

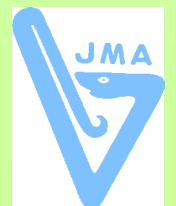


# Asia 3R Conference

Mita Conference Hall  
October 30, 2006

## Doctors' Efforts Toward Appropriate Medical Waste Management

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Japan Medical Association  
<http://www.med.or.jp/>



# About JMA

- Japan Medical Association (JMA)
- Founded in 1916
- National voice of Japanese physicians
- 165,000 members (about 60% of all licensed physicians in Japan)
- Mission
  - to play leadership for citizens
  - to promote the highest standards of medical ethics and education

Why  
should doctors  
take care of  
Medical Wastes?

Medical wastes  
cause diseases,  
and  
Doctors should  
prevent them

# Threats of Medical Waste

- Threats to Health
  - 4 needlestick accidents per 100 beds in a year
  - Infectious rate by needlestick accidents
    - HBV 10 ~ 35%
    - HCV 2 ~ 5%
    - HIV 0.2 ~ 0.5%
- Threats to Environment
  - Cause environmental pollution

# Responsibility of Waste Generators

Responsibility from the beginning (generation) to the end (final disposal)

If waste are illegally disposed by others  
such as contracted waste disposal companies . . . .

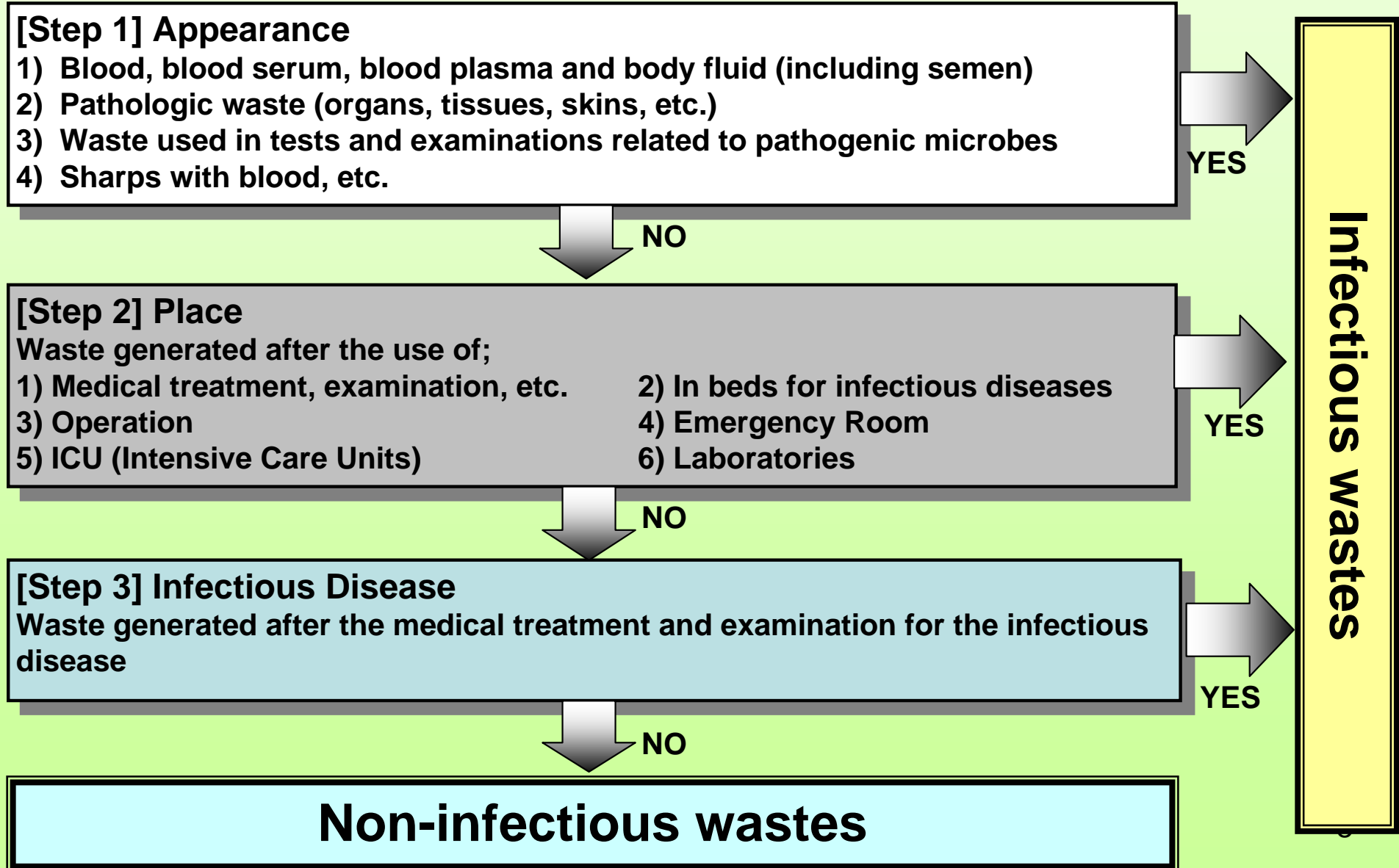
We may still have responsibility to recover  
them.

