Medical waste generation and management: case of Lithuania

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Medical waste is defined as hazardous waste and secure which are generated providing health services. Its proper management is of great importance due to its impact on both public health and the environment. The objective of the study was to analyze medical waste generation and management in Lithuania during 2008-2016 period. The results have indicated that the total amount of medical waste in Lithuania is estimated at about 1600 t. The waste generation rate ranges from 0.2 kg to 2.6 kg/person of a municipality. The lowest amount of medical waste was collected and treated in 2008. The amount of collected and treated medical wastes increased by 49% over the period of 2008 to 2016 and it reached approximately 1850 t annually. A larger proportion of the wastes were infectious wastes, one time used products, and pharmaceutical wastes. The largest part of the wastes was burned until 2012. Then the treatment of waste was changed: the larger part was exported instead of burned. Almost of 10% of the collected medical wastes are disposed to the landfills. The analysis showed that the amount of composed medical wastes were statistically significantly related to the number of hospital bed-days, and number of inhabitants with. The regression analysis showed that the greatest impact on the amount of medical waste had a number of bed-days in hospitals.