

Training on Medical Waste Management

in Collaboration with
Al-Essa Medical & Scientific Equipment Co. W.L.L

Global Perspectives on Medical Waste Management



**Kuwait University
Health Science Center
29 January – 1 February, 2012**

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Presentation Outline

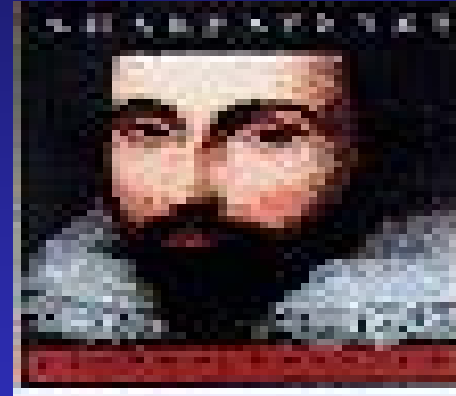
1. Global Perspective
2. Environmental Health and Safety Issues
3. Risk Assessment
4. Definitions of Medical Waste - WHO
5. Management of Waste in the Facility
6. Decontamination
7. Transport, Treatment / Disposal of Medical Waste
8. Practicing Safe Science video

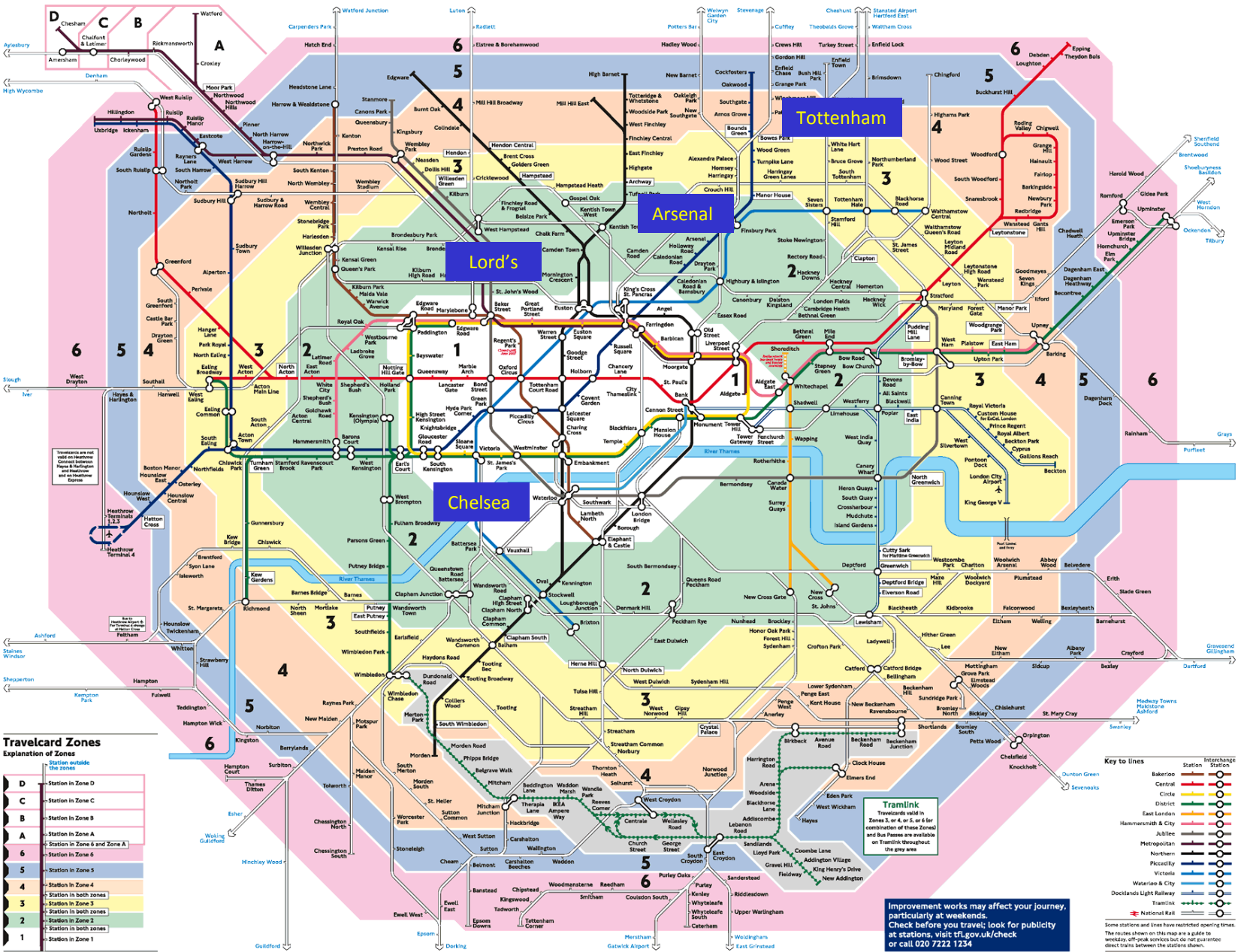
Quiz!!!!!!

