

Practice Point

Lead toxicity with a new focus: Addressing low-level lead exposure in Canadian children

Irena Buka, Catherine Hervouet-Zeiber

Canadian Paediatric Society, Paediatric Environmental Health Section, Ottawa, Ontario

Correspondence: Canadian Paediatric Society, 100–2305 St Laurent Blvd, Ottawa, Ontario K1G 4J8. E-mail info@cps.ca, website www.cps.ca

For the full text document, visit www.cps.ca/en/documents

Abstract

Although acute and subacute lead toxicity requiring active treatment is rare in Canada, paediatricians need to be aware of new evidence linking lower lead levels to neurodevelopmental deficits. Health Canada has identified potential exposures occurring prenatally, in infancy and during early childhood from food and water, household dust, soil, and mouthing products that contain lead. Children with neurodevelopmental problems who live in older housing and newcomers to Canada may be at greater risk. Symptoms may be latent, subtle, and chronic. Blood assay, widely available clinically, does not confirm diagnosis unless lead exposure has been recent. Human biomonitoring data are available in the Canadian Health Measures Survey, and Health Canada has suggested that clinicians use these new reference ranges. Early detection and prevention of lead exposure are key public health objectives because effects of lead toxicity are chronic and treatment is complex.

Keywords: *Blood lead levels; Cognitive deficit; Lead exposures; Lead toxicity; Paediatrics*

CANADIAN PAEDIATRIC SOCIETY PAEDIATRIC ENVIRONMENTAL HEALTH SECTION

Executive members: Faruqa Ladha MD (President), Alvaro Osornio Vargas MD (President-Elect), Catherine Hervouet-Zeiber MD (Past President), Robert Issenman MD (Secretary-Treasurer), Irena Buka MD (Member at large), Arend Strikwerda MD (Member at large), Shazeen Suleman MD (Member at large), Robin Walker MD (Member at large)

Principal authors: Irena Buka MD, Catherine Hervouet-Zeiber MD