Manganese Health Research Program: Recent published literature

September 2008 - November 2008
The Institute of Environment and Health (IEH) was established at Cranfield University in November 2005. The research and consultancy activities of the Institute are principally funded through specific grants, contracts and awards by UK Government Departments and Agencies.
Introduction

This report presents the bibliographic details of papers identified as being first published during the period September 2008 to November 2008.

The papers were selected because they address research areas that are considered of direct relevance to the health effects of manganese (Mn); in order to aid review, the papers are presented under the following categories:

**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.
1. EXPOSURE MEASUREMENT AND MODELLING


2. HEALTH EFFECTS


3. MECHANISM


Han, J.H., Chung, Y.H., Park, J.D., et al. (2008) Recovery from Welding-Fume-Exposure-Induced MRI T1 Signal Intensities After Cessation of Welding-Fume Exposure in Brains of Cynomolgus Monkeys. Inhalation Toxicology, 20(12), 1075-1083.


4. HUMAN SUSCEPTIBILITY

No relevant papers identified.
5. TREATMENT AND IMAGING

No relevant papers identified.
6. MISCELLANEOUS

No relevant papers identified.