

# Reducing the Environmental Impacts of Medical Equipment

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# Outline

**Goal: Map environmental impacts of medical equipment and KP's approach to tackling the issues.**

- Scale of medical equipment use and application at KP
- Material and chemical content
- Water conservation
- Energy performance
- Discussion by Walt and JD
- Equipment end-of-life management options

# KP's Scale – Measured with Medical Equipment

- 13,000 Large Volume Infusion Pumps
- 2,500 Patient Controlled Analgesia Pumps
- 100+ CT Scans
- 600+ Diagnostic and Scanner Ultrasounds
- 1500+ Ultrasonic Scanners for Obstetrics, Cardio, Opthomology...
- and much, much more...



# Material Ingredients – What are they?

**Carcinogens, Mutagens, Reproductive Toxins**

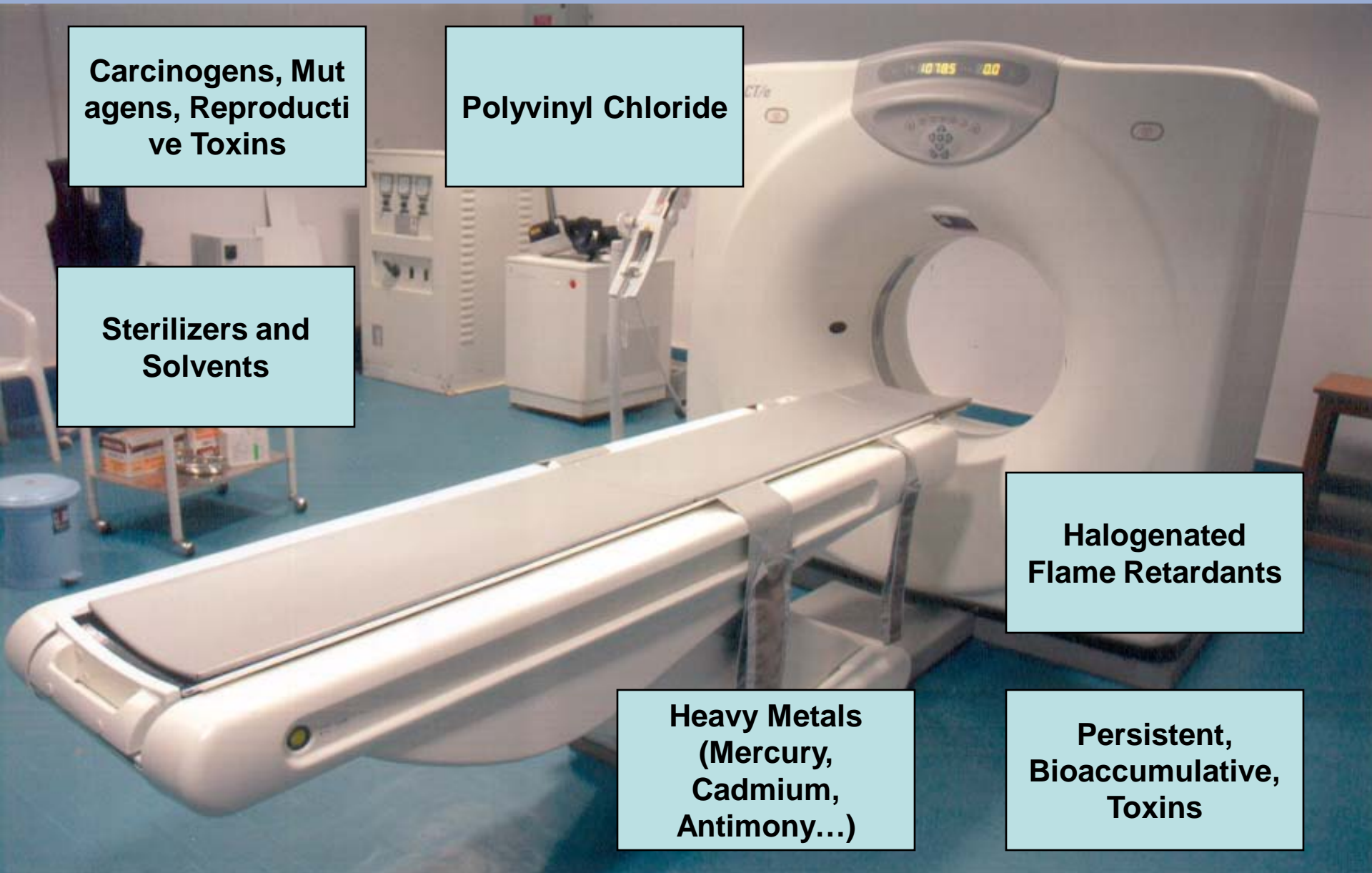
**Polyvinyl Chloride**

**Sterilizers and Solvents**

**Halogenated Flame Retardants**

**Heavy Metals  
(Mercury,  
Cadmium,  
Antimony...)**

**Persistent,  
Bioaccumulative,  
Toxins**



# Water Consumption → Water Conservation



## Equipment Conversion Examples:

- Wet film processing → digital imaging
- Water intensive autoclaves → highly efficient steam sterilizers

# Energy Performance – Beyond Exemptions

Medical equipment, historically exempt from environmental performance targets, is now moving under the microscope



## Catalyst for Change:

- Dept. of Energy, Hospital Energy Alliance -Steering Committee members
- Request for Proposal-level questions about energy performance

# Equipment End-of-life Options



## Donations

- Functioning equipment with all necessary parts
- Non-expired equipment

## Supplier Take-Back

- Contract language requiring take-back and environmentally responsible management

## Recycling

- Responsible and ethical partners
- Cleansing of biohazardous material and proprietary information

# Thank you

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