

# LEAD IN BONE FROM SOUTH MORAVIAN AUTOPSIES

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## SUMMARY

In bone samples of 181 humans deceased at the age of 0–99 years from Brno and surroundings, lead content was determined by the method of atomic absorption spectrometry. The geometrical mean of the lead content of the whole set is  $2.29 \mu\text{g.g}^{-1}$  of dry tissue (min.  $0.26$ , max.  $29.28 \mu\text{g.g}^{-1}$ ). With the age the lead content in bone gradually increases from the value of the geometric mean of  $1.35 \mu\text{g.g}^{-1}$  in the first year of life to almost a double in the age decade of 21–30 years. Up to 80 years it roughly remains on a constant level, after the age of 80 it rises again up to the mean value of  $4.26 \mu\text{g.g}^{-1}$ . Differences between the sexes in the whole set as well as in the individual age groups are very small and non-significant. Statistically significant differences in Pb content in bone were found in the relation to the size of the place of residence ( $P < 0.05$ ); however, no association was proved with the character of place of residence, occupation, smoking habits or type of the underlying cause of death.

*Key words:* toxic metals, lead, bone, biological monitoring

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