# Doctors' Activities

- I. Waste management in the hospital
  1. Identification
  2. Segregation
  3. Container
  4. Bio-hazard Mark
  5. Medical Waste Supervisors
- II. Waste management out of the hospital
  6. Slips used for Waste Management
  7. Visiting Waste Treatment Facility



# 1. Identification





## 2. Segregation



**Sharps**



**Plastics  
(compatible)**



**Glass bottles**

# Segregation (Laboratory Wastes)



# 3. Containers

- For Sharps (Needles, surgical knife)
  - Made of metal or plastics
  - Made of anti-penetrate containers
- For Solid
  - Double-Use of plastics bag
- For Liquid and Sledge
  - Made by anti-leak container (Keep out liquid)





# 4. Bio-hazard Mark

Used for containers with special color to distinguish types of wastes easily

- **Red** : for **Liquid or Sludge waste**
- **Orange** : for **Solid waste**
- **Yellow** : for **Sharps waste**



# 5. Medical Waste Supervisor

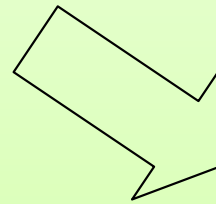
- Each Facility should appoint the supervisor
- Responsibilities include;
  - Managing medical wastes in the facility
  - Improving awareness among staffs
  - Developing “Waste Management Plans”
- Qualification
  - Degrees in medicine, pharmacy, public health, hygiene or veterinary science
  - (Medical Doctors, Dental Doctors, Pharmacists, Veterinarians, Health Nurses, Midwives, Nurses, Clinical/Health Laboratory Technologists and Dental Hygienists)



