

Definitions

Health-care waste

Total waste stream from HCW generators
(major and scattered sources)

Hazardous health-care waste

75 - 90% of general waste (similar to domestic waste)
10 - 25% is hazardous (infectious, toxic etc.)



Health-care activities

Health-care activities (for humans) generating waste include:

- Diagnosis
- Treatment
- Prevention of diseases
- Alleviation of disablement
- Associated research



Hazardous health-care waste

- Infectious
- Pathological
- Sharps
- Pharmaceutical
- Genotoxic
- Chemical
- Heavy metals
- Pressurized containers
- Radioactive



Major sources of health-care waste

- Hospitals
- Clinics
- Laboratories
- Research centres
- Animal Research
- Bloodbanks
- Nursing Homes
- Mortuaries
- Autopsy centres



Minor sources of health-care waste

- Physician's office
- Dental clinics
- Home health-care
- Nursing homes
- Acupuncturists
- Psychiatric clinics
- Cosmetic piercing and tattooing
- Funeral services
- Paramedic services
- Institutions for disabled persons



HCW Generation by Region

Region	kg/bed/day
• North America	7 - 10
• Latin America	3
• Western Europe	3 - 6
• Eastern Europe	1.4 - 2
• Middle East	1.3 - 3
• East Asia High Income	2.5 - 4
• East Asia Middle Income	1.8 - 2.2



What is Risk ?

the probability that the hazard
of a substance will cause harm
and the severity of that harm



Hazardous properties of HCW

Hazardous HCW may have the following properties:

- contains infectious agents
- genotoxic
- contains hazardous chemicals or pharmaceuticals
- radioactive
- contains sharps



Hazardous properties of chemicals

- Toxic
- Corrosive
- Flammable
- Reactive
- Explosive
- Shock sensitive
- Genotoxic



Who is at Risk ?

- Doctors and nurses
- Patients
- Hospital support staff
- Waste collection and disposal staff
- General public



Public health risks of hazardous HCW

Potential health effects:

- AIDS
- Hepatitis B and C
- Gastroenteric infections
- Respiratory infections
- Blood stream infections
- Skin infections
- Effects of radioactive substances
- Intoxication



Public sensitivity

Public sensitivity

- about incidents involving HCW
- about visual impact of HCW

Cultural practices should be taken into account in HCW management.

