

Waste Management

Waste management is a management process of disposing the waste generated from the activities of the designated organization.

Waste management entails the highest understanding of the environmental protocols, in terms of disposal of waste.

The environmental auditing and confirmation of the processes of waste management would entail:

- Setting up of specifications of waste management systems.
- Responsibilities in managing waste
- Specified regulation of transportation of waste
- Specified regulation of packaging of waste
- Processes of setting up of segregated waste collection.

Collection and handling of Medical waste:

- ◆ All the staff handling the medical waste should be trained in the following:
 - Understand the necessity and importance of handling medical waste specially sharps and body fluids
 - Wear heavy duty gloves while handling wastes
 - Check the bags are securely sealed.
 - Trained in accidental spillage.
- ◆ Protective Outfits should be used like head gears, masks, aprons, Gloves and safety boots.
- ◆ The staff handling the medical waste should have a full immunization course particularly with respect to anti tetanus, Hepa-B, Serum and feces carried disease immunization.
- ◆ Medical waste should be transported in closed containers.
- ◆ The transporter and generator should follow the following color codes:
 - Red- Radiotherapy Waste
 - Purple-Cytotoxic waste
 - Light Blue –waste for Autoclaving
 - Yellow-All other medical waste

- ◆ The containers used for medical waste would be 240 liters each for the small generators upto 1.5m³ with dimensions not exceeding more then 1.2L x 0.725W x 1.6H for bigger generators.

Case Study: 01

Hospital of 220 in- patient bed having the following specialty:

- ◆ Ambulatory Lab / Radiology Services
- ◆ Chemotherapy
- ◆ Contact Lens Clinic
- ◆ Cosmetic Surgery
- ◆ Derma Center and Laser Treatment
- ◆ Diabetic Clinic
- ◆ ESWL (Extra Corporeal Shock Wave Lithotripsy)
- ◆ Heart Rescue
- ◆ Holiday Dialysis
- ◆ Home Call Consultation (Specialist and GP)
- ◆ Interventional Cardiology
- ◆ Laparoscopic Surgery
- ◆ Laser Treatment for eyes
- ◆ Mammography
- ◆ MRI / LT Scan
- ◆ Online Registrations and Appointments
- ◆ Sleep Lab
- ◆ Suite Rooms
- ◆ Urgent Care Centre

Waste Collection Schedule:

- ◆ General Waste Collection -6 days in a week
 - 02 nos 5m³ skip @62AED per skip
- Medical Waste Collection-6 Days in a week
 - 04 nos 240litres Bin -6 days a week

Collection charges Lump sum being charged by the agency to the hospital is - 5000 AED per month.

Municipality treatment Charges are separately paid by the hospital to the agency @ of:

02 AED per skip for general waste

4.75 AED per KG for medical waste.



Medical waste **generation 7500 Kg** approx per month keeping into 80% occupancy of the inpatient facility.

Case Study: 02

Hospital of 10 In-patient beds having the following specialty:

- ◆ Clinical genetics Counseling
- ◆ Fetal and reproductive health
- ◆ Parental diagnostic
- ◆ ENT
- ◆ Family Medicine
- ◆ Medical imaging
- ◆ Special needs and rehabilitation centre
- ◆ Labs
- ◆ Clinical labs
- ◆ Genetics and DNA Diagnostic

Waste Collection Schedule:

- ◆ General Waste Collection -02 days in a week
 - 01 nos 5m3 skip @62AED per skip
- Medical Waste Collection-02 Days in a week
 - 002 nos 240litres Bin -02 days a week

Collection charges Lump sum being charged by the agency to the hospital is - 1350 AED per month.

Municipality treatment Charges are separately paid by the hospital to the agency @ of:

02 AED per skip for general waste

4.75 AED per KG for medical waste.

Medical waste generation **125 Kg** approx per month keeping into 50% occupancy of the inpatient facility.

Case Study: 03

Hospital of 30 In-patient beds having the following specialty:

- ◆ Critical Care Unit
- ◆ Internal Medicine
- ◆ Nursery
- ◆ Obstetrics & gynecology
- ◆ Pediatrics
- ◆ Surgery
- ◆ Labor / Delivery Theatre
- ◆ Operation Theatre
- ◆ IVF Unit

Waste Collection Schedule:

- ◆ General Waste Collection -02 days in a week
 - 01 nos 5m3 skip @62AED per skip
- Medical Waste Collection-02 Days in a week
 - 002 nos 240litres Bin -02 days a week

Municipality treatment Charges are separately paid by the hospital to the agency @ of:

02 AED per skip for general waste

4.75 AED per KG for medical waste.

Medical waste generation **625 Kg** approx per month keeping into 50% occupancy of the inpatient facility.