# II. Waste management out of the hospital



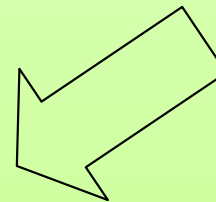
Removal



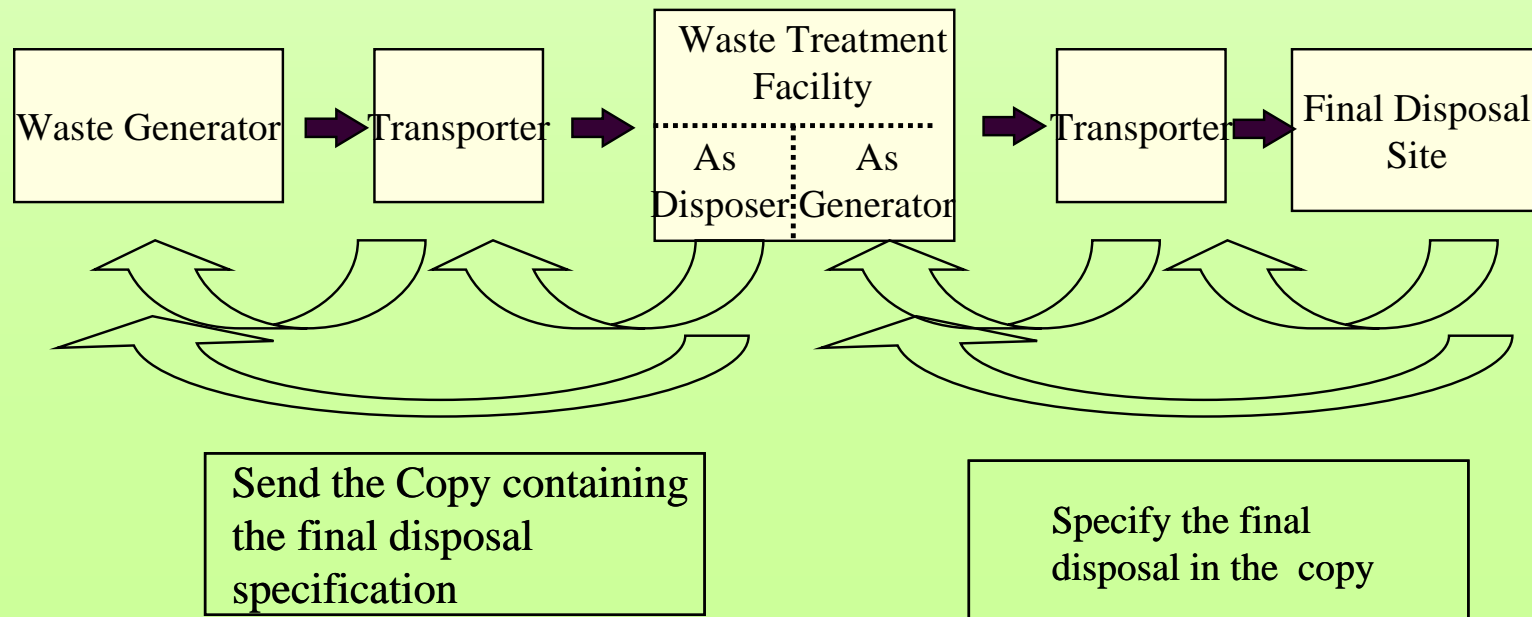
Transportation



Treatment



# 6. Slips for Waste Management





# 7. Visiting Facilities





# JMA's Activities

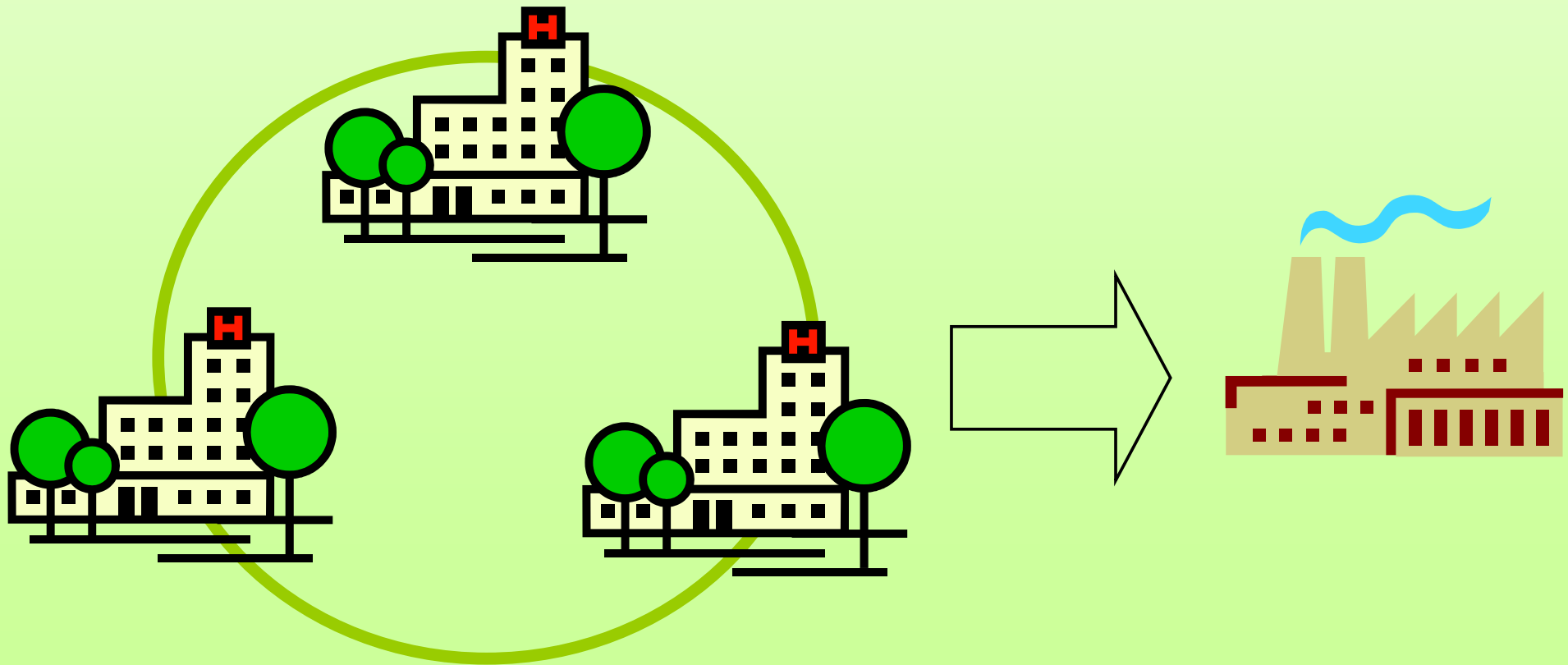
8. Promotion for appropriate treatment  
(ex. seminars)
9. Selection of most appropriate disposal  
company
10. Social Contribution against Illegal Dumping
11. Technology Development such as IC Chips

