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Risk of Occupational Exposure to Cytotoxic Drugs: The Role of Handling Procedures of Hospital Workers

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Abstract : In order to study environmental contamination by cytostatic drugs in Portugal hospitals, sampling campaigns were conducted in three hospitals in 2015 (112 samples). Platinum containing drugs and fluorouracil were chosen because both were administered in high amounts. The detection limit was 0.01 pg/cm² for platinum and 0.1 pg/cm² for fluorouracil. The results show that spills occur mainly on the patient's chair, while the most referenced occurrence is due to an inadequately closed wrapper. Day hospitals facilities were detected as having the largest number of contaminated samples and with higher levels of contamination.

Keywords: cytostatic, contamination, hospital, procedures, handling

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