Health Care Waste Management In Thailand

Regional Workshop"Building Capacity for Implementing Sound Health Care Waste Management in SEAR countries"

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Outlines

1. Country Profile
2. Infectious Waste Management in Thailand
3. Strategies & Measures
4. Conclusion & Recommendations

Country Profile

Total Area 514,000 sq. km.

Total Population 65 m.

Administrative System : 3 Tiers

1. Central Administration

- **20 ministries**

1. Provincial Administration

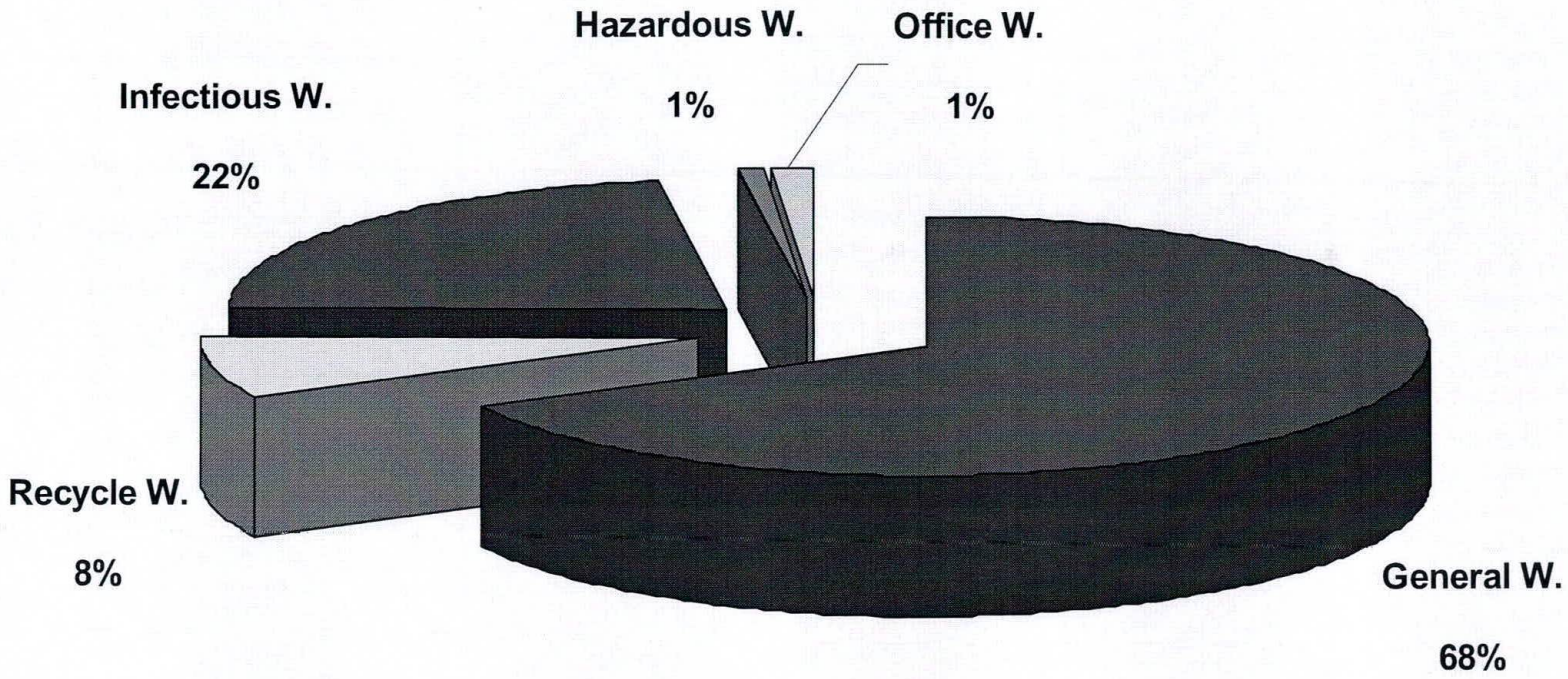
- **75 Provinces**
- **876 Districts**
- **7,490 Sub-districts**
- **74,427 Villages**