# 8. Seminars



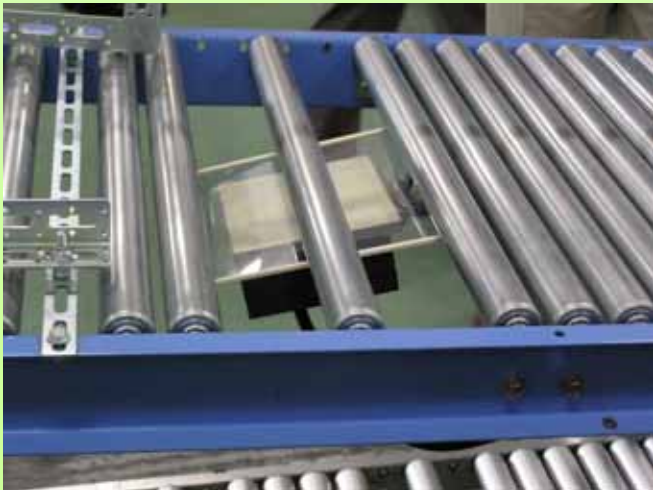
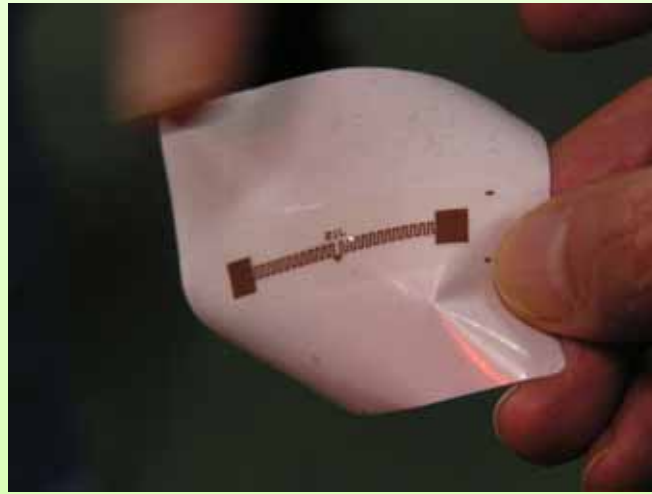
# 9. Coordination between hospitals & waste disposal companies

- Local Medical Associations should play a key role
- Build Networks for small clinics





