



United Nations
Environment
Programme



Distr.
GENERAL

UNEP/POPS/INC.6/INF/26
14 June 2002

ENGLISH ONLY

INTERGOVERNMENTAL NEGOTIATING COMMITTEE FOR AN
INTERNATIONAL LEGALLY BINDING INSTRUMENT
FOR IMPLEMENTING INTERNATIONAL ACTION ON
CERTAIN PERSISTENT ORGANIC POLLUTANTS

Sixth session

Geneva, 17-21 June 2002

Item 3 of the provisional agenda*

REVIEW OF ONGOING INTERNATIONAL ACTIVITIES
RELATING TO THE WORK OF THE COMMITTEE

World Health Organization progress report on activities
related to the reduction and/or elimination of persistent organic pollutants

Note by the secretariat

Attached to the present note is information provided by the secretariat of the World Health Organization. The information has been circulated as submitted and has not been formally edited.

* UNEP/POPS/INC.6/1.

K0280177 140602

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**WHO PROGRESS REPORT
ON ACTIVITIES RELATED TO**

**THE REDUCTION AND/OR
ELIMINATION OF PERSISTENT
ORGANIC POLLUTANTS**

13 June 2002

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WHO PROGRESS REPORT ON ACTIVITIES RELATED TO THE REDUCTION AND/OR ELIMINATION OF PERSISTENT ORGANIC POLLUTANTS

Submission of the World Health Organization
to the 6th Session of the Intergovernmental Negotiating Committee
of the Stockholm Convention on Persistent Organic Pollutants (Geneva, 17–21 June 2002)

1. WHO policy and programmes

The work of the World Health Organization towards the goals set by the Stockholm Convention on Persistent Organic Pollutants (POPs) continues to be guided by World Health Assembly Resolution WHA50.13 on the Promotion of chemical safety, with special attention to persistent organic pollutants.

A number of WHO Member States still rely on DDT, one compound among the group of 12 POPs covered under the Stockholm Convention (May 2001), for indoor residual spraying to interrupt transmission of malaria and other vector-borne diseases. One Member State has had to revert to DDT for malaria control, mainly because of the emergence of resistance against alternative insecticides. The advice of WHO to Member States relying on DDT for malaria control is based on the recommendations made by a WHO Study Group in 1993¹ and by the WHO Expert Committee on Malaria in 1998.²

Following the adoption and opening for signature of the Convention on POPs in Stockholm on 23 May 2001, WHO published its *Action plan for the reduction of reliance on DDT in disease vector control*.³ The plan provides a strategic framework for action.

This progress report first highlights WHO activities related to POP chemicals in general. It then goes on to focus on progress in the implementation of the WHO DDT Action Plan.

2. Progress in POPs-related activities in general

The text of the Stockholm Convention was distributed to relevant WHO staff at regional and country office levels. Special reference was made to the sections dealing with DDT.

The **Programme on Chemical Safety** initiated a project on the Epidemiology of Pesticide Poisoning — a Harmonized Collection of Human Data. The project aims to estimate the extent of human exposure and poisoning by pesticides in selected regions or countries. Particular emphasis is given to improving the surveillance of pesticide exposure. The data collected will also be used to support estimates of global disease burdens.

¹ *Vector control for malaria and other mosquito-borne diseases. Report of a WHO Study Group*. Geneva, World Health Organization, 1995 (WHO Technical Report Series No. 857).

² *Twentieth report of the WHO Expert Committee on Malaria*. Geneva, World Health Organization, 2000 (WHO Technical Report Series No. 892).

³ *Action plan for the reduction of reliance on DDT in disease vector control*. Geneva, World Health Organization, 2001 (document WHO/SDE/WSH/01.5).

Activities related to the reduction and/or elimination of POPs

WHO has initiated a joint project with the EU on risk assessment of non-dioxin-like PCBs in food and rapid assays for dioxins and related compounds. Poison information monographs (PIMs) have been prepared on the POPs chemicals for the INCHEM and INTOX CDs. They are available on the web at www.inchem.org.

The WHO **Food Safety Programme** is active in various aspects of POPs management. WHO, along with FAO, serves as the Secretariat for the Codex Alimentarius Commission, which implements the Joint FAO/WHO Food Standards Programme. In particular, the Codex Committee on Pesticide Residues periodically reviews maximum limits for several POPs in food commodities, including aldrin, dieldrin, chlordane, DDT and endrin in food commodities. In addition, the Codex Committee on Food Additives and Contaminants is considering the establishment of maximum limits for dioxins, dibenzofurans and dioxin-like PCBs in food and animal feed as well as source-directed measures for reducing emissions and contamination of food.