3 Local Administration

- **75 Provincial Administrative Authorities**
- **1,161 Municipalities**
- **6,700 Sub-district Administrative Authorities**
- **2 Special types – Bangkok Metropolitan Administration and Pattaya City**



Combination of Waste Generated within Health Care Facilities

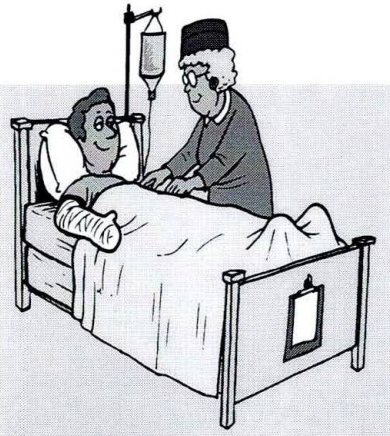


Sources of Infectious Waste in Thailand

Types of Facilities	Total Number	Amount of Infectious Waste (kg./d)
1 Hospitals		
- Government	985	40,825
- Private	472	8,879
2 Health Care Facilities		
- Government	10,296	3,835
- Private	27,363	11,928
Total Amount of Infectious Waste		65,468

Disposal of Infectious Waste generated in Government-owned Hospitals- 2006	
On-site Incineration	62.43 %
Incinerated by Private Companies	32.70 %
Incinerated by Local Authorities	4.87 %

INFECTIOUS WASTE MANAGEMENT Principle



Source of Infectious Waste

Separate at sources

Collection

Transportation

Treatment & Disposal

Objective

Infectious Waste from all sources should be managed correctly based on standard and legislation

Activities

Management by Health Care Facilities

Separation

- Campaign on reduction of waste by 3 R
- Upgrading of Health Care Facility inf. waste management system

Collection

- Training on prevention & control of hazardous from inf. Waste – according to the Public Health Act

Management by Local Authorities

Transportation

- Manifest System
- Route of Transport
- Accredit private company operating transportation service

Disposal

- Accredit Disposal Facilities
- Research on other type of clean technology for inf. Waste disposal

Draft

Infectious Waste Management

Strategic Plan

Separation & Collection

Strategy 1 To set up guidelines for reduction, separation & collection infectious waste at sources by sanitary practice

Measure 1 To set up guidelines for all health facilities aims for reduction, separation, collection of in. waste to achieve HA & ISO 14001

Project 1 Waste Minimization by Clean Technology
Project 2 Upgrading hospital waste management to achieve criteria set by law and hospital standard
Project 3 developing & improving infectious waste storage room
Project 4 training on infectious waste separation

Support Local Authorities

Strategy 2 To support local authorities for infectious waste central management

Measure 1 To support local authorities which have disposal facilities to expand their services to other local authorities (14 Central Disposal Facilities)

Project 1 To support improvement of existing facilities to be more efficient



Legislation

Strategy 3 To enact legislation that support management according to the Public Health Act 1992 & Ministerial Rule on Management of Infectious Waste 2002

Measure 1 Permit system for private company to operate central disposal facilities

