

RESOLUTION 10**The Prevention of Childhood Lead Poisoning In Canada Occurring From Exposure To Lead-Based Paint And Other Domestic Sources Of Lead**

BE IT RESOLVED THAT the Canadian Nurses Association takes a strong leadership role in advocating for the development of a national strategy addressing the prevention of childhood lead poisoning occurring from exposure to residential sources.

Background

Lead is a serious environmental toxin with the capacity to interrupt children's normal brain growth and functioning. Since at least 1930 numerous case studies in American, Canadian and Australian literature have identified residential lead based paint as a major source of poisoning for young children;¹ and since at least 1990 evidence has shown that it is the lead dust from deteriorating paint in older homes and renovating activities that is the primary source of chronic exposure for young children today.² Socioeconomic factors such as poverty along with substandard housing combine to make this public health issue a disproportionate problem.³

Lead-based interior and exterior paint was manufactured and sold in Canada until at least 1991 although legislation fully banning lead additives in paints did not come into effect in Canada until 2005.⁴ Recent findings from the Canada Health Measures Survey identify that immigrant populations and families living in older housing stock are at increased risk of lead exposure.⁵ Preliminary findings from the *Canadian House Dust Study*² indicate that residential dwellings built prior to 1983 are more likely to contain lead in floor dust at levels associated with childhood lead poisoning.^{2,6} In Canada, lead poisoning is defined as a blood lead level greater than or equal to 10 micrograms per decilitre ($\geq 10 \mu\text{g/dL}$).

Findings from a 2008 Hamilton investigation⁷ indicate that lead poisoning continues to affect Ontario children despite earlier efforts to eliminate major lead sources (i.e. leaded gasoline, domestic solder). The Hamilton study identified 12.5 per cent of children with blood lead levels $\geq 4 \mu\text{g/dL}$, a level now associated with poorer school performance, negative behavioral effects such as attention-deficit/hyperactivity disorder and injury to renal and blood-forming systems and neuroendocrine and reproductive systems.^{8,9} A further 3 per cent of Hamilton children ≤ 2 years were identified with blood lead levels $\geq 10 \mu\text{g/dL}$,⁷ a level which surpasses Canada's current but outdated 'level of concern.'

Lead poisoning is a multi-faceted problem that crosses the boundaries of public health, housing and environment. The *Public Health Agency of Canada Act*¹⁰ authorizes Health Canada to safeguard the health of Canadians. The *Department of Health Act*¹¹ equally obliges Health Canada to protect and monitor the physical, mental and social well-being of Canadians. Lead itself is recognized as a priority substance under Schedule 1, Toxic Substances of the *Canadian Environmental Protection Act* (1999)¹² which further requires Health Canada to manage health risks related to lead.¹³ Responsibility for the investigation of housing falls within the mandate of Canada Mortgage and Housing Corporation.¹⁴

To date in Canada, little has been done to address historic sources of lead-based paint and childhood lead poisoning occurring from exposure to residential sources of lead. Canada's *National Lead Risk Reduction Strategy* (2002) addresses lead in consumer products only.¹⁵ Today, children living in smelter communities are the only population routinely monitored; and, Québec is the only province requiring mandatory reporting of blood lead levels $\geq 10 \mu\text{g/dL}$ identified through case finding.¹⁶ **There are still no regulations at the federal level to protect Canadian children from exposure to historic sources of lead paint found in older housing stock.**¹⁷

Lead-based paint is a persistent environmental toxin and one requiring concerted and sustained effort to eliminate. Various measures such as lead-based paint abatement have been shown to be effective in preventing the occurrence of new cases.¹⁸⁻²⁰ The World Health Organization advises that lead-based paint remediation results in an even better return per dollar invested than immunization programs.²¹

This resolution recognizes lead as a serious developmental neurotoxin and regards early childhood lead exposure as an important but preventable root cause of later poor health outcome. This resolution is in keeping with the Canadian Nurses Association (CNA) endorsement of a broad systems approach²² with its focus on the broad spectra of social, political, economic and environmental forces that shape health outcomes.

Submitted by the Registered Nurses' Association of Ontario (RNAO)

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