

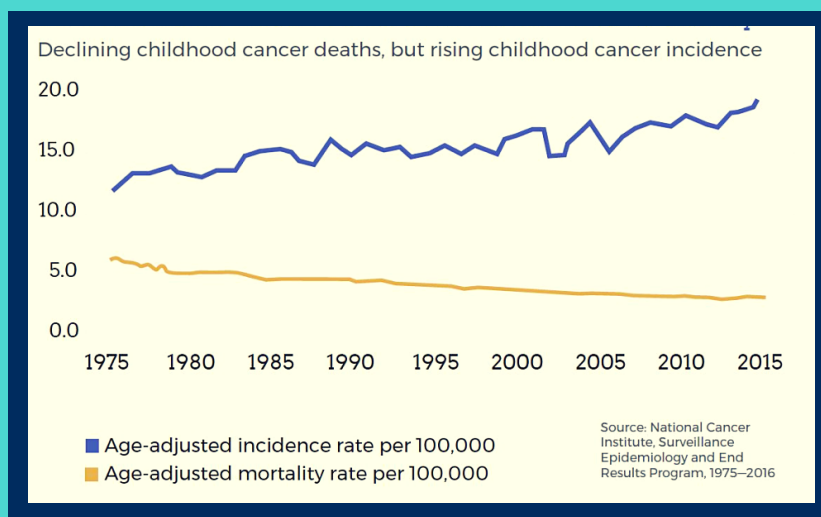
PREVENTING CHILDHOOD CANCER

Children are uniquely vulnerable to harm from exposures to environmental agents where they live, learn, and play. The American Public Health Association (APHA) Policy Statement on Children's Environmental Health urges all sectors of society to help protect children and minimize the risk of health impacts like childhood cancer.

KEY FACTS

- Cancer is the #1 disease-related cause of death for children.
- Over 16,000 U.S. children were diagnosed with cancer in 2019.
- The incidence of childhood cancer is increasing, especially among Latinos.
- Childhood cancer is increasingly recognized as a preventable disease.
- There is robust evidence that exposure to pesticides and being in close proximity to dense traffic and diesel emissions are linked to leukemia and brain cancers.
- Strong evidence links leukemia with solvents and paints, even when exposure occurs before conception.
- Other toxicants of concern include per- and polyfluoroalkyl substances (PFAS), polycyclic aromatic hydrocarbons (PAHs), and endocrine-disrupting chemicals.
- The average cost for one child with cancer is \$833,000.
- Children's physical, physiological, and behavioral traits can lead to increased exposures to toxic chemicals or pathogens.

- APHA's Policy Statement – [Protecting Children's Environmental Health: A Comprehensive Framework](#) – addresses children's environmental health risks and provides recommendations on how to protect them from harm.
- Limited access to social and economic opportunities and lack of quality resources can increase a child's vulnerability to toxicants and pathogens present in the environment.
- The timing and dose of environmental exposures are critical to the onset of childhood cancer. "Windows of susceptibility" or "critical windows of exposure" are developmental periods during which the unborn fetus, and then the child, is most vulnerable.
- Exposures implicated in cancer include diesel emissions, tobacco smoke, pesticides, solvents, off-gassing household furnishings and paints, and cleaning products.
- Exposures occur both inside and outside; outdoor contaminants from workplaces, lawns, or streets are often carried inside on shoes and clothing.
- The cost of environmentally mediated cancer in children was estimated at \$76 billion in 2008.



RECOMMENDED ACTION



Coordinated, comprehensive, and intentional efforts to reduce or eliminate environmental risks to children are a valuable investment in children's health and long-term development and in the well-being of future generations. Therefore, APHA urges agencies, public health practitioners, policymakers, community-based and environmental justice organizations, health economists, communication leaders, business leaders, and researchers to advance policy and planning activities that incorporate or address child protective measures in relevant legislation or public health priority-setting regulations in order to prevent childhood cancer.

Detailed action steps, more information, and references are available in the full [APHA Policy Statement](#).



RELEVANT STUDIES

Van Maele-Fabry G, et al. *Int J Hyg Environ Health* 2019;222(1):49-67; Bailey HD, et al. *Int J Cancer*. 2015;137(11):2644-63; Chen M, et al. *Pediatrics*. 2015;136(4):719-29; Maele-Fabry G, et al. *Environ Int*. 2017;106:69-90; Boothe VL, Am J Prev Med. 2014;46(4):413-422; Filippini T, et al. *J Environ Sci Health C Environ Carcinog Ecotoxicol Rev*. 2015;33(1):36-66; Carlos-Wallace FM, et al. *Am J Epidemiol*. 2016;183(1): 1-14; Metayer C, et al. *Environ Res*. 2016;151:174-183; Heck JE, et al. *Occup Environ Med*. 2019; 76(8):527-529; Spycher BD, et al. *Environ Int*. 2017;108:84-91; Peters S, et al. *Br J Cancer*. 2014;111(5):998-1003.

Access the full Policy Statement at <http://bit.ly/APHAcehPolicy>