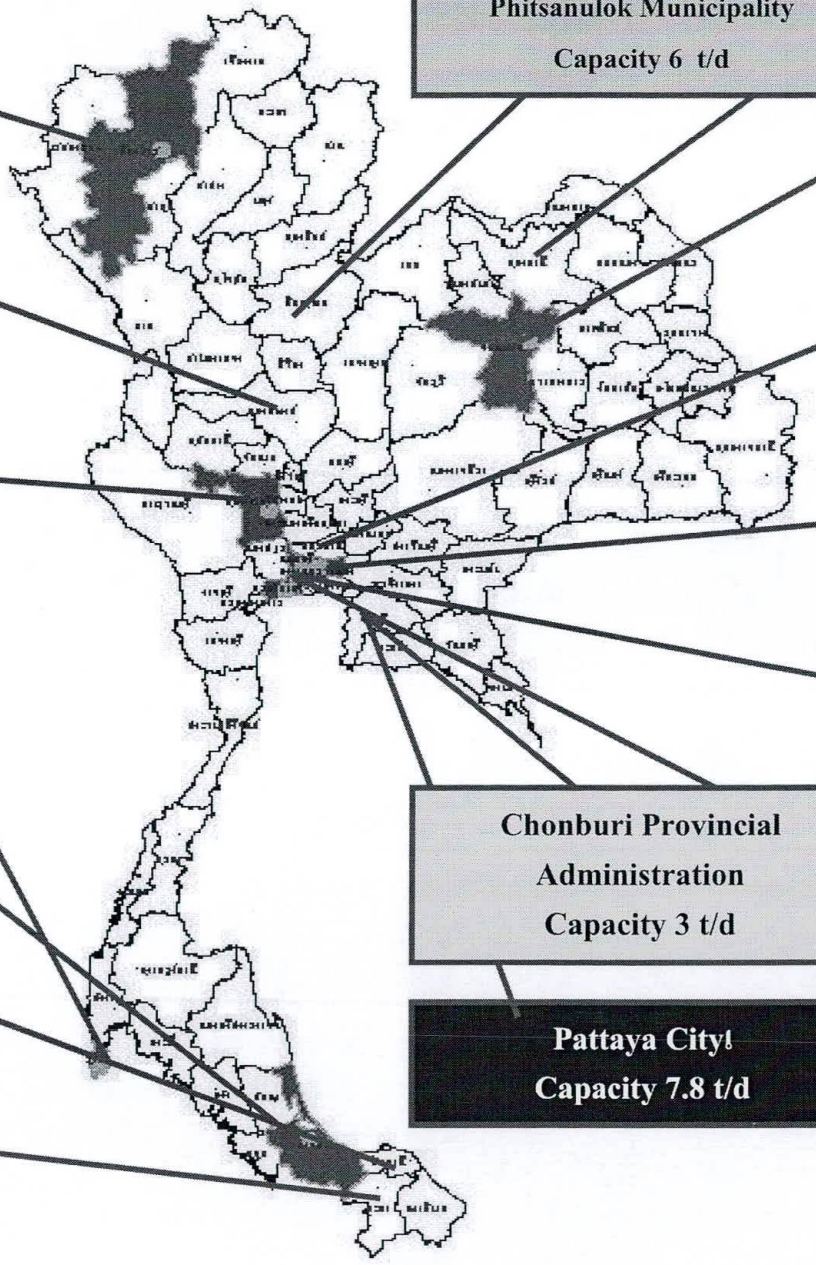
Measure 2 Manifest system for control of inf. Waste transportation

Measure 3 Certification of Operator & Auditing system for Disposal facilities

Measure 4 Central treatment facilities

Project 1 Encourage private sector to invest in inf. Waste treatment facilities

Infectious Waste Incinerators 16 Plants(G = 14 , P = 2)



Chiangmai Municipality
Capacity : 8.4 t/d

Nakhornsawan Municipality
Capacity 8 t/d(P)

Supanburi Municipality
Capacity 2.1. t/d

Phuket Municipality
Capacity 3 t/d

Hadyai Municipality
Capacity 5.4 t/d

Pattani Municipality
Capacity 6 t/d

Yala Municipality
Capacity 6 t/d

Phitsanulok Municipality
Capacity 6 t/d

Chonburi Provincial
Administration
Capacity 3 t/d

Pattaya City
Capacity 7.8 t/d

Udornthani Municipality
Capacity 6 t/d

Khonkaen Municipality
Capacity 1.2 t/d

Bangkok Metropolitan
Administration
Capacity 30 (15*2) t/d

Nonthaburi Provincial
Administration
Capacity 3 t/d

Samutprakarn Municipality
Capacity 1.5 t/d(P)

Samutsakorn Municipality
Capacity 5 t/d

Conclusion and Recommendations

Principle approaches are enforcement of law and formulation of strategic plan.

This is our goal. In addition, it is increasing in number of hazardous wastes for example expired drugs, cytotoxic. Therefore, we hope that this training course could provide us more knowledge in developing more effective measures for our country.





Thank for Your Kind Attention