Case Study: 04

Hospital of 75 In-patient beds having the following specialty:

- General medical practice
- Cardiology
- Ophthalmology
- Surgery
- Urology/Endocrinology/ gastroenterology/Plastic surgery
- Radiology and Orthopedics
- 01 operation theater

Waste Collection Schedule:

- ◆ General Waste Collection -02 days in a week
 - 01 nos 5m3 skip @62AED per skip
- Medical Waste Collection-04 Days in a week
 - 002 nos 240litres Bin -4 days a week

Municipality treatment Charges are separately paid by the hospital to the agency @ of:

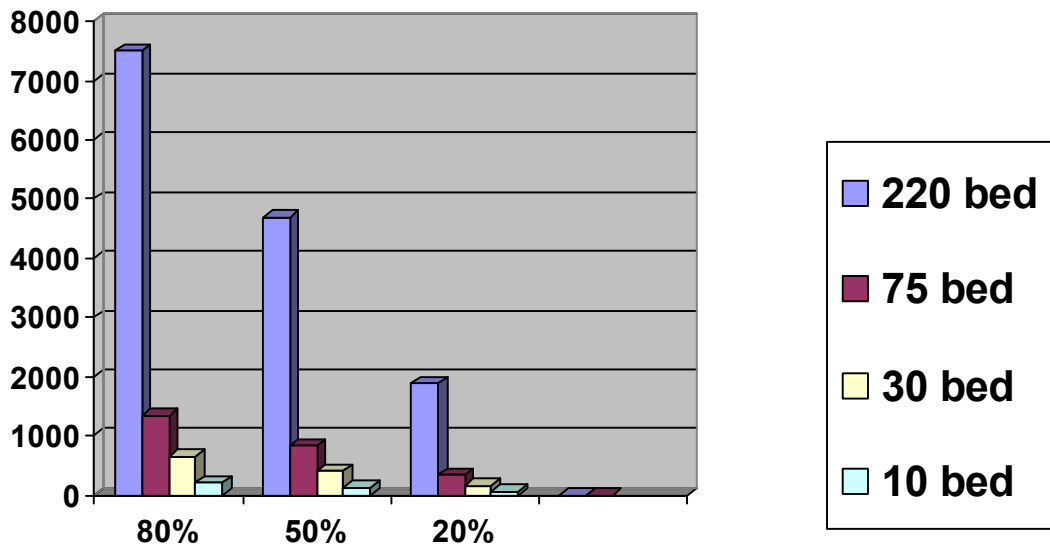
02 AED per skip for general waste

4.75 AED per KG for medical waste.

Medical waste generation **625 Kg** approx per month keeping into 50% occupancy of the inpatient facility.

