

## Steps involved in Bio-medical Waste Management

First five steps (Segregation, Collection, pre-treatment, Intramural Transportation and Storage) is the exclusive responsibility of Health Care Facility. While Treatment and Disposal is primarily responsibility of CBWTF operator except for lab and highly infectious waste, which is required to be pre-treated by the HCF. Following are the responsibility of HCF for management and handling of bio-medical waste:

1. Biomedical Waste should be segregated at the point of generation by the person who is generating the waste in designated colour coded bin/ container
2. Biomedical Waste & General Waste shall not be mixed. Biomedical Waste & General Waste shall not be mixed. Storage time of waste should be as less as possible so that waste storage, transportation and disposal is done within 48 hours.
3. Phase out use of chlorinated plastic bags (excluding blood bags) and gloves by 27/3/2019.
4. No secondary handling or pilferage of waste shall be done at healthcare facility. If CBWTF facility is available at a distance of 75 km from the HCF, bio-medical waste should be treated and disposed only through such CBWTF operator.
5. Only Laboratory and Highly infectious waste shall be pre-treated onsite before sending for final treatment or disposal through a CBWTF Operator.
6. Provide bar-code labels on all colour coded bags or containers containing segregated bio-medical waste before such waste goes for final disposal through a CBWTF.

The management of bio-medical waste can overall be summarized in the following steps;

- Waste Segregation in color coded and barcode labeled bags/ containers at source of generation
- Pre-treat Laboratory and Highly infectious waste
- Intra-mural transportation of segregated waste to central storage area
- Temporary storage of biomedical waste in central storage area
- Treatment and Disposal of biomedical waste through CBWTF or Captive facility

## **Bio Medical Waste Segregation**



Bio- medical waste generated from a healthcare facility is required to be segregated at the point of generation as per the colour coding stipulated under Schedule-I of BMW Rules, 2016.

Following activities to be followed to ensure proper waste segregation:

- Waste must be segregated at the point of generation of source and not in later stages. As defined earlier too, “Point of Generation” means the location where wastes initially generate, accumulate and is under the control of doctor / nursing staff etc. who is providing treatment to the patient and in the process generating bio-medical waste.
- Posters / placards for bio-medical waste segregation should be provided in all the wards as well as in waste storage area.
- Adequate number of colour coded bins / containers and bags should be available at the point of generation of bio-medical waste.
- Colour coded plastic bags should be in line with the Plastic Waste Management Rules, 2016. Specifications for plastic bags and containers given at Annexure 1.
- Provide Personnel Protective Equipment to the bio-medical waste handling staff.

## Color Coding and Type of Container/ Bags to be used for Waste Segregation & Collection

As per Schedule I of the Bio Medical Waste Management Rules, 2016 following colour coding and type of container/bags is needed to be used by the HCFs for segregation and collection of generated Bio Medical Waste from the facility.

S. No.	Category	Type of waste	Colour & Type of Container
1.	Yellow Category	<ul style="list-style-type: none"> <li>- Human Anatomical Waste</li> <li>- Animal Anatomical Waste</li> <li>- Soiled Waste</li> <li>- Discarded or Expired Medicine</li> <li>- Microbiology, Biotechnology and other clinical laboratory waste</li> <li>- Chemical Waste (yellow-e)</li> <li>- Chemical Liquid Waste</li> </ul>	<p>Yellow coloured non-chlorinated Plastic Bags</p>  <p>Note: (i) Chemical waste (yellow-e) comprising of un-used, residual or date expired liquid chemicals including spent hypo of X-Ray, should be stored in yellow container</p>
2.	Red Category	Contaminated Waste (Recyclable)	<p>Red Coloured Non Chlorinated Plastic Bags (having thickness equal to more than 50 <math>\mu</math>) and Containers</p> 

3.	White Category	Waste Sharps including metals	<p>White Coloured translucent, puncture proof, leak proof, Temper Proof containers</p> 
4.	Blue Category	<ul style="list-style-type: none"> <li>Glassware</li> <li>Metallic Implants</li> </ul> <p>Body</p>	<p>Puncture proof, leak proof boxes or containers with blue coloured marking</p>  <p>Cardboard Box with Blue marking</p> 