HUMAN EXPOSURE TO LEAD IN BRAZIL

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Abstract: Adverse effects due to lead environmental pollution are well recognized. Being a widespread agent in the environment, and a major harmful element to organic systems, mostly to children, lead has been investigated all over the world aiming to improve measures regarding its control. Brazilian scientific production on lead exposure and its adverse effects on general population have been scarce and irregular. The purpose of this study is to present a review on the assessment of exposure and adverse effects due to environmental lead contamination in Brazil. Epidemiological investigations on children lead exposure around industrial and mining areas have shown that in many situations, lead contamination is a real source of concern. In Brazil, lead was withdraw from gasoline in the middle of the 80s, and the last lead mining and refining plant was closed in 1995, leaving residual environmental lead contamination which has recently been investigated using a multidisciplinary approach. Moreover, there are hundreds of small secondary battery recycling plants and secondary smelting facilities all over the country, which produce focal urban areas of lead contamination. The few studies on reference values for lead in blood in the general population in Brazil are also discussed.