

Managing Hazardous Materials in Healthcare Institutions

Protecting the Environment Today

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What's the problem?

Current practices for management of hazardous materials are creating unnecessary and preventable workplace exposures and discharges of harmful chemicals to the environment, and wasting resources

How big are the problems?

- 39,950 tons of pharmaceuticals discarded by hospitals, clinics and pharmacies in 2002
- Waste minimization and recycling not part of the industry culture
- Culture dominated by “red bag” mentality
- Approximately 15% of hospitals have dedicated, professional environmental health and safety staff
- A 2006 survey revealed that less than 1 in 20 clinical staff could correctly discriminate between hazardous and medical waste

Why is the problem so big?

- Lack of education and understanding
- Healthcare providers not connected to professional environmental management support
- Conflicting and confusing information and requirements
- Poorly developed vendor support network
- Regulatory agencies not educated in industry sector

Unknown and Emerging Issues

- Nanotechnology
- Biotechnology
- Gene Therapy
- Genetically Modified Organisms
- Pharmaceutical-like products

What's the solution?

- Education
 - Institutional and corporate management
 - Clinical and pharmacy staff
 - Environmental professionals
 - Recycling and Waste management channels
 - Regulatory agencies

What's the solution?

- Proper waste management techniques
 - In the clinical setting
 - Staff training
 - Availability of equipment and space
 - Environmental management support
 - Knowledgeable industry professionals
 - Innovation and culture change
 - Development of recycling and disposal options

What's the solution?

- Regulatory Reform and Interagency Cooperation
 - Appoint a lead agency
 - Align regulations
 - Consistent enforcement
 - Adoption of best management practices
 - Encourage innovation

Conclusions

- Environmental health and safety professionals need to increase their understanding of the healthcare environment and material management options
- The healthcare needs to be connected to expertise and infrastructure
- Minor regulatory changes are needed to facilitate effective and practical solutions

Bonus Round

What's the next big challenge for hospitals?

DOT Has Become Aware of Them

§ 172.704 Training requirements.

Hazmat employee training must include the following:

- *General awareness/familiarization training.*
- *Function-specific training.*
 - Each hazmat employee must be provided function-specific training concerning requirements of this subchapter
- *Safety training.* Each hazmat employee shall receive safety training concerning—
 - (i) Emergency response information required by subpart G of part 172;
 - (ii) Measures to protect the employee from the hazards associated with hazardous materials to which they may be exposed in the work place
 - (iii) Methods and procedures for avoiding accidents
- *Security Training*