



INTERNATIONAL CONFERENCE ON  
**Environmental and Occupational  
Determinants of Cancer:**  
Interventions for Primary Prevention  
ASTURIAS (AVILÉS AND GIJÓN), SPAIN



**World Health  
Organization**

## **1. BACKGROUND AND RATIONALE:**

Cancer is the second most common cause of death worldwide, after cardiovascular diseases. In 2008, 12.7 million new cases of cancer and 7.6 million deaths due to cancer were reported worldwide. Cancer can impose long-term suffering on those affected and their families and has important social and economic impacts. Moreover, as populations gain increased longevity, the burden of cancer is predicted to increase. It has been estimated that globally cancer incidence will double between 2000 and 2020, and will triple around 2030 creating a substantial additional burden on health-care systems and costs. Until recently, cancer was considered a disease of westernized, industrialized countries. However, 63% of all cancer deaths were found in low- and middle-income countries in 2008, and this figure is predicted to increase. The estimated rise in cancer incidence will have a greater impact in these countries, which frequently have fragile or inexistent health systems. Intensified primary prevention efforts, including implementation and/or reinforcement of environmental and occupational interventions, would help to reduce the incidence of cancer, and the clinical, personal, economic and social burdens that result from this disease condition.

Cancer is a multifactorial disease due to a combined effect of genetic and environmental factors acting concurrently and sequentially. Overwhelming evidence, including studies with identical twins, indicates the importance of the environment in the development of cancer. Furthermore, observational studies in migrant populations have indicated that the chances of being diagnosed with a particular type of cancer are determined by the country to which they migrate. Globally, roughly 19% (12—29%) of all cancers are estimated to be attributable to the environment, including in working settings, resulting in 1.3 million deaths each year. Many carcinogenic agents have been identified as risk factors for cancer and can be found in the environment as physical (ionizing and non-ionizing radiation such as radon or UV, respectively) and chemical carcinogens (such as tobacco smoke and other air pollutants, asbestos, and food and drinking water contaminants such as aflatoxins or arsenic). Carcinogenic effects in human beings result from air, water, food and radiation exposure, occurring on multiple occasions and in various settings during the course of a life time, in particular in the working environment.

Environmental interventions are key for reducing the incidence of cancer, by decreasing the exposure to environmental carcinogens, including in occupational settings, by being cost-effective and by contributing to the overall well-being of communities. This requires a broad, public health driven response engaging all stakeholders in a multi-sectoral, collaborative approach.

## **2. GOAL:**

The capacity of Member States to address the environmental and occupational determinants of cancer requires strengthening. The International Conference on "Environmental and occupational determinants of cancer: Interventions for Primary Prevention" aims to use scientific evidence about environmental and occupational risks related to cancer to raise awareness and promote environmental and occupational interventions in support of more intensive primary preventive measures.

## **3. OBJECTIVES:**

The overall objective is to develop a policy framework for the primary prevention of environmental- and occupational-related cancers and to further mobilize public health and scientific communities and civil society towards that end.

The specific objectives are to:

- A. Review key policy options and environmental interventions that have proven successful for the primary prevention of selected cancers.
- B. Identify gaps in and means to promote existing interventions in scientific, social mobilization, policy, legislation and communication arenas.
- C. Promote innovative approaches to strengthen primary prevention of environmental and occupational cancers.

The expected outcomes are:

1. Set of policy options and effective interventions for the primary prevention of selected causes of cancer.
2. Key messages to the media and the public to raise awareness about environmental and occupational causes of cancer.
3. Establishment of a coordinated network of institutions for primary prevention of environment-related cancer, involving scientific experts, professional societies, NGOs, academic and governmental institutions, media and others.
4. Release and disseminate a collective "Asturias Pledge: Call to Action" for the primary prevention of cancer.

#### **4. PLANNED ACTIVITIES:**

The International Conference on "Environmental and occupational determinants of cancer: Interventions for Primary Prevention" will be held in Asturias (Avilés and Gijón), Spain, on 17 and 18 March 2011. This two-day conference will be arranged as follows:

- on Thursday 17 March, a number of sessions with international scientific experts will take place to discuss and agree on a series of recommendations to develop public health policies for primary prevention of cancer through environmental and occupational interventions;
- on Friday 18 March, a series of round tables are scheduled with policy-makers and government representatives, representatives of civil society, NGOs and advocacy groups, trade unions, private sector, professional associations and cancer networks, including patient groups, and media, to define common messages for the primary prevention of cancer and to identify barriers to implementing environmental and occupational interventions and how to overcome them.