communication	32	IS	International Standards
5	BDO	Block Development Officer	33	IV	Intra Venous
6	BLD BNK	Blood Bank	34	MAT	Maternal
7	BMW	Bio-Medical Waste	35	MDM	Mid-Day meal
8	BOD	Biological Oxygen Demand	36	ME	Measurable Element
9	CAT	Category	37	MRSA	Methicillin-resistant Staphylococcus aureus
10	CCU	Coronary Care Unit	38	NGO	Non-Governmental Organization
11	CM	Centimetre	39	NICU	Neonatal Intensive care unit
12	COD	Chemical Oxygen Demand	40	NQS	National Quality Standards
13	CSSD	Central Sterile and Supply Department	41	NRHM	National Rural Health Mission
14	DC	District Collector	42	OPD	Out-Patient Department
15	DH	District Hospital	43	OT	Operation Theatre
16	DLC	Differential Leukocyte Count	44	PHED	Public Health Engineering Department
17	e.g.	Example Given	45	RKS	Rogi Kalyan Samiti
18	ETO	Ethylene Dioxide	46	RO	Reverse Osmosis
19	ETP	Effluent Treatment Plant	47	RR	Record Review
20	GEN	General	48	SARS	Severe Acute Respiratory Syndrome
21	GOVT	Government	49	SI	Staff Interview
22	HB	Haemoglobin	50	SOP	Standard Operating Procedure
23	HOSP	Hospital	51	TB	Tuberculosis
24	HSRC	Health Systems Resource Centre	52	TLC	Total Leukocyte Count
25	I/C	In-charge	53	TOR	Terms of Reference
26	ICC	Infection Control Committee	54	TOT	Training of Trainers
27	ICDS	Integrated Child Development Services	55	WHO	World Health Organization
28	ICU	Intensive Care unit			