**Waste Management
is a Process
Not a Technology.**

What's in a Name / Definition??

- Biohazardous Waste
- Biomedical Waste
- Clinical Waste
- Healthcare Waste
- Hospital Waste
- Infectious Waste
- Medical Waste
- Regulated Medical Waste





Travelcard Zones

Explanation of Zones

D	Station outside the zones
C	Station in Zone C
B	Station in Zone B
A	Station in Zone A
6	Station in Zone 6 and Zone A
5	Station in Zone 5
4	Station in Zone 4
3	Station in Zone 3
2	Station in Zone 2
1	Station in Zone 1

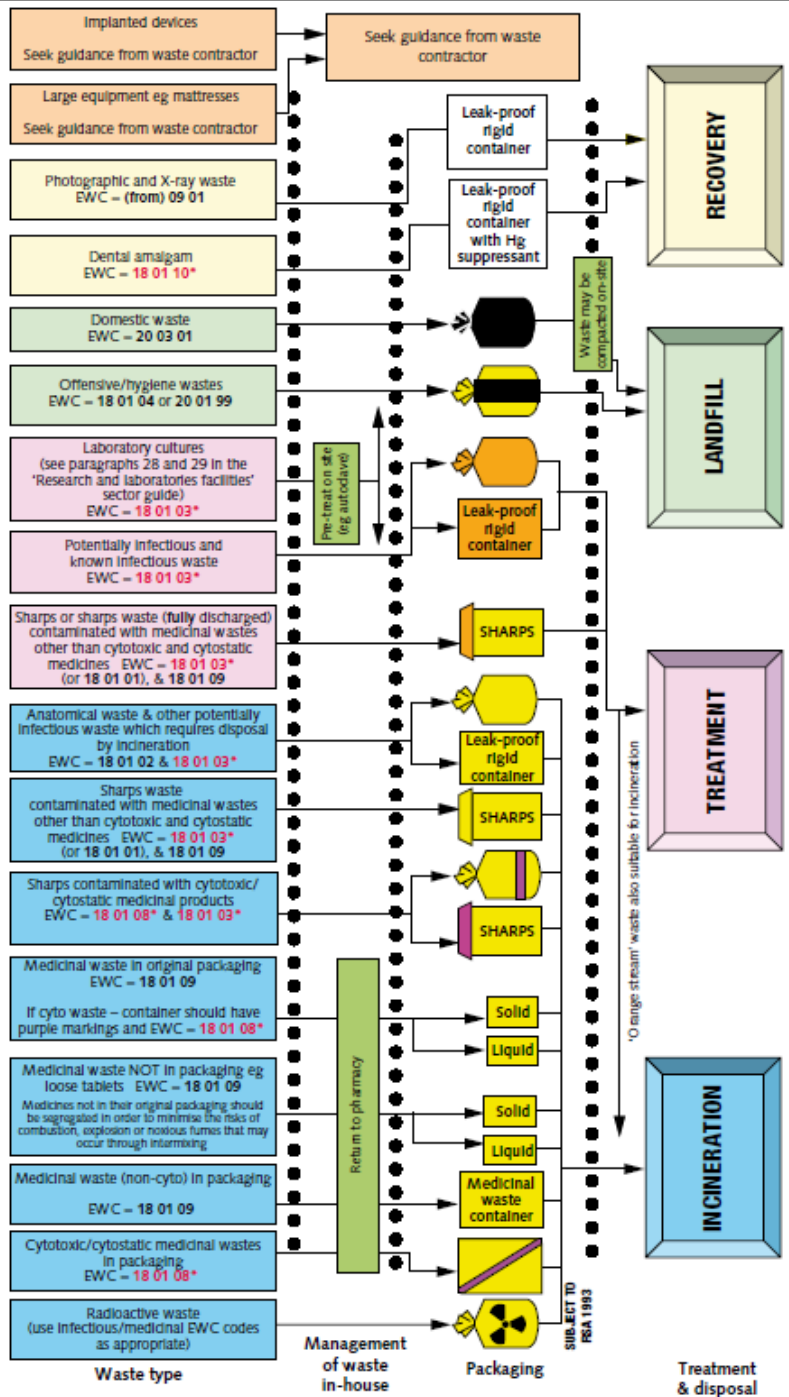
Key to lines

- Interchange Station
- Bakerloo
- Central
- Circle
- District
- East London
- Hammersmith & City
- Jubilee
- Metropolitan
- Northern
- Piccadilly
- Victoria
- Waterloo & City
- Docklands Light Railway
- Tramlink
- National Rail

Some stations and lines have restricted opening times. The routes shown on this map are a guide to weekly off-peak services but do not guarantee direct trains between the stations shown.

Improvement works may affect your journey, particularly at weekends.
Check before you travel; look for publicity at stations, visit tfl.gov.uk/check or call 020 7222 1234

