

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: *Glenys M. Webster, MRM, PhD (Candidate)*

Presentation Summary: *Chemicals, Health and Pregnancy Study (CHirP): building capacity for children's environmental health research in Western Canada*

Chemicals used as flame retardants (PBDEs) and stain and grease repellents (PFCs) leach out of many consumer products, and are detectable in nearly 100% of the general population. Although animal studies clearly indicate that PBDEs and PFCs are thyroid toxicants, few studies have examined the thyroid disrupting potential of these chemicals in humans. Thyroid disruption is of particular interest during pregnancy, because thyroid hormones play a critical role in fetal brain development. The Chemicals, Health and Pregnancy study (CHirP) will investigate the associations between PBDE and PFC levels in pregnant women, and thyroid hormone levels in both pregnant women and their newborns. A second goal of the study is to identify the main determinants of exposure to PBDEs and PFCs (e.g. indoor dust, diet, home characteristics, occupational exposures, transportation habits) to help develop policy recommendations to reduce exposures in the future.

This presentation will outline the Vancouver-based Chemicals, Health and Pregnancy study, including plans for knowledge translation. Existing challenges for conducting this type of research in Canada, and ideas for building capacity in this rapidly growing field will also be discussed.