ANIL AGGRAWAL'S
Internet Journal of Forensic Medicine and Toxicology
The world's first online journal devoted entirely to forensic medicine and toxicology · Published 1 January and 1 July

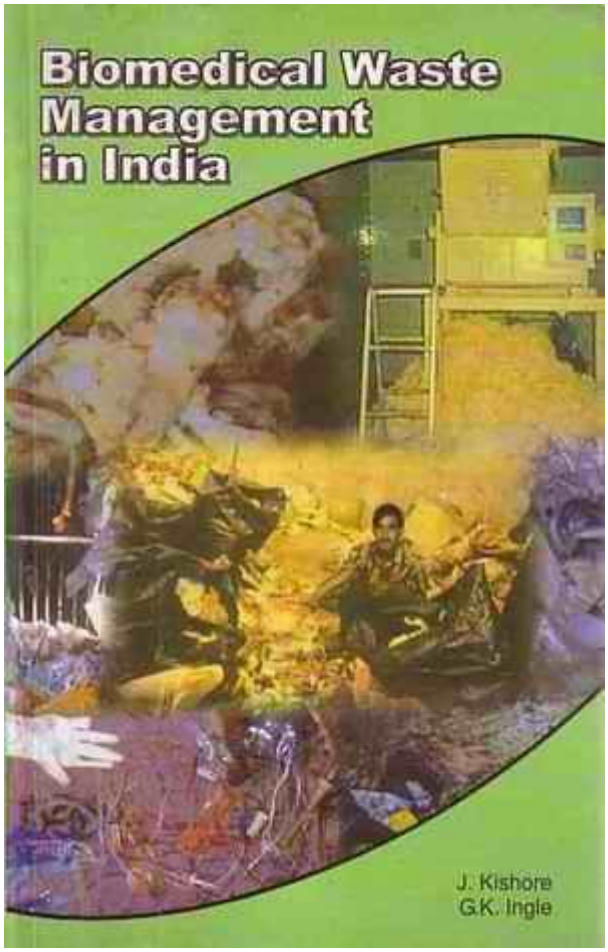
VOL. 8, NO. 1
Downloaded from www.anilaggrawal.com · ISSN 0972-8074 (Online) · https://www.anilaggrawal.com/ij/vol_008_no_001/reviews/tb/page001.html

Book Reviews: Technical Books Section

...A VALUABLE GUIDE ...The colour coding and labeling of waste has also been carefully explained. The book has a list of abbreviations and an exhaustive glossary...This handbook is complete guide to Biomedical Waste Management in India and a must buy for everybody...
Biomedical Waste Management In India by J. Kishore and G.K. Ingle. Softcover, 5.5" x 8.5". Century Publications, 46 Masih Garh, Jamia Nagar, New Delhi - 110025. . Email: centurypublications@hotmail.com. Publication Date 2004. 144 pages, ISBN: 81-88132-08-X. Price Indian Rupees 140.00

Official site: Click here to visit

Click cover to go to the official site of the author of this book



Biomedical waste management has recently emerged as an issue of major concern not only for hospitals but also to environmental agencies, media and general public. It forms approximately 1-2% of total municipal solid waste. The composition and quantity of waste differ not only from country to country but also within a country. The greatest risk is from the infectious and sharp components of waste because health workers associated with handling waste often get needle prick injuries and contract deadly diseases such as HIV/AIDS, Hepatitis B and C. In recent years, techniques have been developed to reduce human exposure to toxic and infectious components of medical waste like segregation, containment and incineration.

This book "Biomedical Waste Management in India" is an excellent handbook for all medical and related healthcare professionals. Biomedical waste management is a serious concern to both national and international health and in developing countries like India it is still lagging a lot. Many legislations have also been framed by Government of India but in spite of this, there is a lacuna in information between new development and healthcare authorities and staff. This book hence very aptly fills the gap and serves the purpose not only to healthcare authorities but also to nursing homes, private clinics, maternity homes, academicians, students of public health, environment, waste management, medical and nursing sciences. The book is also in accordance with Central Pollution Control Board and Delhi Pollution Control Committee.

