

**Setting a National Research Agenda Children's Environmental Health in Australia
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By Liz Hanna - Convenor Environmental Health Special Interest Group**

Children's Health has captured the attention of Australians for decades. Indeed Melbourne's Royal Children's Hospital Annual Good Friday appeal has historically prompted extraordinary compassion and donations. It is difficult to understand then why has the field of Children's Environmental health received so little attention, when we know that adverse environmental exposures impact on human health. Indeed, the World Health Organisation (WHO) has estimated that 24% (95% CI=21-27%) of the global burden of disease measured in disability adjusted life years (DALY) and 23% (95% CI=21-25%) of all deaths are attributable to adverse environmental exposures. Over 40% of the global burden of disease attributed to environmental factors falls on children below five years of age despite accounting for only 10% of the world's population.

This is not just a problem that happens elsewhere! Recent events in Australia, including lead contamination in Esperance, WA and the finding of high dioxin levels in fish and prawns caught in Sydney Harbour demonstrate that Australian children are at risk of the health effects of adverse environmental exposures. Children in many parts of Australia are exposed to levels of arsenic above recommended levels. Children are particularly susceptible to environmental risks and should be protected. Understanding what our children are exposed to and how this impacts on their health is critical to developing and implementing strategies to protect children. This will require the cooperation of researchers, healthcare providers, government agencies and the community. Liz Hanna, Convenor of the Environmental Health Special Interest Group was invited to join a research team led by Peter Sly (Telethon Institute of Child Health Research) to investigate the gaps in children's environmental health research in Australia, and set a National Research Agenda.

Australia has a proud history in research on Children's Environmental Health. The adverse health effects of lead-based paint were first recognised in Queensland in the early 1900s and The Port Pirie Cohort Study led the world in describing the health effects of lead in children. There is also some seminal work on adverse health effects of problems in the built environment occurring currently. Australia leads the world in legislating safety; bicycle helmets, child restrainers, and pool fencing have saved countless lives, however, our public performance does not match our research prowess. Significant Australian research investigates asthma, and now obesity research is taking a front seat among the competitive funding rounds. Our knowledge however is very limited on the impacts upon children of chemicals exposures, food allergies, and climate change impacts.

A workshop of leading researchers, policy makers and NGOs explored the issues, and recommended that a Network for Children's Environmental Health should be formed consisting of researchers, clinicians, government and NGOs and consumers. The group also called for a national assessment of the environmental contribution to the burden of disease for Australian children. The report is now available on the PHAA website <http://www.phaa.net.au/enviroHealth.php>