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

<table>
<thead>
<tr>
<th>Region</th>
<th>kg/bed/day</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>7 - 10</td>
</tr>
<tr>
<td>Latin America</td>
<td>3</td>
</tr>
<tr>
<td>Western Europe</td>
<td>3 - 6</td>
</tr>
<tr>
<td>Eastern Europe</td>
<td>1.4 - 2</td>
</tr>
<tr>
<td>Middle East</td>
<td>1.3 - 3</td>
</tr>
<tr>
<td>East Asia High Income</td>
<td>2.5 - 4</td>
</tr>
<tr>
<td>East Asia Middle Income</td>
<td>1.8 - 2.2</td>
</tr>
</tbody>
</table>
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

- about incidents involving HCW
- about visual impact of HCW

Cultural practices should be taken into account in HCW management.