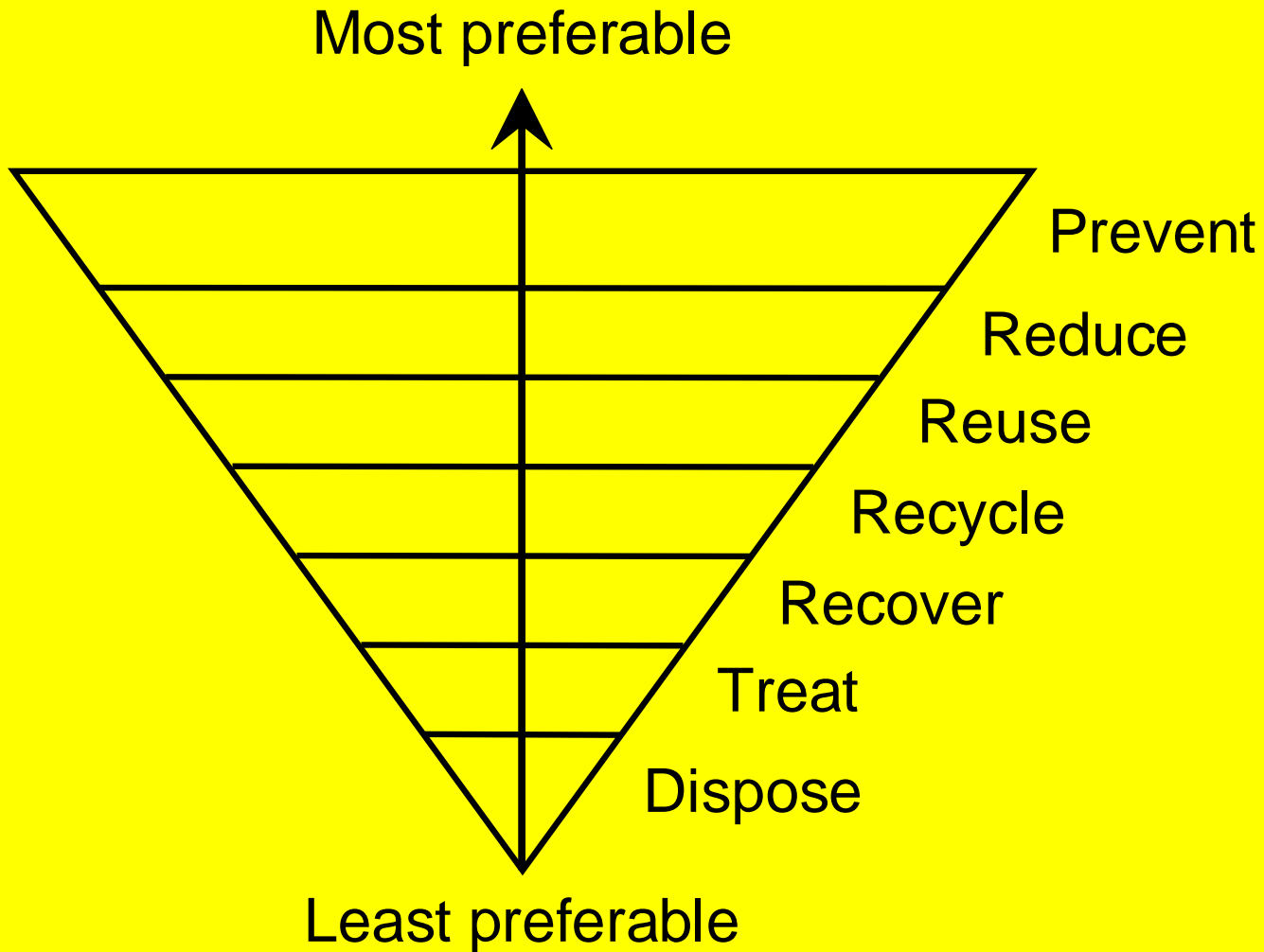




HTM 07-01 NHS UK

Is this what it really looks like???

Waste Management Hierarchy



Typical Laboratory Hazardous Wastes

Which are hazardous?



