

Federal University of São Carlos Nursing Departament

GENERATION OF MEDICAL WASTE IN HOSPITALS IN INTERIOR OF SÃO PAULO-BRASIL

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Introduction

- Medical Waste (MW) are responsible per 2% of total waste generated for a city and has merited attention → due the risks that offers to the public health and environment, representing an important aspect in waste management
- In Brazil, the Resolution 306/04 of the National Health Surveillance Agency classifies the MW into **5 groups** as follows: Group A (GA) biological, Group B (GB) chemical, Group C (GC) radioactive waste, Group D (GD) common and Group E (GE) sharps

Objective

To determine the amount of waste generated in hospitals
of Ribeirão Preto, São Paulo, Brazil

Methodology

- Research descriptive and documental
- Quantitative variables
- 11 hospitals of the city of Ribeirão Preto, Brazil:
 - general hospitals, university, maternity and psychiatric; public, private and philanthropic; and large, medium and small

Methodology

- To quantify the MW, the weighing of the waste was held for six days, following **methodology adapted from PAHO**
- Data were analyzed using descriptive statistics, **determining the average global generation of MW and for each group**
- Approval by the Ethics in Research of the the University of São Paulo
- Ethical principles of research, to present the results hospitals were numbered from 1 to 11

Results

Table 1: Generation of Medical Waste in Hospitals in Ribeirão Preto-São Paulo, Brazil, 2014

| Hospital (H) | Geração total (kg) | GA kg (%) | GB kg (%) | GC kg (%) | GD kg (%) | GE kg (%) |
|--|--------------------|-----------------|---------------|--------------|-------------------|----------------|
| General and Teaching Hospital | | | | | | |
| ¹ H 1 | 19061,53 | 6325,6 (33,19%) | 93,87 (0,49%) | 11,2 (0,06%) | 12630,86 (66,26%) | 0 (0%) |
| H 2 | 3234,2 | 1027,3 (31,76%) | 0 (0%) | 0 (0%) | 2134,19 (65,99%) | 72,7 (2,25%) |
| ² H 3 | 5224,29 | 1220 (23,35%) | 18,6 (0,36%) | 0 (0%) | 3985,69 (76,29%) | 0 (0%) |
| H 4 | 6581,09 | 49,5 (0,75%) | 34,8 (0,53%) | 0 (0%) | 3026,29 (45,98%) | 262,66 (3,99%) |
| ³ H 5 | 2460,65 | 1030 (41,86%) | 0 (0%) | 0 (0%) | 1430,65 (58,14%) | 0 (0%) |
| General Hospital | | | | | | |
| H 6 | 2761,57 | 410,03 (14,85%) | 22,04 (0,8%) | 0 (0%) | 2233,92 (80,89%) | 95,58 (3,46%) |
| H 7 | 1117,9 | 127,2 (11,38%) | 0 (0%) | 0 (0%) | 962,3 (86,08%) | 28,4 (2,54%) |
| Specialized and Teaching Hospital | | | | | | |
| H 8 | 579,02 | 180,87 (31,24%) | 0 (0%) | 0 (0%) | 390,85 (67,5%) | 7,3 (1,26%) |
| Specialized Hospital | | | | | | |
| H 9 | 693,08 | 138,3 (19,95%) | 9,78 (1,41%) | 0 (0%) | 498,7 (71,96%) | 46,3 (6,68%) |
| Psychiatric Hospital | | | | | | |
| H 10 | 1934,08 | 11,7 (0,6%) | 0 (0%) | 0 (0%) | 1912,73 (98,9%) | 9,65 (0,5%) |
| Maternity | | | | | | |
| H 11 | 842,5 | 179,85 (21,35%) | 9 (1,07%) | 0 (0%) | 639,9 (75,95%) | 13,75 (1,63%) |

^{1,2,3} The averages of wastes from GA and GE were determined together due the inability to perform the weighing separately from groups.

Conclusion

Thus, considers necessary a **differentiated look to the management of MW**, which requires an inspection more efficient to guarantee an **adequated handling**

References

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Thank you!!!

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