



Epidemiology of Hazards of Disease Transimission Risks

OBJECTIVE

To Understand

1. Modes of Diseases Transmission
2. 5-Factors & Universal Precaution
3. Risk analysis of Hospital Waste V/s Household Refuse

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BACKGROUND: Hospital Waste Awareness /Regulations

- In USA Clinical Waste Washing up on Resort Beaches.
- In India:
 - Fear of spread of HIV, HBV, AIDS
 - Recycling of Medical Disposable through Waste handlers.

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DISEASE TRANSMISSION- Indirect Mode

- **VECTORS**
 - Flies
 - Landfill
 - Rodents
 - Sea Water
 - Syringe needles

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DISEASE TRANSMISSION- Direct Mode

- **Injuries due to Infected SHARPS**
- **Exposed Open Wounds**

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HOUSEHOLD WASTE

- **Contribute to large amount of micro-organisms, include:**
 - **Tissues**
 - **Dog and Cat Faeces**
 - **Soiled Diapers**
 - **Putrescible Foods**

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HOSPITAL WASTE V/S HOUSEHOLD REFUSE- Bacterial Contamination (Arithmetic Mean/G)

Bacteria	Household	OU	IM
Althaus et al, 1983			
Aerobic B.	7.2×10^6	8.8×10^3	2.6×10^6
Coliform B.	8.4×10^5	1.1×10^2	9.4×10^5
Kalnowski et al, 1983			
Aerobic B.	6.1×10^9	2.3×10^4	3.4×10^8
Gram-negat	6.0×10^7	5.8×10^3	7.2×10^4
Jager et al, 1989			
Total B.	2.2×10^8	5.0×10^5	1.1×10^7

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CONCLUSION

Summary of Findings:

- Global Warming will enable geographical distribution of Vectors
- Greater Emphasis on Handling & Management of Household Waste
- Education and Training of better Hygiene and Safer Sanitation
- Diseases Trans. Universal Precaution,
- Disease Trans. Modes, Lack of Understanding & misled media coverage

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