Global Perspective – Actual Practices

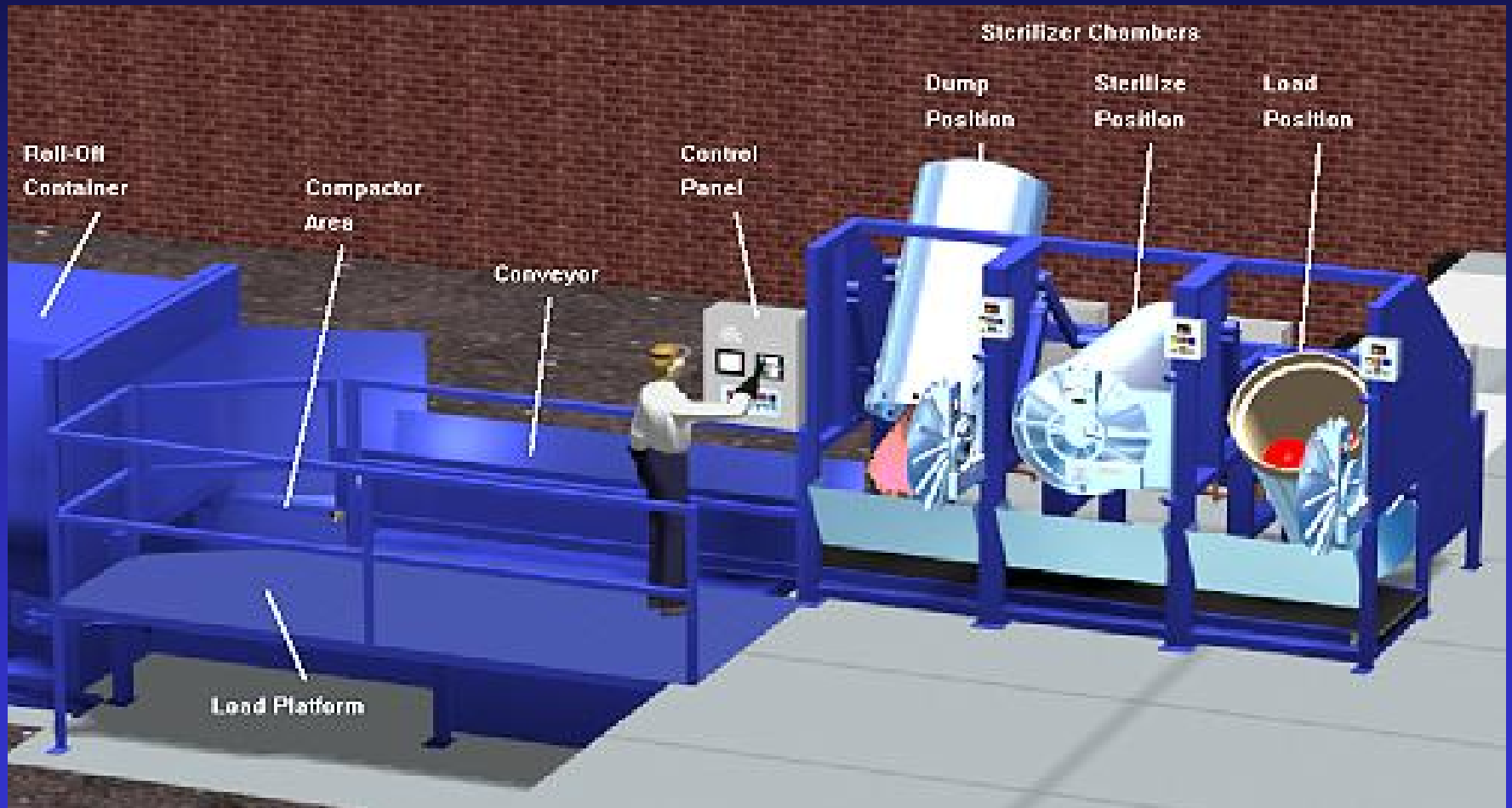


Different Cultures but common themes to Waste Management

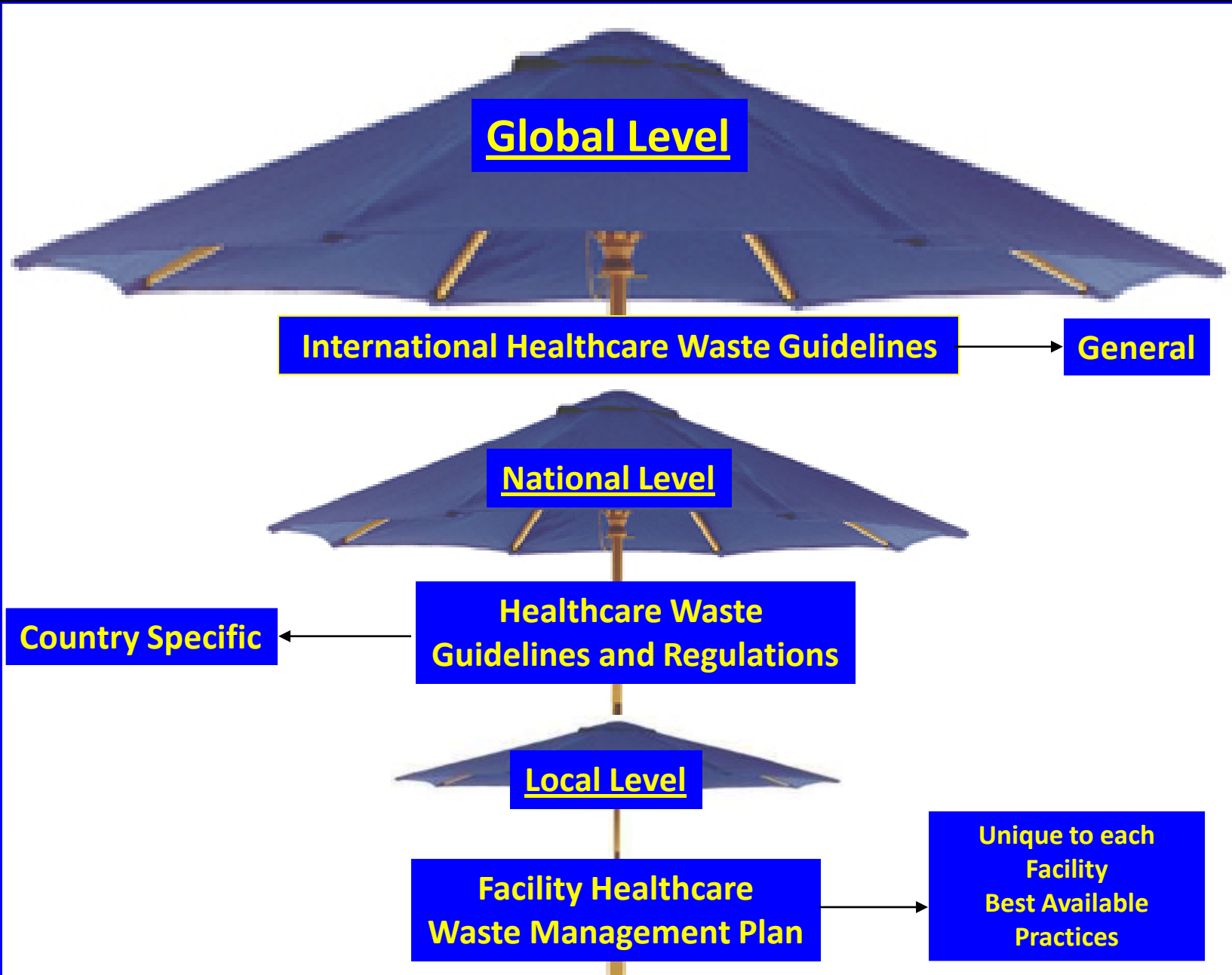


San-i-Pak™

WORLD HEALTH SYSTEMS



Applicability of information on Healthcare Waste Management



World Health Organization

Introduction to Legislation

International Agreements and Principles

- **Basel Convention**
- **Polluter Pays Principle**