The book has a very user friendly index and the main headings are Introduction, Definitions and Classification of waste, Hazards of Biomedical Waste, Legislation related to Biomedical Waste Management, Waste Segregation and Labeling, Storage and Transportation, Treatment of disposal, Important diseases related to biomedical waste etc. This book has classified all waste into biomedical, animal, chemical, contaminated, cytotoxic, hazardous, human blood, pathological etc in the section "Definitions and Classification". In 1998, Government of India has notified Biomedical waste Rules under the Environment Act 1986 and amended on 2000 that classified in detail biomedical waste into 10 categories as mentioned in schedule I. These are as follows: 1.Human anatomical waste 2. Animal Waste 3. Microbiological waste 4. Waste sharps 5. Discarded medicines & Cytotoxic drugs 6. Soiled waste 7. Solid waste 8. Liquid waste 9. Incineration ash 10. Chemical waste. The book explains how various diseases like HIV/AIDS, Hepatitis B and C are transmitted by prick from infectious and sharp waste. The potential health hazards of biomedical waste includes psychological stress, infections, tuberculosis, respiratory diseases, gastroenteritis, fungal infections, zoonoses, injuries, dermatitis, conjunctivitis, bronchitis, genetic mutations, cancer and poisonings.

...The book also brings out the fact how bags, syringes and other waste materials are reused and recycled in large quantities after picking up from incinerator and autoclave sites. There are some excellent diagrams and illustrations in this book, one of them showing how a needle is piercing out from the black bag. The author has also given the list of waste generated in wards, operation theatre, labor room laboratories, OPD and dressing room...

The book also brings out the fact how bags, syringes and other waste materials are reused and recycled in large quantities after picking up from incinerator and autoclave sites. There are some excellent diagrams and illustrations in this book, one of them showing how a needle is piercing out from the black bag. The author has also given the list of waste generated in wards, operation theatre, labor room laboratories, OPD and dressing room. In "Waste Treatment and Disposal" (Chapter 9, page 74) four broad categories of biomedical waste treatment modalities are explained: 1.Mechanical: Compacting, Shredding, Landfill, Encapsulation, Inertization 2.Thermal

and Irradiation: Autoclaving, Microwaving, Incineration, Plasma arc 3.Chemical: Disinfectants, Antiseptics 4.Biological: Vermiculture, Biodigestion etc.

The term "inertization" may not be plain to everyone. The author explains this term very well on page 78. Inertization is the process where mixing of waste with cement and other substances before disposal in order to minimize the risk of toxic substances contained in the waste migrating into surface water or groundwater. It is especially suitable for pharmaceuticals and for incineration ashes with a high metal content. It is not applicable to infected waste.

The colour coding and labeling of waste has also been carefully explained. The book has a list of abbreviations and an exhaustive glossary. One of the vital section of the book is "Legislation related to Biomedical Waste "which enlists the Environment Protection Act, 1986 and the penalty for not disposing the waste properly. So if the authorities are not aware of the waste disposal, they may have to shell out Indian Rupees 1 lakh (one hundred thousand) or imprisonment for a term extending up to 5 yrs or both. In the end of the book, the author has given annexure which are very helpful: "Waste auditing questionnaire", "Checklist for hospital waste management" and "Addresses of manufactures and suppliers of various machines like autoclave, incinerator, needle destroyer etc". Hence I think that this handbook is complete guide to Biomedical Waste Management in India and a must buy for everybody.



Dr. Anshul Gupta

New Delhi, India
Email: anshul7777@yahoo.com
Dr. Anshul Gupta, 25 - after completing his graduation in medicine and surgery in 2004 from M.P.Shah Medical College, Jamnagar, Gujarat (Saurashtra University) - is currently pursuing his postgraduate studies in ENT (1st year PG) at one of the most prestigious medical institutions of Delhi - the St. Stephen's Hospital. He has earlier worked as a Junior Resident in the Department of Biochemistry at another prominent superspeciality hospital of New Delhi- the G B Pant Hospital. He likes to read books and is a highly motivated reader and book reviewer. Stamp and coin collection are his main hobbies. He can be contacted at anshul7777@yahoo.com.

Order this book by Clicking here

Request a PDF file of this review by clicking here. (If your screen resolution can not be increased, or if printing this page is giving you problems like overlapping of graphics and/or tables etc, you can take a proper printout from a pdf file. You will need an Acrobat Reader though.)

Editor's recommendation. This book is recommended by the editor.