WHO also implements the **Global Environment Monitoring System/Food Contamination Monitoring and Assessment Programme** (GEMS/Food), which has taken lead role in monitoring of POPs in food. GEMS/Food, which maintains links to UNEP, FAO, IAEA and IPCS, is the most important global monitoring programme with relevance to POPs. Last year GEMS/Food began a collaboration with UNEP Chemicals to respond to Article 16 of the POPs Convention, which requires the monitoring of changes in POPs levels in the environment (food) and humans (breast milk) as a result of implementation of the provisions of the Convention.

GEMS/Food, which was established in 1976, has an extensive database on levels of POPs in many foods collected over the past two decades. In addition, GEMS/Food is supporting the development of regional total diet studies to assess exposure to contaminants in foods as consumed. Most of the 12 POPs will be included in these studies. An international workshop on total diet studies was held in Brisbane in February 2002, and will be followed by regional workshops in Buenos Aires in July 2002 and in Prague in December 2002.

Perhaps most important for monitoring of POPs, GEMS/Food in cooperation with the WHO Region for Europe has conducted two studies (with a third in progress) on levels of dioxins, dibenzofurans and dioxin-like PCBs in human breast milk, which provides an indicator of total integrated human exposure to these substances. Recently GEMS/Food has modified the third study to include examination of the levels of other POPs in breast milk in order to establish reliable baseline data. This will supplement existing GEMS/Food data on POPs, in particular DDT, in breast milk, which dates back many years. Several developing countries are participating in this study. A study in China to assess the use of levels of POPs in earwax to monitor the body burden of these substances is under discussion. This would allow large-scale assessment of children and men.

WHO held a conference in South Africa (Cape Town, 24–27 July 2001) to raise awareness in the health sector about chemical safety issues, including POPs, and to promote the active participation of the sector in national chemical safety programmes.

Incineration of healthcare waste is a major known source of dioxins and furans in many countries. The WHO **Water, Sanitation and Health** unit, together with UNDP and the NGO Health Care Without Harm have submitted a proposal to the Global Environment Facility (GEF) for developing a number of regional healthcare waste management demonstration projects. Such projects will aim at promoting better waste management (e.g. segregating wastes) and at introducing alternative non-incineration treatment technologies to significantly reduce the production and release of dioxins and furans.

3. Progress in the implementation of the WHO action plan for the reduction of reliance on DDT in disease vector control

Immediately after the adoption of the Stockholm Convention, the Director-General of WHO wrote to executive heads of UN agencies and presidents of multilateral development banks drawing their attention to the need to consistently refer to and apply WHO guidance on the public health use of DDT in any assistance to Member States concerning vector control activities.

Shortly afterwards, the *WHO action plan for the reduction of reliance on DDT in disease vector control* was published. It provided a framework for action in five key areas: country needs assessment; safe management of DDT stockpiles; institutional research network; monitoring; and advocacy. The Action Plan was widely distributed to WHO regional offices, Member States, other UN organizations and multilateral development banks. It has been posted on the Roll Back Malaria website <http://rbm.who.int>.

In the remainder of this progress report, activities are grouped under the five key areas of the Action Plan.

3.1 Country needs assessment

Based on a technical consultation in March 2001, WHO developed guidelines for vector control needs assessments. The draft guidelines are expected to be field tested in the second half of 2002 in five malaria-endemic countries, and completed in early 2003.

In collaboration with FAO and UNEP Chemicals, a guidance document on alternative strategies for sustainable pest and vector management has been produced. *Reducing and eliminating the use of persistent organic pesticides* will be launched at INC-6.

In order to meet the needs of Member States, a manual on alternative insecticides for indoor residual spraying against malaria vectors has been developed and widely distributed. A manual and training course on decision-making criteria and procedures for judicious use of insecticides is under preparation as well as guidelines for pesticide management in public health.

A Regional Consultation to prepare African countries towards reduction of reliance on DDT for malaria control (Harare, 8–10 February 2000) resulted in a number of recommendations, including one to WHO and its partners to “ensure that the necessary technical and financial support is available to Member States for implementation of integrated, evidence-based and cost-effective vector control programmes to ensure a sustainable reduction of the malaria burden,” and to “support investments in research to develop new, affordable, cost-effective and sustainable vector control methods including effective and affordable alternative insecticides”.

In response, the Regional Director of the WHO Region for Africa wrote to the ministers of health of countries relying on DDT for malaria control (Eritrea, Ethiopia, Madagascar, Namibia, South Africa and Swaziland) and suggested that a proposal be developed for submission to the GEF.

All six countries responded positively. WHO, with the support of the GEF Secretariat, initiated the proposal development process. All countries have endorsed the proposed project and final approval by the Project Development Fund (PDF) is expected from its governing body, the GEF Secretariat, shortly.

