Manganese Health Research Program: Recent published literature

June – August 2006

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Introduction

This report presents bibliographic details of recent literature addressing a number of research areas that are considered of direct relevance to the health effects of Manganese (Mn), and include:

Section 1 - EXPOSURE MEASUREMENT AND MODELLING: Papers relating to the measurements or modelling of environmental and occupational Mn exposure, the development of biomarkers of exposure or effect.

Section 2 - HEALTH EFFECTS: Papers on the influence of Mn on health, disease and dysfunction.

Section 3 - MECHANISM: Papers on the physiological, biochemical and cellular mechanisms underlying the toxic effects of Mn.

Section 4 - HUMAN SUSCEPTIBILITY: Papers relating to assessment of the influence of genetic and epigenetic factors on human susceptibility to the effects of Mn.

Section 5 - TREATMENT AND IMAGING: Papers on the development and implementation of new medical approaches to the treatment of excessive Mn exposure.

Section 6 - MISCELLANEOUS: Other papers considered of interest or potential relevance to the study of the health effects of Mn.

The papers presented herein were identified using a series of structured searches of the following on-line databases: Medline, Toxline, Biological Sciences and Proquest Health. The paper abstracts were reviewed and categorised by an experience Scientist to confirm their relevance before inclusion in this report.

The papers presented were identified as being first published between June 2006 and August 2006, together with some earlier papers not previously included in the on-line databases used to identify publications. Future reports will present the literature published during subsequent 3-monthly (quarterly) intervals.
1. EXPOSURE MEASUREMENT AND MODELLING


2. HEALTH EFFECTS


3. MECHANISM


4. HUMAN SUSCEPTIBILITY


5. TREATMENT AND IMAGING


6. MISCELLANEOUS


