

## **Assessment of Healthcare Waste Management in Eastern Algeria: A Case Study at the University Hospital of Batna**

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**Abstract**

Healthcare waste encompasses all waste generated by medical facilities, requiring proper management and disposal to prevent disease transmission and protect the environment. Like many developing countries, Algeria faces significant challenges in implementing effective healthcare waste management practices. Understanding the current status is essential for improvement. This descriptive cross-sectional study is the first to assess healthcare waste management at the University Hospital of Batna. Data were collected through on-site observations and an analysis of hospital archives, covering the period from 2008 to 2015. The results were processed using Excel 2016. Findings indicate that the hospital generated an average of 92,720.62 kg of hazardous healthcare waste per year, with 56.20% classified as infectious waste, 36.06% as chemical and toxic waste, and 7.74% as anatomical waste. The average hazardous waste generation rate was 0.40 kg per bed per day. The study highlights significant inadequacies in the hospital's waste management system. Key processes such as segregation, collection, storage, transport, and disposal are either poorly implemented or neglected, underscoring the urgent need for improved waste management strategies to ensure both public health and environmental safety.

**Keywords**

Medical waste, Hospital waste, Infectious waste, Medical waste management, The University Hospital of Batna.