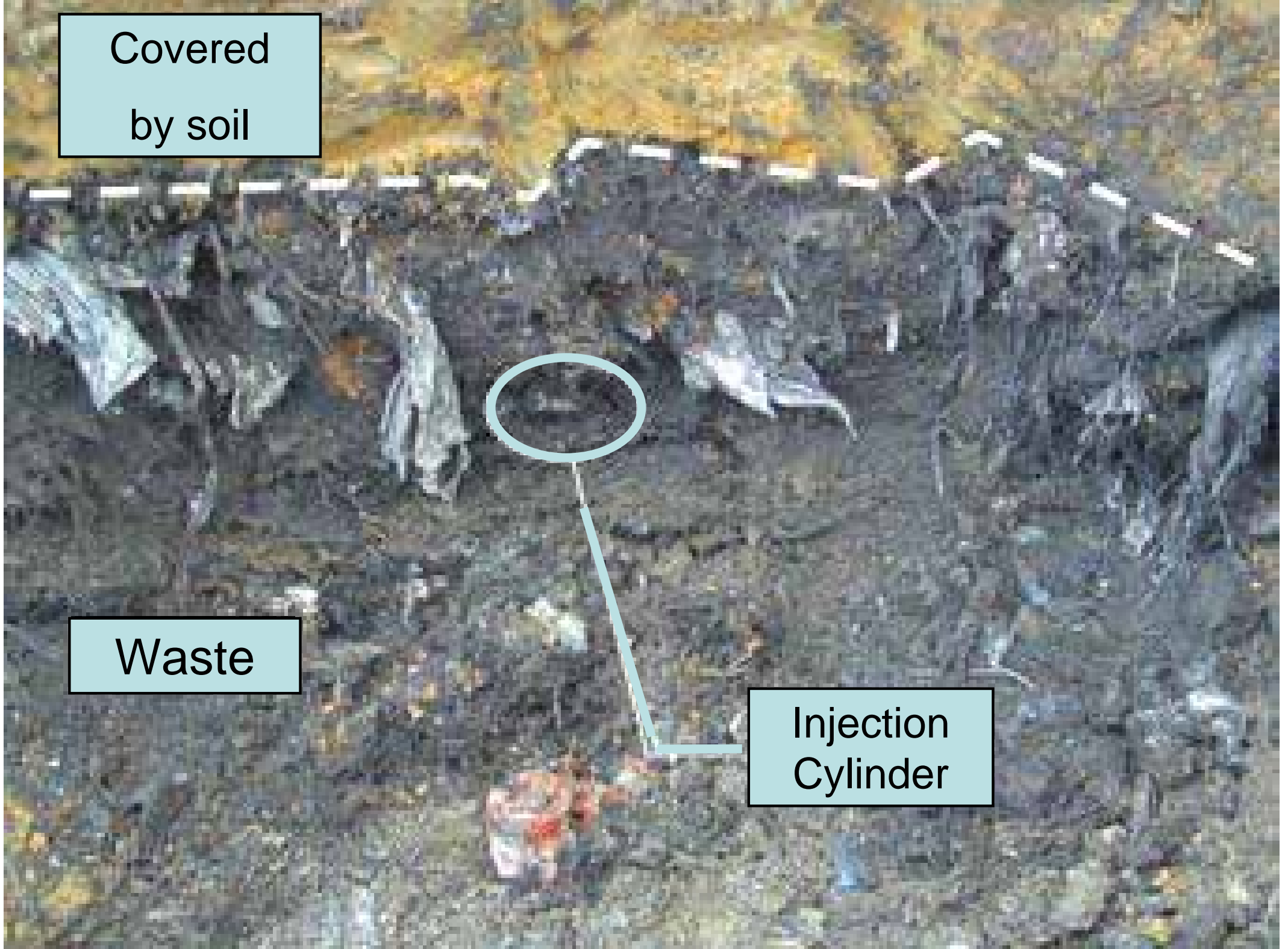
# 10. Technology Development such as IC Chips.



