



Preventing Malaria, Promoting Health Solutions Beyond DDT

The U.S. must support safe and sustainable approaches to malaria control in Africa and worldwide

Malaria kills more than a million people each year, with over 80% of the deaths occurring among children in sub-Saharan Africa.¹ The undersigned U.S. and African organizations applaud international efforts to mobilize the political will and resources to tackle malaria worldwide, and join our international partners in calling for a redoubling of these initiatives.

We call on the U.S. government to play a leading role in promoting effective malaria control that is safe for human health and the environment.

Prevention is crucial to malaria control, and effective programs are in place in many countries that combine a range of preventive approaches, including treated bed nets, selective use of indoor residual spraying, fish predators of mosquito larvae, improved sanitation, water drainage, public education, and surveillance of cases in malarial areas. Community-based integrated vector management, rather than reliance on a single tool, has proven the key to successful programs.²

Current advocacy for increased use of the pesticide DDT for indoor residual spraying in Africa is in danger of dominating the debate on prevention strategies. This can derail much needed progress to prevent malaria with the safest and most effective strategies.

The U.S. must support safe and effective malaria control strategies. The most successful malaria control programs combine a variety of strategies with community education, and require government commitment and political will. Vietnam reduced malaria deaths by 97% and malaria cases by 59% when it switched in 1991 from trying to eradicate malaria using DDT to a DDT-free malaria control program involving distribution of drugs and mosquito nets along with widespread health education organized with village leaders.³ A program in the central region of Kenya is focusing on reducing malaria by working with the rice-growing community to improve water management. The program also involves using livestock as bait, introducing biological controls, and distributing mosquito nets in affected areas.⁴ Mexico shifted away from DDT use with an integrated approach that combines early detection of malaria cases and prompt medical treatment, community participation in notification of malaria cases, cleaning of streams and other sites where mosquitoes breed, and low-volume chemical control with pyrethroid and other less toxic pesticides as part of a resistance management strategy.⁵ These and many other examples demonstrate the effectiveness of integrated malaria control approaches.

Reliance on DDT is not the most effective way to fight malaria. Relying on a single tool to combat malaria is not the most effective approach. The malaria eradication programs of the 1950s and 1960s helped to control the disease in many places, but wiping out malaria with DDT proved an unrealistic goal. One of the many reasons for the failure of this effort was resistance to DDT among malaria-carrying mosquitoes.⁶ Resistance will continue to be a problem.

Malaria control programs that rely on DDT put communities at risk. Scientific research shows that low-level DDT exposure can harm human health. Studies have linked a wide range of human health impacts with environmental exposures to DDT and its break-down product dichlorodiphenyldichloroethylene (DDE). These include:

- premature delivery and reduced infant birth weight⁷
- miscarriage⁸

- neurological effects, including developmental delays, among babies and toddlers exposed to DDT in the womb⁹
- reduced breast milk production¹⁰
- a higher incidence of undescended testes¹¹
- poor sperm quality¹²
- nervous system impacts due to occupational exposure to DDT¹³
- liver impacts due to occupational exposure to DDT.¹⁴

The International Agency for Research on Cancer also lists DDT as a possible human carcinogen.¹⁵

Communities around the world are affected when DDT is used for malaria control. In addition to those communities where malaria control programs are in place, the indigenous peoples of the Arctic region face ongoing contamination of their traditional foods, bodies, and environment by DDT carried to the Arctic by wind and water, and are concerned by calls for increased use of this persistent chemical.¹⁶ DDT use for malaria control also increases the burden on communities living near production plants. A DDT factory in the Eloor-Edayar region in India has a long record of contaminating the environment, including rivers. The local community is now protesting their poisoning as a result of emissions from this factory.¹⁷ In communities throughout Africa, new DDT use adds to exposure from old stockpiles that are not properly contained or controlled. The Food and Agriculture Organisation of the United Nations estimates there are more than 100,000 tons of obsolete pesticide stockpiles in Africa, mostly older chemicals such as DDT.¹⁸

The world community has agreed to phase out DDT in an international treaty. We strongly support the Stockholm Convention on Persistent Organic Pollutants' call for the ultimate elimination of DDT, while allowing short term use of this persistent and bioaccumulative pesticide in countries that demonstrate an immediate need. The treaty also calls on the international community to mobilize resources to help put safer and more effective alternatives in place. The 143 governments around the world that are parties to the Stockholm Convention have endorsed this approach.¹⁹

We, the undersigned, call on the U.S. government to actively promote safe and effective malaria control that protects children and families around the world.

Africa Network for Animal Welfare, Kenya
 AGENDA for Environment and Responsible Development, Tanzania
 Advocates for Environmental Human Rights
 Alaska Community Action on Toxics
 Beyond Pesticides
 Black Family Land Trust
 The Black Leadership Forum
 Boat People SOS, Inc
 Breast Cancer Fund
 California Safe Schools
 Center for Biological Diversity
 Center for Food Safety
 Center for International Environmental Law
 Center for Reflection, Education and Action, Inc.
 Circumpolar Conservation Union
 Citizens Environmental Coalition
 Clean New York
 DC ACORN

Department of Planet Earth
Earth Day Network
Earth Justice
Ecology Center
Environmental Defense
Environmental Health Fund
Environmental Justice Resource Center
Florida Consumer Action Network
Food & Water Watch
Global Toxics Policy Project, University of Illinois at Chicago School of Public Health
Ground Works USA
Indiana Toxics Action Project
Indigenous Environmental Network
Indigenous Women's Network
International Center for Technology Assessment
International Indian Treaty Council
Land Loss Prevention Project
Kentucky Environmental Foundation
Maryland Pesticide Network
National Association for the Advancement of Colored People
National Hispanic Environmental Council
Native Movement
New York Lawyers for the Public Interest, Inc
Occidental Arts and Ecology Center
Parents for a Safer Environment
Pesticide Action Network Africa
Pesticide Action Network North America
Pesticide Education Project, North Carolina
Physicians for Social Responsibility – Kenya
Physicians for Social Responsibility – US
Pro-biodiversity Conservationists in Uganda (PROBICOU)
Rainbow PUSH
Redefining Progress
REDOIL, Alaska
Science and Environmental Health Network
Sciencecorps
Sierra Club
South Texas Colonia Initiative, Inc
Urban Semillas
Washington Toxics Coalition
William C. Velasquez Institute

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¹⁹ For a current list of signatories to the Stockholm Convention, see www.pops.int.