

Title: Protocol for scoping review of electronic waste and public health outcomes.

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- **Abstract:** Electronic waste has been recently regarded as a global waste stream, with potentially harmful environmental and public health effects from its unsafe constituents. The exponential production and growth of electronic waste worldwide have been attributed to rapidly evolving technology, urbanisation, industrialisation, expanding population, and the ever-growing knowledge economy. In Africa, most countries meet the ever-increasing demand in the knowledge economy by importing cheaper secondhand electronic devices from better-resourced countries. Poor methods of managing obsolete and unrepairable electronic devices result in massive e-waste accumulation, whose increase negatively impacts the environment and human health. Electronic waste has widely been recorded to cause brain damage, congenital disabilities, allergic reactions, and cancer. The most vulnerable groups include older people, people with disabilities, pregnant women, foetuses, children, informal e-waste workers, and ewaste scavengers. Therefore, this scoping review aims to analyse up-to-date information on the impact of e-waste on public health and establish the drivers of e-waste exposure. The study's results will help raise awareness of e-waste to the general public and policymakers. Our recommendations may also promote a dialogue between researchers and users of the research findings to provide the much needed evidence to bridge the existing science-policy gap.
- **Keywords:** global waste stream, industrialization, , foetuses, electronic devices