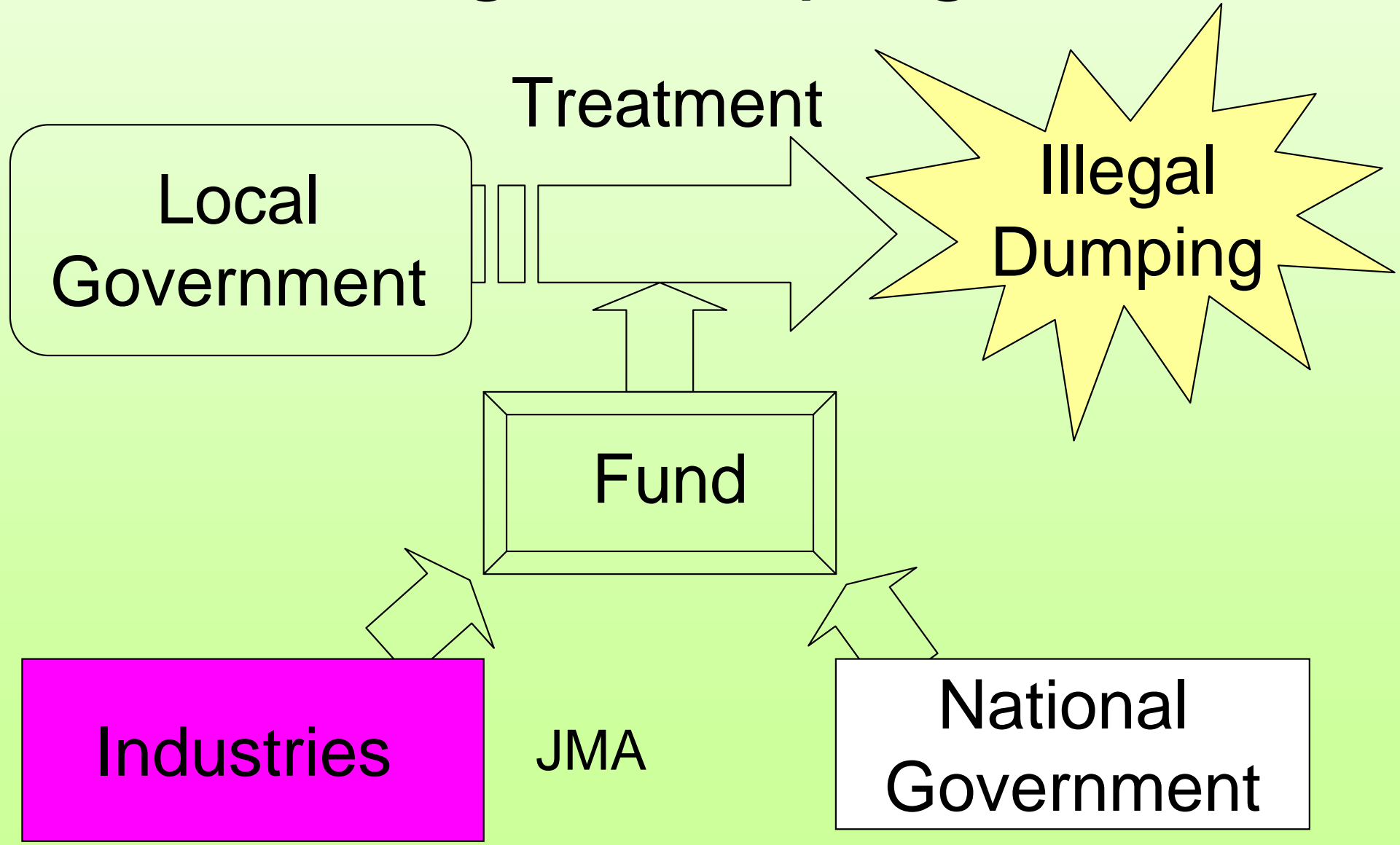
Covered  
by soil

Waste

Injection  
Cylinder



# 11. Social Contribution against illegal dumping



# Take Home Messages

- Medical waste causes **serious adverse effects** to human health and environment
- History shows that medical waste **increases** in accordance with industrialization
- Appropriate treatment system is **essential**
- Doctors can and should play a **key role**

**Thank you!**