- **Precautionary Principle**
- **Duty of Care Principle**
- **Proximity Principle**

Basel Convention, 1989

- **Coordinated by the United Nations Environment Programme (UNEP)**
- **Signed by more than 100 Nations (Parties)**
- **Controls transboundary movements of hazardous waste**

Polluter Pays

All waste producers are legally and financially responsible for:

- **safe handling**
- **environmentally sound disposal**
- **creating an incentive to produce less**

Precautionary Principle

Where risk is uncertain or unknown:

- **Assume risk is significant**
- **Plan protection measures accordingly**

“Duty of Care” for Wastes

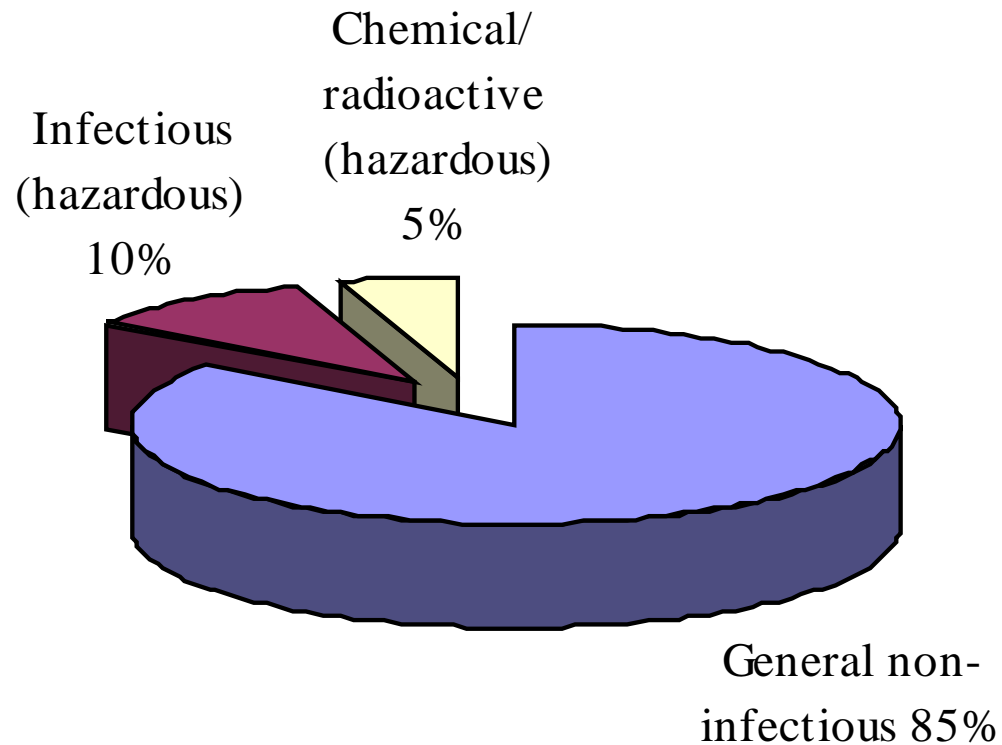
The “duty of care” principle stipulates that any person handling or managing hazardous substances or related equipment is ethically responsible for applying the utmost care.

