

'Save our kids from computer toxics' scientists warn

September 16 2013

An international scientific expert has called for an urgent global effort to save the coming generation of children from being poisoned by toxic residues from the world's ever-growing garbage pile of old mobile phones, computers and electronic devices.

"Electronic waste (or e-waste) is the world's fastest growing [waste stream](#), rising by 3-5 per cent every year, due to the decreased lifespan of the average computer from six years to two," says Professor Ming Hung Wong of Hong Kong Baptist University.

"In countries such as Australia the disposal of e-waste in [landfills](#) generates a potent leachate, which has high concentrations of flame retardant chemicals and heavy metals. These can migrate through soils and groundwater and eventually reach people via [tap water](#) and the food chain."

Professor Wong will deliver a keynote paper at CleanUp 2013, the world's leading scientific contamination conference, which is being held in Melbourne this week.

In many countries in Asia and Africa, e-waste from advanced nations is being recycled under extremely primitive conditions which lead to extensive pollution of air, water, food and people, he says. Gradually these toxins make their way around the world in food and water and via trade, posing a risk to everyone.

"The [toxic chemicals](#) generated through open burning of e-waste include PCDD, PBDEs, PAHs, PCBs and [heavy metals](#) (especially lead) have given rise to serious environmental contamination.

"Some of these toxic chemicals are known to build up in fish especially, which may then be traded locally and around the world. In general, any food items originating in e-[waste processing](#) areas are highly contaminated, leading to sharp increases in cancers and heart disease and other ailments in people who consume them."

Professor Wong says that science has now clearly demonstrated the risk of these toxic chemicals being passed on to the next generation, while babies are still in the womb, or in their mother's milk.

"At the same time these e-waste contaminated sites are extremely hard to clean up due to the complex chemical mixtures they contain. However the time may soon be coming when developing countries will no longer accept e-waste from consumers in developed countries – and every nation will have to take care of its own.

"It is clear there is an urgent need to manage e-waste more efficiently in all countries and through better international collaboration."

Total world e-waste production has been estimated as high as 50 million tonnes a year, and is a growing component of the world's estimated annual output of 400 million tonnes of hazardous waste, only a small fraction of which is safely disposed.

Professor Wong will deliver his keynote address at the conference at 9.30am on Monday 16 September.

More information: www.cleanupconference.com/

Provided by CRC for Contamination Assessment and Remediation of the Environment

Citation: 'Save our kids from computer toxics' scientists warn (2013, September 16) retrieved 18 April 2024 from <https://phys.org/news/2013-09-kids-toxics-scientists.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.