Similarly, in the WHO Region for the Americas, a key development has been the formulation and adoption of a project in the Mesoamerican subregion, comprising Mexico and the central American countries, which proposes development, demonstration and application of vector control techniques as alternatives to DDT and other pesticides. Financial support for this project is provided by the World Bank/UNEP Global Environmental Facility.

Although no actual needs assessment has been conducted in countries of the WHO Region for the Eastern Mediterranean, every year the regional office receives country needs and usage of insecticides for public health use. For example, since 1998 none of the countries in the region reported using DDT, with the

Activities related to the reduction and/or elimination of POPs

exception of Morocco (600 kilograms of DDT were used in 2001, exclusively for indoor residual spraying for malaria control). Sudan, earlier listed as still relying on DDT, stopped using the compound after the 1998/1999 transmission season.

3.2 Safe management of DDT stockpiles

A majority of the 21 countries of the WHO Region for the Americas where malaria is endemic no longer use DDT for malaria control. Some countries that no longer use DDT maintain stocks, while others, where the disease burden continues to be high, are still inclined to depend on DDT in disease vector control.

The WHO Region for the Western Pacific worked with the Government of Papua New Guinea (PNG) on a plan to dispose of their old DDT stockpiles. This plan was eventually abandoned. The Government of PNG is now working with the Australian bilateral agency, AusAID, to export the old stockpiles. WHO is also in the process of making detailed risk maps of the highlands of PNG as a first step towards a targeted approach to residual house spraying, probably with DDT.

3.3 Institutional research network

The search for alternative insecticides and technologies for malaria vector control and personal protection is being pursued and accelerated as an ongoing activity in close collaboration with industry and other partners under the WHOPES programme (WHO Pesticide Evaluation Scheme).

A rapid assessment of the malaria situation was done in Menoreh Hills, Central Java, Indonesia, with the objective of identifying vector control options that would contribute to a reduced reliance on insecticides. The report of this assessment was published in April 2002 and submitted to the Indonesian authorities.⁴

In the WHO Region for the Eastern Mediterranean, implementation of integrated vector management (IVM) has been adopted as a regional approach to communicable disease control. A Regional Consultative Meeting was held in February 2002 to chart the way forward. Important progress has been made in developing, testing and implementing sustainable, environmentally safe and cost-effective alternatives for vector control. Replacement of DDT by synthetic pyrethroids has been almost completely achieved, and several countries have shown a strong promotion of insecticide-treated mosquito nets (Afghanistan, Somalia, Sudan and Yemen). Moreover, larval control through the use of larvivorous fish is being promoted. A regional manual/guidelines on this subject is about to be published.

The WHO Region for Africa organized a workshop for policy-makers in February 2001 and IVM was adopted as the strategic approach to vector control. WHO headquarters also held a meeting of Regional Advisers for Vector Biology and Control (VBC) to develop a global strategic framework for VBC with IVM as a key component.

3.4 Monitoring

A database has been developed at WHO headquarters to monitor the use of DDT and alternative insecticides in vector control.

As part of the support to Member States in the WHO Region for the Eastern Mediterranean, there are plans to establish a network to collect information on insecticide use and to promote safe use of insecticides. The regional office continues to inform ministries of health and, through them, the general public on the role of DDT in public health. Governments are encouraged to include insecticide resistance monitoring in their vector control activities, in order to ensure a cost-effective and judicious use of insecticides.

⁴ Nalim, S et al. *Rapid Assessment of correlations between remotely sensed data and malaria prevalence in the Menoreh Hills area of Central Java, Indonesia*. Geneva, World Health Organization, 2002 (document WHO/SDE/WSH/02.06).

Data on DDT use are received on an annual basis by the WHO Region for South-East Asia. The most recent information indicates that Thailand is phasing out the use of DDT for malaria control (mainly in refugee camps along its western border). Thailand stopped purchasing DDT in 1996; vector control authorities are using 75% WP, conduct quality control testing, and have approximately 150 tonnes in stock (1998). Myanmar received a donation of DDT from Thailand and had about 10 tonnes in stock in 1998. India has no clearly defined strategy on DDT stockpile management, and reported having 5800 tonnes of stock in 1998. India uses 50% WP, HCH and Lindane for indoor residual spraying for malaria control. Bangladesh still uses DDT, mainly for the control of visceral leishmaniasis. In 1998 it declared DDT stockpiles amounting to 94 tonnes.

3.5 Advocacy

In the WHO Region for the Americas, the use of epidemiological tools in planning and implementing interventions is the basis of selective vector control in combating malaria. Community participation and the rational use of insecticides are among the aims of the global malaria control strategy launched in 1992, which represented a shift away from the eradication strategy and its related total coverage spraying operations. The Roll Back Malaria initiative, launched in 1998, has provided further impetus to control efforts.

4. Useful contacts at WHO

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