

## Biomedical waste management

- It is in the form of disposable syringes, swabs, bandages, body fluids, human excreta etc.
- Chemicals from hospitals include formaldehyde and phenols, which are used as disinfectants and mercury which is used in thermometers, are fatal to humans by direct exposure.
- These are highly infectious and can be a serious threat if not managed in a scientific and discriminate manner.
- Surveys show that health care in India is not giving much attention to their waste management.

Total waste generated in this category is 484 tonnes per day, out of this, 447 tonnes per day are treated. The amount of waste generated in India is approximately 1-2 kg per bed per day in a hospital and 600 gm per bed per day in a clinic. 85% of this waste is non-hazardous and 15% is infectious and hazardous. Now one can imagine the need for the management and segregation because the mixing of both types will make entire waste hazardous.

### Biomedical waste management rules, 2016

1. Rules have been extended to vaccination camps, surgical camps, blood donation camps and other health care facilities.
2. Phase-out the use of chlorinated plastic bags, gloves and blood bags within 2 years.
3. Laboratory waste, microbiological waste, blood samples should be pre-treated by disinfecting it on-site as prescribed by WHO or NACO. Also, provide training to all health workers regularly.
4. Establish a bar-code system for bags and containers having biomedical waste and report major accidents.
5. Segregation of biomedical waste into 4 categories (earlier was 10) to improve segregation at source. Incinerators should achieve stringent standards according to the new rules to reduce the emission of pollutants. New rules have also included the emission limit for dioxin and furans (by-product during the incineration process).
6. No occupier shall establish an on-site treatment facility if a common bio-medical service is applicable at a distance of 75 km. Also, operator of common biomedical service should be hired to ensure timely collection of waste from health care centres and to provide training also.
7. State government to provide land for setting up common bio-medical waste treatment and disposal facility.

**Waste management is necessary and important for the environment. If not handled properly, it makes hazardous problems for both men and animals. Many rules and regulations are set up by the central government, but the matter is how effectively executive is working towards it.**