

# EXPOSURE TO LEAD AND HUMAN HEALTH IN THE CZECH REPUBLIC

K. Bláha<sup>1</sup>, V. Bencko<sup>2</sup>, M. Cikrt<sup>3</sup>

<sup>1</sup>Department of Ecological Risks and Monitoring, Ministry of Environment of the Czech Republic, Prague

<sup>2</sup>Institute of Hygiene and Epidemiology, First Faculty of Medicine, Charles University, Prague

<sup>3</sup>Department of Industrial Hygiene and Occupational Diseases, National Institute of Public Health, Prague, Czech Republic

## SUMMARY

The aim of presented review is to address the most relevant issues related to the health effects caused by the human exposure to lead, as they have been recognized in Czech Republic in the period of 1992–1994 within the framework of the National Integrated Programme on Environment and Health (NIPEH) approved in 1992 and supported by WHO-European Centre for Environment and Health (WHO-ECEH), Bilthoven, The Netherlands and by the Government of the Netherlands. Basic sources of environmental exposure to lead are identified and the fate of lead in the individual compartments of the environment is discussed. Relevant methods used for the exposure evaluation are summarized and the highest-risk group of population is defined. Attention is being paid to the effects of the long-term exposure to low lead levels, while other exposure settings are intentionally omitted. Interventional measures developed in the Czech Republic in attempt to reduce the environmental exposure are introduced. Instead of presenting specific data, current state-of-art and general trends are presented; list of references tries to combine the internationally recognized studies with those coming from national sources.

*Key words:* lead, human exposure, biomonitoring, health effects, interventional measures

Address for correspondence: M. Cikrt, Dept. of Industrial Hygiene and Occupational Diseases, National Institute of Public Health, Šrobárova 48, 100 42 Prague 10, Czech Republic