

Doctors seek stronger chemicals regulation to prevent cancer

Testicular cancer, childhood cancers, congenital malformations, neurodevelopmental disorders and sterility have all become more common in the past 20 years. With evidence that man-made chemicals are contributing to this rapid growth in serious health problems, a powerful alliance of doctors and scientists is calling for more effective European regulation of chemicals. Génon Jensen reports.

Top international doctors and scientists meeting in Paris have called for more effective European regulation of pesticides and other chemicals known to cause cancer, congenital malformations, neurodevelopment disorders and sterility.

The meeting at UNESCO on Thursday 9 November 2006, entitled 'Environment and Sustainable Health: An international assessment'¹, has produced a powerful plea to the authorities in Brussels.

The so-called 'Paris Appeal Memorandum' says that if the environment is to be made sustainable for health, EU chemical safety legislation, known as REACH, must be strengthened, and an overhaul of current European pesticide regulation is urgently needed. It also calls for greater support for initiatives that are already successfully contributing to a healthier environment, such as 'green chemistry', which identifies and markets safer substitutes, and support for organic agriculture.

The Memorandum represents the logical follow-up to the Paris Appeal (see box below), which was developed at a previous scientific colloquium at UNESCO in 2004. The Paris Appeal recognised the rapid increase in the incidence of some diseases, including cancer, as a direct consequence of deterioration in the environment. Since then, many thousands of scientists, professionals, non-governmental organisations and individuals have signed up. Signatories include Nobel Prize winners and more than 1,500 non-governmental organizations. As

the list of signatories grew longer, it became increasingly clear that the next step was to develop practical recommendations with which to address different authorities.

The leading force behind the Paris Appeal process is Professor Dominique Belpomme, a French professor of oncology and founding director of ARTAC, the Association for Research and Treatments Against Cancer. Welcoming participants to the November 2006 meeting, he reminded them of the rapidly rising incidence of some cancers, including testicular cancer and cancer in children during the past twenty years (see figure 1).

'One in four cancer cases is related to tobacco; the rest are linked to other causes, notably mutations provoked by environmental factors, primarily chemical,' he told the audience of more than 500 people. 'The Memorandum to the Paris Appeal is aimed at action for the environment and sustainable health.'

Powerful alliances

Over the years, emerging environmental health sciences and the environment and health movement have attracted high-level and rapidly growing support. One of the speakers at the conference was Daniel Mart, President of the Standing Committee of European Doctors. His presentation described why his membership of more than two million medical doctors decided to support the Paris Appeal.

To further strengthen the movement, Professor Belpomme invited two major



Génon Jensen, Health and Environment Alliance, says the principle of substitution is vital if REACH is to improve the protection of human health

Photo: ARTAC

international health and environmental networks to be partners in the organisation of the meeting².

The European umbrella non-governmental organisation, the Health and Environment Alliance (HEAL), of which ARTAC is a member, aims to improve health through public policy that promotes a cleaner and safe environment. HEAL represents 50 organisations, several of which presented examples of successful community action in preventative environmental action for health. The US-based Collaborative on Health and the Environment helped ensure the key US health and environment scientists became involved.

For example, John Peterson Myers³, co-author of 'Our Stolen Future', which explores the scientific basis of concern for how contamination threatens foetal development, gave the introductory presentation. He said that a recent key scientific discovery was that 'Some contaminants can alter gene behaviour at extremely low doses.' He gave the example of early exposure to bisphenol A, frequently found in baby bottles, and the risk of prostate cancer later in life. He said that the good news was that by strengthening health standards, major progress could be made in preventing hormone-related cancers, autism, certain degenerative diseases, asthma and infertility.

Key concerns

Particular attention was given to the special vulnerability of children and the unborn child. Vyvyan Howard, a UK professor of toxicology, said that the effects of toxic molecules could be magnified on a developing foetus. French endocrinologist Charles Sultan made the links between pesticides and congenital malformations. Sascha Gabizon of Women in Europe for a Common Future described a commitment by 52 European governments of the wider

The Paris Appeal

Agreed at an international meeting in May 2004, the Paris Appeal has now been signed by more than 1,000 scientists, around 1,500 NGOs, and more than 250,000 citizens.

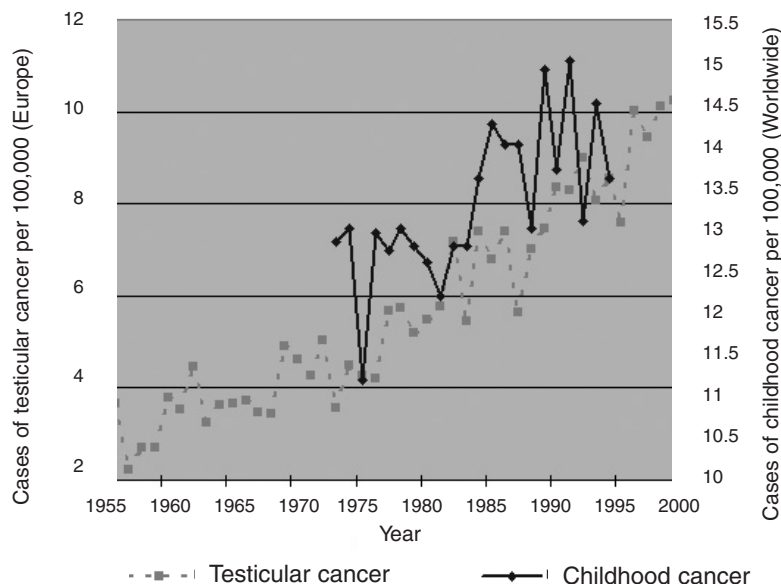
Article 1 : The development of numerous current diseases is a result of the deterioration of the environment.

