WASTE MANAGEMENT IN PUBLIC HOSPITALS
HEALTH CARE WASTE CATEGORIES

• HEALTH CARE GENERAL WASTE:
Waste that does not pose an immediate hazard or threat to human health or to the environment and poses no additional risk of injury or infection to staff, patients, visitors or the community at large.

• HEALTH CARE RISK WASTE (HCRW):
Waste capable of producing immediate risk or disease to humans and threat or harm to the environment.
HEALTH CARE RISK WASTE CATEGORIES

• Chemical Waste:
• Cytotoxic Waste:
• Genotoxic Waste:
• Infectious Waste:
• Isolation Waste:
• Sharps Waste:
• Laboratory Waste:
• Pathological Waste:
• Pharmaceutical Waste:
• Radioactive Waste:
• Waste with Heavy Metals:
• Micro-organisms, including those that have been genetically modified, pathogens, cells, cell cultures and human endoparasites that have the potential to provoke an infection toxic effects and cause human diseases and present a risk of spreading to the community due to its infection transmission capabilities; i.e.

– Blood, body fluids, secretions, excretions, skin, mucous membrane and tissue.

**Infectious, Sharps & Isolation Waste:**
A subcategory of health care risk waste.
ENVIRONMENTAL MANAGEMENT PRINCIPLES
1. **DUTY OF CARE:**

THE GENERATOR AND HANDLER OF WASTE CARRY THE RESPONSIBILITY OF THE ULTIMATE FATE OF THE WASTE GENERATED.

**GENERATOR /HANDLER RESPONSIBILITY:**

- **DUTY OF CARE TOWARDS SOCIETY.**
- **TO INVESTIGATE, ASSESS AND EVALUATE THE IMPACT OF WASTE GENERATION ACTIVITIES ON THE ENVIRONMENT AND ON HUMAN HEALTH.**
2. **POLLUTER PAYS:**

THE GENERATOR ACCEPTS THE COMPLETE FINANCIAL CULPABILITY FOR THE RESPONSIBLE HANDLING, STORAGE, TRANSPORTATION, TREATMENT AND FINAL DISPOSAL OF WASTE GENERATED.
IT MUST AT ALL TIMES BE ASSUMED THAT ALL WASTE GENERATED IS INFECTIOUS AND THEREFORE HAZARDOUS:

“UNTIL IT CAN BE PROVEN OTHERWISE.”

THIS WILL SURELY PROTECT HUMAN HEALTH AND THE ENVIRONMENT.
4. PROMIXITY PRINCIPLE:

THE TREATMENT AND THE DISPOSAL OF WASTE SHOULD TAKE PLACE AS NEAR TO THE POINT OF PRODUCTION AS IS TECHNICALLY, ENVIRONMENTALLY AND IN THE PUBLIC HEALTH INTEREST AS POSSIBLE.

(B.P.E.O.)
5. PRIOR INFORMED CONSENT PRINCIPLE

TO PROTECT PUBLIC HEALTH AND THE ENVIRONMENT FROM HAZARDOUS WASTE, AFFECTED COMMUNITIES AND OTHER STAKEHOLDERS MUST BE APPRAISED OF THE HAZARDS AND RISKS AND THEIR CONSENT BE OBTAINED ON ANY ACTIVITIES THERETO.
HCRW MANAGEMENT STEPS.

• WASTE PREVENTION.
• WASTE MINIMIZATION.
• WASTE SEGREGATION.
• WASTE CONTAINERISATION.
• WASTE INTERNAL COLLECTION AND TRANSPORTATION.
• WASTE INTERNAL STORAGE.
• INFECTION PREVENTION AND CONTROL
• OCCUPATIONAL HEALTH AND SAFETY.
• EMERGENCY RESPONSE: PREPAREDNESS.
• WASTE EXTERNAL TRANSPORTATION.
• WASTE EXTERNAL TREATMENT AND DISPOSAL.
• WASTE INFORMATION SYSTEM.
• WASTE TRACK AND TRACE.
• WASTE MANAGEMENT PLANS. (WMP)
• ROLES AND RESPONSIBILITIES.
A UNIFORM COLOUR CODING SYSTEM SHOULD BE BASED ON THE FOLLOWING PRINCIPLES:

- INFECTIOUS: **RED** HEAVY DUTY PLASTIC BAG OF MIN. 80 MICRON THICKNESS. OR-

- RECEPTACLES WITH **RED** MARKING.

- SHARPS: **YELLOW**-TAMPER PROOF, PUNCTURE PROOF AND SPILLPROOF CONTAINERS WITH INDICATOR FOR FILL LEVEL, THAT CAN BE CLOSED SAFELY AND NOT REOPENED ONCE A FULL CONTAINER IS SEALED.

- ANATOMICAL: **RED** SPECIBINS.

- PHARMACEUTICALS: **GREEN**

- HCGW: ANY COLOUR OTHER THAN RED OR YELLOW CAN BE USED. PREFERABLY CLEAR/TRANSPARENT.
IPC AND HANDWASHING

1. Palm to palm
2. Between fingers
3. Back of hands
4. Base of thumbs
5. Back of fingers
6. Fingernails
7. Wrists
8. Rinse and wipe dry

Steps:
1. Rub palms together.
2. Rub the back of both hands.
3. Interlace fingers and rub hands together.
4. Interlock fingers and rub the back of fingers of both hands.
5. Rub fingertips on palms for both hands.
6. Clean under fingernails and use a towel for both hands.
7. Rub both wrists in a circular manner. Rinse and dry thoroughly.
Q.A. AND M&E.
Why Risk Assessment?

• It is the basis for successful safety and health management which is essential for safe waste management practices and is key to preventing and reducing incidents.

• Risk Assessment is a process of evaluating risks to people and the environment to ensure the elimination of hazards.

• Risk Assessment data informs IWMP.
• Identification of sources of exposure;
• Review of related regulatory requirements;
• Sampling the discharge, emission, exposure;
• Consequent impact evaluation;
• Development of action plan to control hazard.
THE KZN HCRWM STRUCTURE.

PROVINCIAL HEALTH CARE WASTE MANAGEMENT COMMITTEE

DISTRICT HEALTH CARE WASTE COMMITTEE

HOSPITAL INFECTION CONTROL COMMITTEE

INSTITUTIONAL WASTE MANAGEMENT OFFICER

DISTRICT HEALTH CARE WASTE COMMITTEE

HOSPITAL INFECTION CONTROL COMMITTEE

INSTITUTIONAL WASTE MANAGEMENT OFFICER
THE WMO LIAISON PATH

- IPC
- PHARMACY
- OHS
- HOSPITAL MANAGER
- MAINTENANCE SECTION
- TRANSPORT
- HEADS OF DEPT OR WARDS.

CLINICS, EMS, FORENSIC, PATHOLOGY, MEDICAL SCHOOL AND ALL HEALTH CARE FACILITIES WHERE HCRW IS GENERATED.
ROLES AND RESPONSIBILITIES

- Waste Management Officer (WMO):
- Infection Prevention & Control (IPC):
- Pharmacy:
- Heads of Departments:
- Nursing Manager:
- The Chief Executive Officer (CEO):
I THANK YOU ALL!