



International Agency for Research on Cancer  
World Health Organization

# Cancer in Africa

## Epidemiology and Prevention



Edited by D.M. Parkin, J. Ferlay, M. Hamdi-Chérif, F. Sitas,  
J.O. Thomas, H. Wabinga, S.L. Whelan

IARC Scientific Publications No. 153  
IARC Press Lyon 2003

# **Cancer in Africa**

**Epidemiology and Prevention**

## INTERNATIONAL AGENCY FOR RESEARCH ON CANCER

The International Agency for Research on Cancer (IARC) was established in 1965 by the World Health Assembly, as an independently financed organization within the framework of the World Health Organization. The headquarters of the Agency are at Lyon, France.

The Agency conducts a programme of research concentrating particularly on the epidemiology of cancer and the study of potential carcinogens in the human environment. Its field studies are supplemented by biological and chemical research carried out in the Agency's laboratories in Lyon, and, through collaborative research agreements, in national research institutions in many countries. The Agency also conducts a programme for the education and training of personnel for cancer research.

The publications of the Agency are intended to contribute to the dissemination of authoritative information on different aspects of cancer research. Information about IARC publications and how to order them, is available via the Internet at: <http://www.iarc.fr/>

*Cover illustration:* Crowd in Abengourou, Ivory Coast. (N 6°44' W 3°29'). Africa has 800 million inhabitants, 13% of all humanity. This colourful crowd, enthusiastically waving to the photographer, was photographed in Abengourou, in eastern Côte d'Ivoire. These children and adolescents remind us of the country's youthfulness; as in most of the African continent, 40% of the population is under 15 years of age. The country's birth rate is 5.1 children per woman, which is representative of the average for the continent (the world average is 2.8). Modernization and the development of cultural and socioeconomic programmes are gradually reducing the birth rate, but it will take several decades for the African population to stabilize. The ravages of the AIDS epidemic in sub-Saharan Africa (home to 70% of the total 36.1 million people infected in the world) will have a severe impact on the region's demography: every day in Africa 6000 people die of AIDS virus and another 11 000 become infected.

From: *EARTH FROM ABOVE: An aerial portrait of our planet.*

Since 1990, Yann Arthus-Bertrand has flown over hundreds of countries. His aerial photographs, which cannot be dissociated from their captions, invite all of us to reflect upon the Earth's evolution and the future of its inhabitants. A report through words and images which makes us aware that, not only are we individually responsible for our planet, we must also decide what we bequeath to future generations, together.

Web site : [www.yannarthusbertrand.org](http://www.yannarthusbertrand.org)

The book *Earth from Above* is published by Abrams, New York.



INTERNATIONAL AGENCY FOR RESEARCH ON CANCER  
WORLD HEALTH ORGANIZATION

# **Cancer in Africa:**

**Epidemiology and Prevention**

**Edited by**  
**D.M. Parkin, J. Ferlay, M. Hamdi-Cherif,**  
**F. Sitas, J. Thomas, H. Wabinga and S. L. Whelan**

IARC Scientific Publications No. 153

*IARC* Press  
Lyon, France  
2003

Published by the International Agency for Research on Cancer,  
150 cours Albert Thomas, 69372 Lyon Cédex 08, France

© International Agency for Research on Cancer, 2003

Distributed by Oxford University Press, Walton Street, Oxford OX2 6DP, UK (fax: +44 1865 267782).  
All IARC publications can also be ordered directly from IARC Press (fax: +33 04 72 73 83 02; E-mail: [press@iarc.fr](mailto:press@iarc.fr)  
or, in North America, tel. (toll-free) 877 WHO-IARC; fax 202-223-1776; E-mail [iarcpress@who.int](mailto:iarcpress@who.int)

Publications of the World Health Organization enjoy copyright protection in accordance with the provisions of  
Protocol 2 of the Universal Copyright Convention. All rights reserved.

The designations employed and the presentation of the material in this publication do not imply the expression  
of any opinion whatsoever on the part of the Secretariat of the World Health Organization concerning the  
legal status of any country, territory, city, or area or of its authorities, or concerning the delimitation of its  
frontiers or boundaries.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed  
or recommended by the World Health Organization in preference to others of a similar nature that are not  
mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial  
capital letters.

The authors alone are responsible for the views expressed in this publication.

The International Agency for Research on Cancer welcomes requests for permission to reproduce or translate its  
publications, in part or in full. Applications and enquiries should be addressed to the Communications Unit,  
International Agency for Research on Cancer, which will be glad to provide the latest information on any  
changes made to the text, plans for new editions, and reprints and translations already available.

#### **IARC Library Cataloguing in Publication Data**

Cancer in Africa : Epidemiology and prevention / editors, D.M. Parkin... [et al.]

(IARC scientific publication ; 153)

1. Epidemiology 2. Neoplasms – prevention 3. Africa I.Parkin, D.M. II.Title III.Series

ISBN 92 832 2153 2  
ISSN 0300-5085

(NLM Classification W1)

Printed in France