

Maternal-infant Child Health and Environment Research Symposium:
“**How Local Research can Influence Policy and Practice**”

Thursday, February 26th, 2009, 08:00-17:00 hrs
Maple Leaf Room, Lister Conference Centre, University of Alberta

Presenter: *Samuel Koranteng, MB ChB*

Presentation Summary: *Systematic Review of Canadian Epidemiological Studies in Air Pollution in Children*

There is mounting evidence from epidemiological studies to suggest that ambient air pollution below regulatory levels may cause adverse health effects in children including: increased hospital admissions and emergency visits for asthma and other respiratory diseases; increased reporting of respiratory symptoms; decrements in lung function; adverse pregnancy outcomes; increased infant mortality; and increased school absenteeism. In addition to significant economic cost to the healthcare system due to increased hospital admissions, the negative health effects of ambient air pollution have serious public health implications.

To determine the impact of current ambient air pollution levels on the health of Canadian children, we systematically reviewed Canadian epidemiological studies published between January 1989 and December 2004. The available information suggests that ambient air pollution within regulatory limits may still cause adverse respiratory health effects, adverse pregnancy outcomes and contribute to infant mortality in Canada.

This presentation will discuss the evidence linking ambient air pollution and adverse health effects in Canadian children. The implications of these findings for clinical practice and formulation of environmental regulatory policies in Canada will be addressed.