

# Medical Waste Management:

## In Support of Improving Medical Waste Management Due to Connections Between Environmental and Personal Health

**Introduction:** The leading method of disposing medical waste material is through incineration, but this contributes to the release of air particulate matter and the formation of toxic carcinogens, dioxins, furans, and mercury. These chemicals that are released into the air have adverse effects on the environment and individual's health (World Health Organization).

**Research Question:** How can healthcare institutions like hospitals more effectively improve their ways in managing medical waste to enhance environmental and individual health while maintaining medical standards?

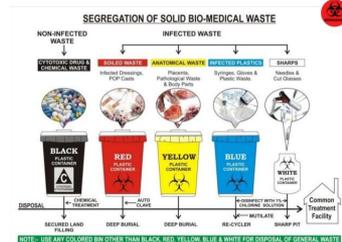
### Thesis Statement/Hypothesis:

- Invest and implement educational programs in healthcare facilities on medical waste management to increase awareness, knowledge, and the skills to safely handle and manage medical waste while providing financial incentives.

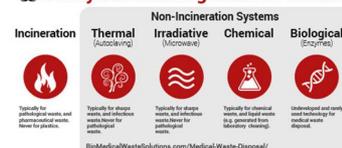
### Conceptual Framework:

- Main Focuses on Three Case Studies:
  - New York - Presbyterian Hospital
  - Sacred Heart Hospital in Eau Claire, Wisconsin
  - Partners for World Health- Elizabeth McLellan, Founder and President
    - Medical Portland-based nonprofit that collects and distributes medical supplies and equipment to developing countries (Partners for World Health).
- Research Problems Encountered:**
  - Finding and narrowing my research topic while pertaining to the main issues in healthcare systems.
  - Communicating the depth of my thesis and style in a clear manner for the audience to understand.
  - Gathering peer-reviewed research articles and case studies to support my claims and hypothesis.

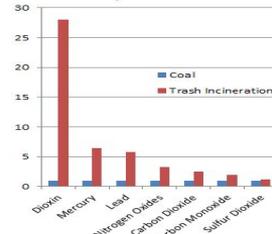
### HOSPITAL WASTE (HEALTH CARE WASTE)



### 5 Ways of Treating Medical Waste



### Number of times more polluting trash incineration is compared to coal



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## Main case studies/data:

- New York - Presbyterian Hospital
  - Leadership in managing the health risks of hospital waste by engaging hospital staff to “minimize and divert waste from landfills” and “Think Before You Throw” Campaign (New York- Presbyterian Hospital).
- Sacred Heart Hospital in Eau Claire, Wisconsin
  - Decreased waste generation by eliminating disposable sharps in specialized hazardous waste stream and by establishing environmental initiatives in the hospital called “Green Team” committee, which was developed to “facilitate the protection of the environment and natural resources in concert with the hospital’s tradition to respect creation and safeguard its people” and their team’s goal is to “assess past progress and current status and set best practice benchmark goals for progress in reducing, reusing and recycling for Sacred Heart Hospital and its campus” (Sacred Heart Hospital).
- Partners for World Health- Elizabeth McLellan’s initiative to Recycle Medical Supplies
  - An organization that collects, sorts and ships entire shipping containers of medical supplies to those who need them most.
  - Hospitals and healthcare facilities discard tons of unused medical supplies and equipment which adds to landfills in the United States each year and can be otherwise used to save lives (Partners for World Health).
    - Surpluses of medical supplies are recycled and redistributed to under-resourced community health centers, clinics, and hospitals in countries where there are medical supply shortages or places affected by devastating events (Partners for World Health)

## Main Conclusions/Results:

- There is an urgent need for raising awareness and education on medical waste management
- Institutional leadership is extremely imperative (Weiss 179).
  - Investing in education for staff and physicians about proper waste management procedures
- Proper waste management strategy is needed to ensure health and environmental safety.
- Effective waste management operations ensures the right materials are going into the right places, which reduces waste, increases recycling efforts, and ultimately minimizes the environmental impact of waste management.
- Proper waste management programs, source-reduction strategies, and recycling efforts could support environmental sustainability and restoration



Elizabeth McLellan's Initiative to Recycle Medical Supplies



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