Article 2 : Chemical pollution represents a serious threat to children and to the survival of mankind.

Article 3 : Not only is our own health and that of our children and future generations under threat, the very existence of the human race itself is in serious danger.

Full text of the Paris Appeal is available for signature in English and other languages at <http://www.artac.info/WelcmeARTAC2006en.html>

Figure 1. Increasing incidence of testicular and childhood cancer



WHO European region to making progress in reducing children's exposure to chemicals⁴. One of her organisation's current concerns is helping women contribute to the debate on REACH, the European Union chemical safety legislation.

The most urgent recommendations from the meeting are calls for stronger health standards in REACH. Génon Jensen, Executive Director of the Health and Environment Alliance, says special attention needs to be given to stimulating alternatives to harmful chemicals and believes this should be achieved through support for the substitution principle. 'If REACH is to improve the protection of human health and the environment beyond what currently exists, the principle of substitution must be firmly integrated into this chemical safety framework,' she said.

The Memorandum to the Paris Appeal from the recent meeting echoes this message calling for the reinforcement of REACH. Specific recommendations include the withdrawal from the market of carcinogenic, mutagenic and reprotoxic (CMR) chemical substances (through REACH) and a withdrawal of organobrominated products; marketing authorisation for pesticides, food additives and cosmetics following a regulatory process comparable to the one used for medicines; and a planned decrease in the use of pesticides in agriculture through reform of the Common Agricultural Policy. The Memorandum also includes recommendations on waste, research priorities, ecology education and environmental medicine.

Participants at the Paris meeting agreed that the most important task ahead of them was successful collaborative action. The Memorandum of the Paris Appeal would help them convince politicians and the public of the need for policies compatible with 'sustainable health'.

1. The conference programme is available at www.artac.info
2. Meeting organisers: The Association for Research and Treatments Against Cancer (ARTAC) is an independent, private, non-profit scientific organization, coordinating research through a network of international scientific experts. The Health and Environment Alliance is an

international non-governmental organization advocating for an environment that improves people's health and well being. It acts as a European platform for diverse local and European groups. The Collaborative on Health and the Environment (CHE) is a diverse partnership network of individuals and organizations working collectively to advance knowledge and effective action to address growing concerns about the links between human health and environmental factors. www.healthandenvironment.org

3. John Peterson Myers is the founder and CEO of Environmental Health Sciences, an organization engaged in advancing public understanding of environmental links to health. It published three websites that track issues in environmental public health: www.EnvironmentalHealthNews.org; www.OurStolenFuture.org and www.ProtectingOurHealth.org. He is author of 'Our Stolen Future' (1996) along with Dr. Theo Colborn and Dianne Dumanoski.

4. Budapest Declaration 2004 agreed at the Fourth Ministerial Conference on Environment and Health is available at www.euro.who.int/budapest2004. Documentation on this page also includes the Children's Environment and Health Action Plan.

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Scientists calls for more analysis of pesticide impacts in Africa

From 16-20 October 2006 over 200 scientists, researchers, regulators and non-government organisations gathered in Arusha, Tanzania, at an international scientific conference on pesticides, the environment and public health in developing countries¹. While participants broadly acknowledged the contribution that pesticides make to food security, public health and migratory pest control, they also expressed significant concerns about pesticide impacts, particularly where resources for control are limited. They highlighted the inadequate resources for African scientists in particular to conduct systematic studies for monitoring and surveillance on the effects of pesticide use on health and the environment.

A number of presentations focused on the proposals to increase the use of DDT for malaria-vector control in Africa. Dr Bornman from the University of Pretoria presented evidence to suggest a link between hypospadias and cryptorchidism, male uro-genital anomalies that seem to be on the increase in areas where DDT has been used. Several presentations addressed problems of obsolete pesticides. Results of a 2004 study in Sudan found 1264 tonnes of POPs pesticides, 10,000 tonnes of contaminated soil and 740 tonnes of containers. The African Stockpile Programme presentations and posters provided progress reports, and addressed questions about its project opera-

tions, disposal technology, and prevention.

Overall, 150 contributions presented toxicological, scientific and research-based evidence to enable discussions on pesticide impacts on public health, the environment and wildlife in developing countries. Papers ranged from pesticide residues and trade to benefits of biomarkers, and from integrated pest management to preventing problems associated with pesticides throughout the life cycle stages of import, distribution, storage, use and disposal.

The reality of pesticide research, regulation and control in Africa underpinned many of the presentations, and the need for improved resources and infrastructure on the continent was widely acknowledged. African scientists and researchers face problems of under-equipped laboratories for testing pesticide impacts; lack of access to up-to-date publications; and shortage of funds to participate in international conferences. They urgently need stronger links for exchanging information on pesticide analysis within the continent. (BD)

1. International Conference on Pesticide Use in Developing Countries: environmental fate, effects and public health implications, organised by the African Network for the Chemical Analysis of Pesticides (ANCAP), and the Society of Environmental Toxicology and Chemistry (SETAC) Africa Branch, Arusha, Tanzania, 16-20 October 2006. www.ancap.org/ANCAP-SETAC.html