Proximity Principle

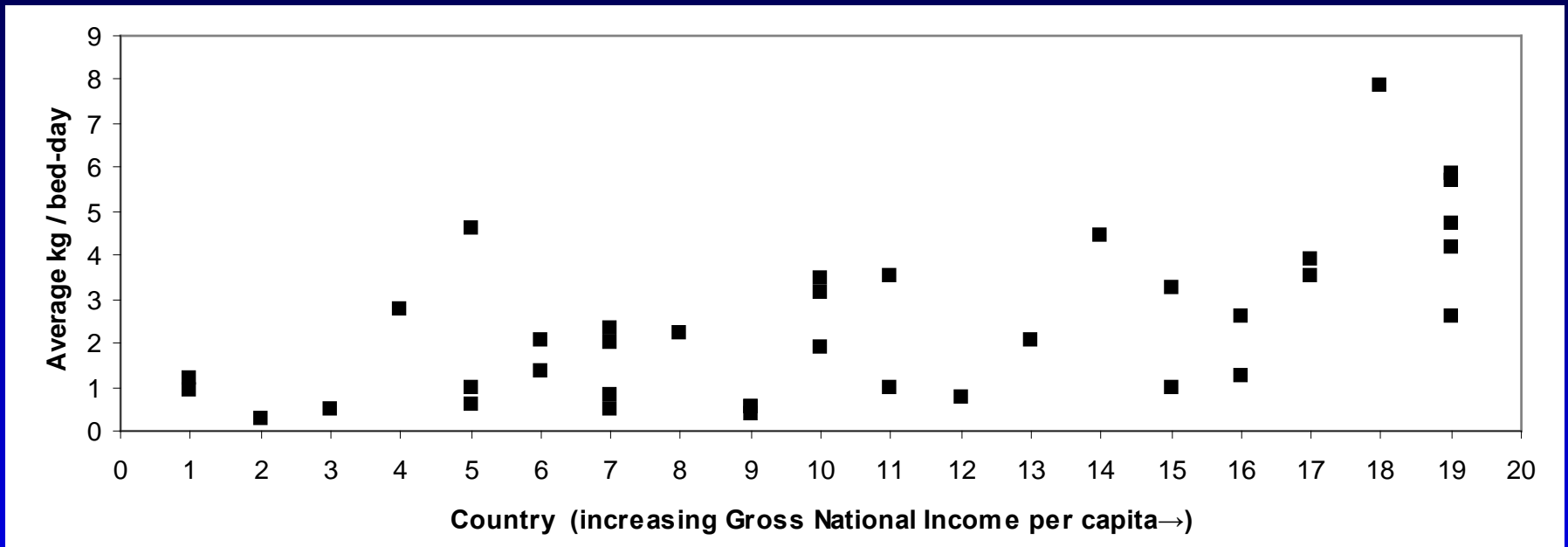
Treatment and disposal of waste takes place as near as possible to the point of production as is technically and environmentally possible

Typical Waste breakdown in Healthcare Facilities

Source: Technical Guidelines on the Environmentally Sound Management of Biomedical and Healthcare Wastes (Y1; Y3), Secretariat of the Basel Convention, 2003



