

WHO and DDT for malaria control - June 2009

The WHO position on the use of DDT for malaria control remains unchanged. WHO still supports the use of DDT for malaria control, wherever this choice of insecticide is justified by considerations of cost-effectiveness and insecticide resistance, and provided that WHO guidelines are followed strictly. DDT is still needed and used for disease vector control simply because in some places there is no alternative of equivalent efficacy and operational feasibility¹.

WHO is facing a double challenge – a commitment to the goal of drastically and sustainably reducing the burden of vector-borne diseases, in particular malaria, and at the same time a commitment to the goal of reducing reliance on DDT in disease vector control, in line with the Stockholm Convention which entered into force in May 2004. The Convention bans the use of DDT for all other purposes, but recognizes that there are situations in which the use of DDT remains necessary for effective malaria control, and it permits such usage according to WHO guidance. It states that reducing and ultimately eliminating the use of DDT remains the eventual goal, and Parties to the Convention support pilot projects to develop and demonstrate DDT-free methods of malaria control². There is, therefore, no contradiction between WHO's support for the present use of DDT for malaria control, and the development of DDT-free methods of malaria control for the future.

Scientific evidence on the toxicity of DDT and its metabolites is kept under review by WHO and is currently being assessed formally³. To date, no change has been warranted in the existing WHO recommendations on the use of DDT for indoor residual insecticide spraying³ (IRS) for vector control.

The Global Malaria Action Plan⁴ recommends universal vector control coverage for populations at risk of malaria. Rapid progress is now being made towards that goal, partly through the extension of IRS, but mainly through massive scaling-up of the free distribution of long-lasting insecticide-treated nets (LLINs). IRS and LLINs are both effective, but they are not equivalent. They have different operational advantages and disadvantages, and the choice depends on the circumstances. For example, LLINs are relatively easy to manage as a technology, whilst IRS has rapid impact, and can be targeted to follow shifting foci of transmission. Exactly the same applies to choosing an insecticide for IRS: there is a range of options, including DDT. Some countries rely on DDT because the vectors have evolved resistance to alternatives. All this is part of "integrated vector management" – the process of designing vector control adapted to, and optimized for, a particular place and time⁵.

Despite conflicting pressures and media controversy concerning the use of DDT, WHO has maintained a consistent and balanced position: DDT should be used only for vector control, only if it is needed, and always according to WHO guidance... but it is still needed to control malaria in some cases, and in these cases it should be used.

1. The use of DDT in malaria vector control, WHO/GMP position statement 2007
http://www.who.int/malaria/publications/atoz/who_htm_gmp_2007/en/index.html
2. Stockholm Convention on Persistent Organic Pollutants, Annex B.
http://www.who.int/malaria/publications/atoz/who_htm_rbm_2004_55/en/index.html
3. Strengthening malaria control while reducing reliance on DDT, WHO/PHE, 2007
http://www.who.int/ipcs/capacity_building/ddt_statement/en/index.html
4. <http://www.rollbackmalaria.org/gmap/gmap.pdf>
5. http://whqlibdoc.who.int/hq/2008/WHO_HTM_NTD_VEM_2008.2_eng.pdf