

Abstract

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Title of thesis:

Environmental risk assessment of drugs

This work deals with pollution of the environment with human drugs. It suggests the most important ways in which drugs penetrate into groundwater and soil. It outlines the basic principles when considering whether to start watching and then set any action based on the results of the environmental risk assessment. The work is closely focused on oral antibacterial antibiotics and hormonal substances within the meaning of the evaluation of their distribution in the Czech Republic in 2011 and 2012. For this evaluation, the data on consumptions pack converted to kilograms using the following formula: distribution of the active substance (kg) = (power of the active substance (mg) / 1000 000) *contents *number of packages sold. It turned out that consumption of the two groups of substances in the Czech Republic is high, while the knowledge about the correct management of substandard drugs are relatively weak.

Keywords: drug residues, waste water, antibiotics, steroid hormones