Summary

The Káraný waterworks supplies drinking water to approximately one third of its total consumption in Prague. It uses two main ways to produce drinking water: artificial infiltration and bank infiltration. Two-year monitoring of the content of 90 drugs and metabolites evaluates the occurrence of these substances in the Jizera River and in both production processes. The results of the monitoring point to a systematic occurrence of drugs in the Jizera River under Mladá Boleslav in concentrations ranging from tens of ng / l to hundreds of ng / l (Acesulfan and Oxypurinol). Artificial infiltration failed to remove six drugs from water (Primidon, Sulfamethaxxazole, Carbamazepine, Lamotrigine, Ibuprofen, Gabapentin, Acesulfan and Oxypurinol). Only four drugs (Ibuprofen, Caffeine, Oxypurinol and Acesulfan) were found in the results of monitoring from bank infiltration. This makes bank infiltration a more effective method of drug elimination than artificial infiltration.

Keywords: drugs, drinking water, statistical analysis, monitoring