Total Healthcare Waste generation in Hospitals (in kg/bed-day)



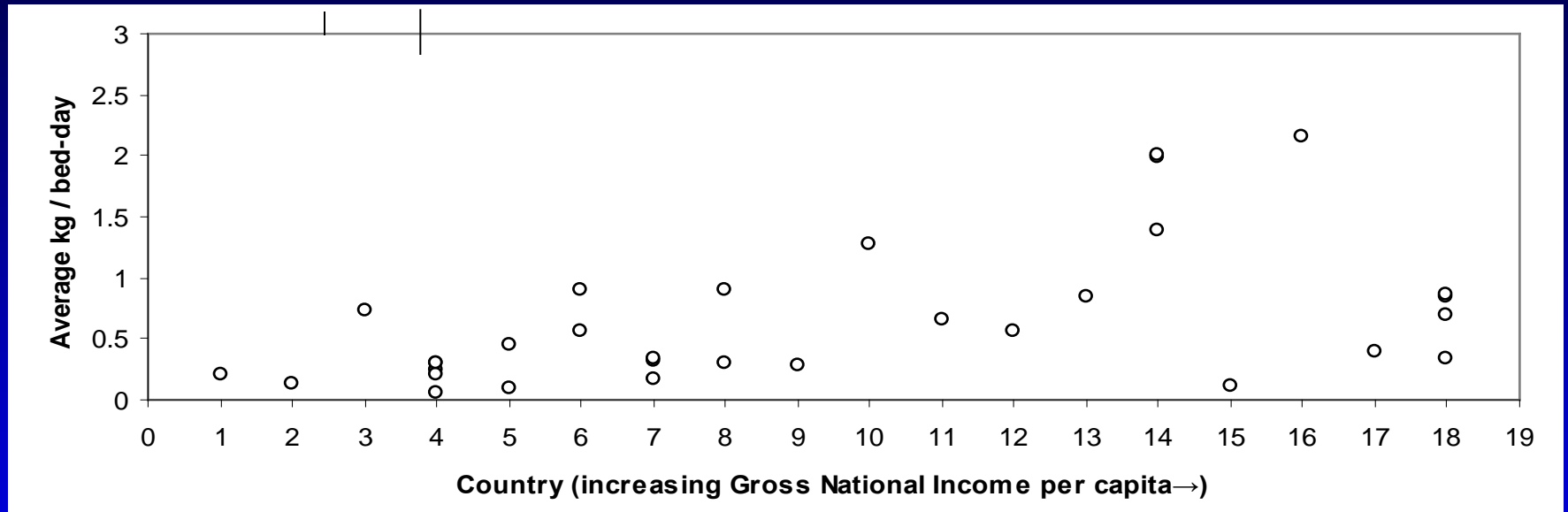
Points represent reported averages; vertical lines are reported ranges of data.

Low-income Countries: 1-Bangladesh (includes clinics), 2-Cambodia, 3-Lao PDR, 4-Nigeria, 5-Vietnam, 6-Pakistan, 7-India;

Middle-income Countries: 8-Guyana, 9-Philippines, 10-Jordan, 11-Columbia, 12-Peru, 13-Thailand, 14-Iran, 15-Brazil (includes health centers and labs), 16-Turkey;

High-income Countries: 17-Portugal, 18-Kuwait, 19-United States

Infectious Waste generation in Hospitals (in kg/bed-day)



Points represent reported averages; vertical lines are reported ranges of data. Low-income Countries: 1-Bangladesh (includes clinics), 2-Cambodia, 3-Nigeria (poor segregation), 4-Vietnam, 5-India;

Middle-income countries: 6-Guyana, 7-Philippines, 8-Columbia, 9-Thailand, 10-Iran (poor segregation), 11-Bulgaria, 12-Brazil (includes health centers and labs-poor segregation);

High-income Countries: 13-Taiwan (China), 14-Portugal, 15-Hong Kong (China), 16-Kuwait (poor segregation), 17-Italy, 18-United States