WWF's Efforts to Phase Out DDT

While banned decades ago in industrialized countries, thousands of tons of the deadly pesticide DDT are still produced each year, causing health and environmental hazards in the U.S. and throughout the world because of its long life and ability to travel great distances. Currently, DDT's only official use, as specified by the World Health Organization (WHO), is for the control of disease vectors in indoor house spraying – although other (illegal) uses are suspected. Because of the availability of safer and effective alternatives for fighting malaria, WWF is calling for a global phaseout and eventual ban on DDT production and use.

Due to the well-documented hazards of DDT, WWF has been involved in a special effort to inform, educate, and convince the public and policymakers about the dangers of DDT and the need to phase out and ban its use. Because DDT can travel long distances and accumulate in the body, millions of humans and animals worldwide have buildups of the chemical in their tissue, even though it may have been used on another continent. WWF-supported research, for example, has found that black-footed albatrosses on Midway Island are contaminated with DDT, as well as PCBs and dioxins. There are no known uses of these chemicals on Midway Island, which is located 3,100 miles from Los Angeles and 2,400 miles from Tokyo. Further studies have linked DDT to feminization and altered sex-ratios of gulls, and eggshell thinning in birds of prey.

As a part of the effort to raise awareness about the threats associated with DDT and the available, viable alternatives, WWF has issued a series of reports on DDT. The first report, "Resolving the DDT Dilemma," released in June 1998, notes that DDT is linked to effects in animals or humans such as reduced lactation and reproductive problems. Thousands of tons of DDT are produced each year in at least three countries and it is legally imported and used in many more.
"Resolving the DDT Dilemma" offers a framework to guide malaria control programs toward reduced reliance on all pesticides, and a 'tool kit' of alternative techniques, along with several recommendations including:

- DDT should be phased out of use and ultimately banned;
- Targeted programs emphasizing reduced reliance on pesticides and better environmental protection should be developed by WHO, World Bank, UNEP, and other multilateral and bilateral assistance agencies;
- Adequate financial and technical resources must be provided to undertake integrated vector management programs;
- Research is needed on the hazards from chronic exposure to synthetic pyrethroids being used as alternatives to DDT for indoor spraying and to impregnate bednets.

WWF's second DDT report, "Hazards and Exposures Associated with DDT and Synthetic Pyrethroids used for Vector Control," finds sufficient scientific evidence of hazards to human health and wildlife to justify a global ban on the production and use of DDT.

This report summarizes the current state of knowledge regarding the health and environmental effects of DDT and its most popular alternative -- synthetic pyrethroids. It dramatically illustrates the persistence and pervasiveness of DDT.

Some of the more recent scientific findings summarized in the report include damage to the developing brain, causing hypersensitivity, behavioral abnormalities and reduced neural signal transmission, and suppression of the immune system resulting in slower response to infections. Investigations in Mexico and South Africa reveal that human breast milk contains DDE (the breakdown product of DDT) at concentrations that exceed the acceptable guidelines for infant intake set by the WHO.

The third report released by WWF, "Disease Vector Management for Public Health and Conservation" demonstrates that a variety of innovative mechanisms can control malaria and other diseases just as effectively as DDT. These alternatives are less harmful to the environment and human health. Detailed case studies in six areas – Africa (Botswana, Tanzania, and Western Africa), India, the Philippines, and Mexico – focus on a variety of alternative techniques. They include pesticide-impregnated bednets (which reduce the need for indoor spraying); odor-baited cloth targets to attract and destroy disease-carrying insects; lower-risk pesticides used in rotation to avoid the development of resistance; and widespread elimination of mosquito breeding grounds and introduction of natural predators.

WWF initially called for a global phaseout and eventual ban on DDT production and use by the year 2007, together with financial and technical assistance to the developing world. The 2007 deadline was intended as a motivational tool to encourage the necessary financial and technical assistance. The proposal of a 2007 deadline drew considerable public attention to the scope of the world's malaria problem and the need to implement alternatives to DDT. However, it also raised fears that DDT would be phased out without sufficient guarantees of protection of public health from malaria. To allay these
fears, WWF has set aside discussion of the 2007 deadline, while retaining its commitment to eliminating DDT. Both the UNEP and WHO recognize that such elimination can be a "win-win" situation for public health and environmental protection. (Read the press releases from WHO and UNEP.

**DDT and the POPs Treaty**

In December 2000, over 120 countries finalized a treaty to phase out persistent organic pollutants (POPs), a dangerous class of chemicals that includes DDT. WWF welcomed this historic agreement which involved provisions for phasing out DDT, while still allowing for its continued limited use for malaria control.

Evidence continues to accumulate about the dangerous health effects associated with DDT. The treaty provisions appropriately balance the need to reduce these hazards while promoting stronger malaria control programs. The accord states that "with the goal of reducing, and ultimately eliminating the use of DDT," individual countries may continue to use the chemical for controlling malaria. However, these countries will also be encouraged to prepare national implementation plans to reduce their reliance on DDT.

Specifically, the national plans would promote methods for reducing illegal uses of DDT, such as agricultural applications. Countries would also identify steps to implement alternative approaches and promote measures that strengthen health care and reduce the incidence of malaria. The parties to the treaty will periodically review the status of alternative approaches to determine whether DDT is still needed or whether it can be eliminated completely.

For more information on the UNEP-sponsored global POPs treaty negotiations, visit "Global POPs Treaty Talks."

*Next: Reading List*