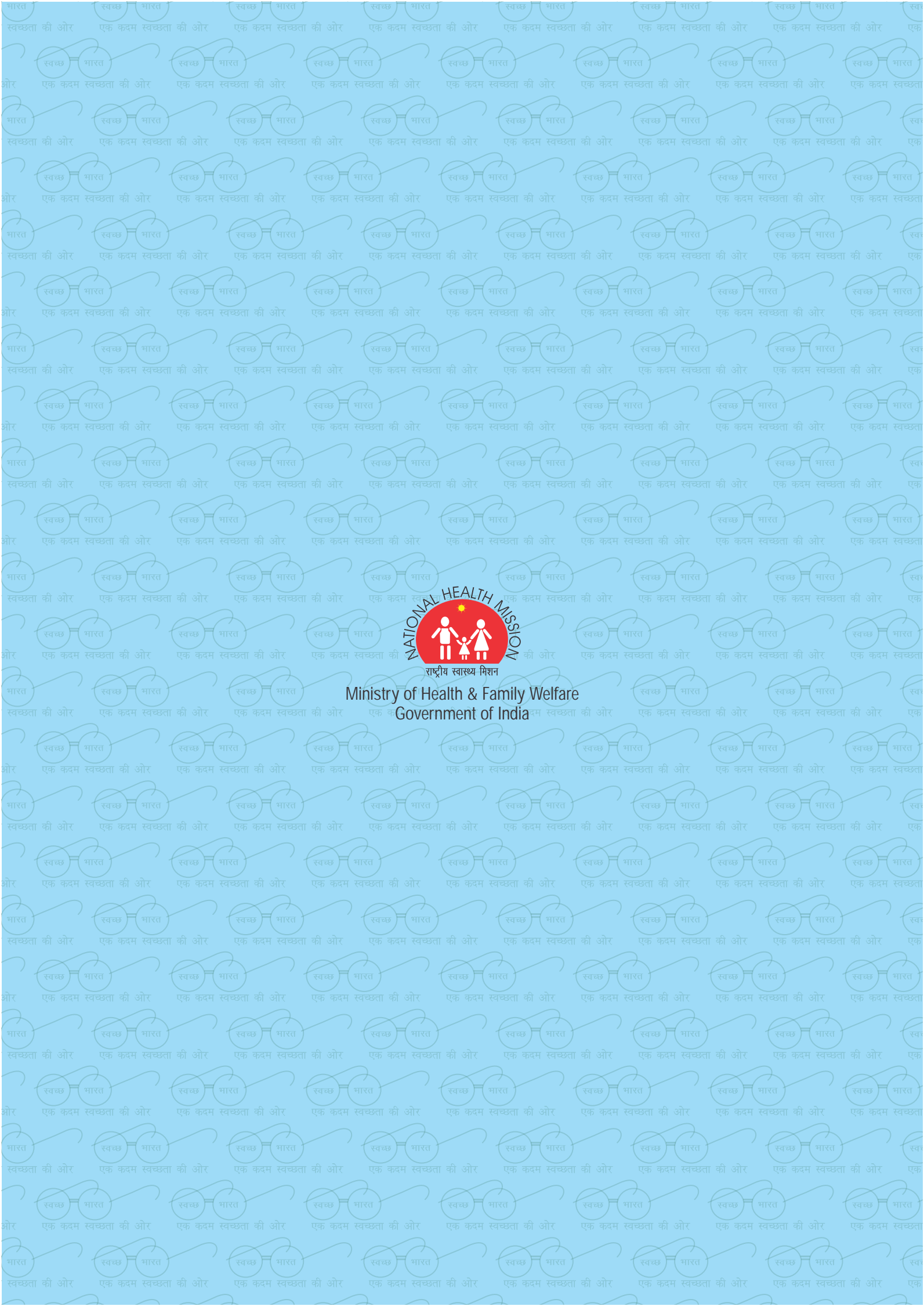
1. Bio-Medical Waste (Management and Handling) Rules, 1998
2. Bio-Medical Waste Management for Basic Health Care System In Rural West Bengal April 2007
3. <http://www.unep.org/ietc/Portals/136/SWM-Vol1-Part1-Chapters5.pdf>
4. Infection control policy of Vardhaman Mahavir Medical College & Safdarjung Hospital New Delhi
5. Infection Management and Environment Plan - Framework and Guidelines, MoHFW, New Delhi
6. Karnataka State Waste Management <http://parisara.kar.nic.in/pdf/wastemgmt.pdf>
7. Park's Textbook of Preventive and Social Medicine 2011 Edn.
8. Rajasthan Health Systems Development Project
9. Solid Waste Management by Prakriti, Centre for Management Studies, Dibrugarh University
10. WHO : Practical guidelines for Infection Control
11. WHO Handbook on Hand Hygiene in Health care 2009
12. WHO : http://www.who.int/water_sanitation_health/medicalwaste
13. WHO : who.int/publications/2009/9789241597906_eng.pdf
14. WHO : http://www.who.int/water_sanitation_health/hygiene/emergencies/fs2_19.pdf



LIST OF CONTRIBUTORS

1.	Mr C. K. Mishra	AS & MD (NHM), MoHFW
2.	Mr. Manoj Jhalani	JS (Policy) MoHFW
3.	Dr Sanjiv Kumar	ED NHSRC
4.	Ms. Limatula Yaden	Director NHM MoHFW
5.	Dr Rajani Ved	Advisor – CP NHSRC
6.	Dr J N Srivastava	Advisor – QI NHSRC
7.	Dr Parminder Gautam	Sr. Consultant NHSRC
8.	Dr Nikhil Prakash	Sr Consultant NHSRC
9.	Mr Padam Khanna	Sr Consultant NHSRC
10.	Dr Deepika Sharma	Consultant NHSRC
11.	Ms. Arpana Kullu	Consultant NHM MoHFW
12.	Mr Rajesh Nallamothu	Consultant NHSRC
13.	Ms Vinny Arora	Consultant NHSRC
14.	Dr Arun K Datta	Short-term Consultant





राष्ट्रीय स्वास्थ्य मिशन

Ministry of Health & Family Welfare
Government of India