

By: ~~October/2007~~, Science Editor

[Computer/Cellphone Recycling Boosts Cancer/Reproductive Issues Inducing Toxins in Mothers' Milk](#)

Developing countries and your PC

You replace your old computer with a new one annually, you do the same with your mobile phone even more often and you still breathe a fresh air. But your gadget wastes go to recycling places where people living nearby load their organisms with gadget toxins you have not even heard of. These include dioxins and furans, often found in women's breast milk, representing a huge threat to babies. Electronic waste recycling is a huge issue today, with the decreasing 'lifetime' of computers and the increasing number of cellphone owners. A report by China's State Environmental Protection Administration shows that 70% of the world's e-waste goes to China, because of the cheap labor and lack of enforcement of the regulations. There "recycling is often done by rudimentary methods," signals a new research led by Ming Wong of Hong Kong Baptist University. "Current recycling methods include burning wire piles to recover metals, melting circuit boards over coal grills ... and extracting metals in acid baths." said Wong. Most employees work without safety equipment, like respirators and they inhale freely the smoke, abundant in dioxins and furans. These chemicals provoke cancer and impair endocrine and reproductive systems, but few researches investigated the health of people living near e-waste recycling zones. The team investigated 20 women in their mid-20s from two different sites: a main e-waste recycling point in Taizhou, Zhejiang Province and Hangzhou, a city in the same province lacking recycling sites. Hangzhou inhabitants presented the same levels of dioxins as found in people from Ireland and Sweden, but in Taizhou dioxin levels represented some of the highest values worldwide. Women's breast milk had more than twice the concentration of the dioxin encountered in the control site and the level of toxins in the placentas was almost three times higher than in control subjects. The longer a woman had lived near the recycling site, the higher the dioxin concentration was and there was also the likelihood of experiencing a spontaneous abortion. "Though, that more research is needed to tell whether the elevated levels of dioxins are related to health problems." said Wong. "It's a bit circumstantial because there's no proof that the recycling causes the high levels of dioxins, but it's likely," said environmental chemist Gareth Thomas of Lancaster University, UK. "Countries have a responsibility to make sure their electronic waste is disposed of properly. We should only export [e-wastes] if they're going to be treated with the same standards that we would expect them to be treated here," he added. "The results indicate that there's a real problem. Richer countries that have ratified the Basel Convention - an international agreement concerning import and export of hazardous materials - are not supposed to export these materials to developing countries," said Sarah Westervelt of the Basel Action Network (BAN), a Seattle-based watchdog group. The US is the only developed country which refused to ratify the Basel Convention. Still, "we found plenty of [e-waste] from the UK both in Nigeria and China," said Westervelt. In fact, the issue could just move location from China to other developing countries. "The Chinese government has imposed tighter control, so the amount of electronic waste entering into mainland China has been decreased. However, the wastes are finding their way to other developing countries and we worry that the same mistake may be repeated."