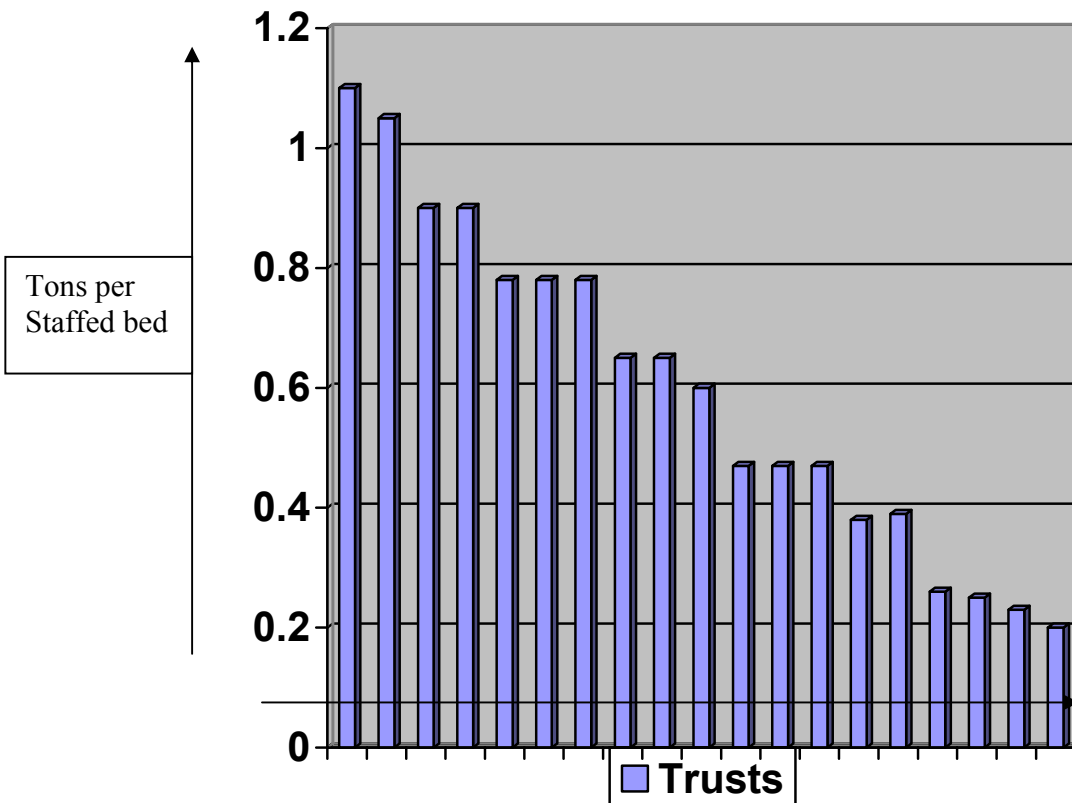
UAE HOSPITAL FIGURES

OCCUPANCY PERCENTAGE VS MEDICAL WASTE GENERATION IN KGS PER MONTH



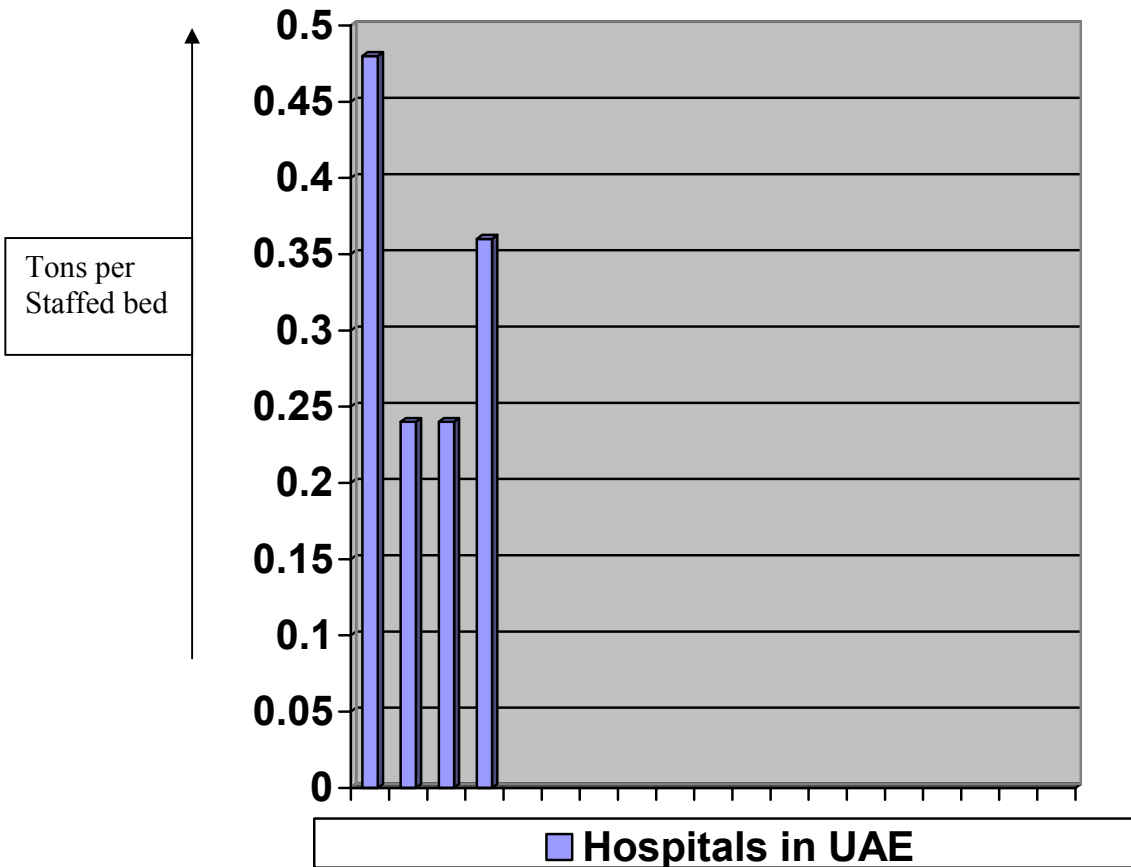
	80%	50%	20%
220 bed	7500	4688	1875
75 bed	1335	833	333
30 bed	650	405	162
10 bed	200	125	50

GLOBAL STANDARDS AND BENCHMARKING



The Above exhibit is data of the clinical waste generated of various trusts in the year 1998/99. This clearly proves that acute hospitals generate more clinical waste (on an average) than non acute hospital.

ANALYSIS OF THE UAE HOSPITAL FOR CLINICAL WASTE GENERATION



The above exhibits details the clinical waste generation where in we clearly see that the specialty hospitals the first and the fourth bar has higher clinical waste generation irrespective of the overall size of the hospital.