MANAGEMENT OF INSECTICIDE RESISTANCE IN VECTORS OF PUBLIC HEALTH IMPORTANCE

REPORT OF THE NINTH MEETING
OF THE
GLOBAL COLLABORATION FOR DEVELOPMENT OF PESTICIDES FOR PUBLIC HEALTH

9–10 SEPTEMBER 2014

World Health Organization

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Abbreviations

ACT Malaria	Asian Collaborative Training Network for Malaria
CDC	Centers for Disease Control and Prevention
DDT	dichlorodiphenyltrichloroethane
GCDPP	Global Collaboration for Development of Pesticides for Public Health
GPIRM	Global Plan for Insecticide Resistance Management
IRS	indoor residual spraying
LLIN	long-lasting insecticidal net
WHOPES	WHO Pesticide Evaluation Scheme

1. Introduction

The ninth meeting of the Global Collaboration for the Development of Pesticides for Public Health (GCDPP) was held at the Hotel Royal, Geneva, Switzerland on 9–10 September 2014. The Collaboration provides a forum for exchange of information and ideas on the development and use of pesticides and pesticide application equipment in the context of WHO's global disease control strategies and serves an advisory and resource-mobilizing role to the WHO Pesticide Evaluation Scheme (WHOPES). The theme of the meeting was management of insecticide resistance in vectors of public health importance.

The meeting was opened by Dr Hiroki Nakatani, WHO Assistant Director-General, HIV/AIDS, Tuberculosis, Malaria and Neglected Tropical Diseases. Dr Nakatani said that, while noncommunicable diseases have been the primary focus of WHO's work, there is growing awareness of the seriousness of communicable diseases, such as Ebola virus disease and dengue, and increasing recognition of the significant role that disease vectors play in public health. The topic of World Health Day on 7 April 2014 had therefore been vector-borne diseases; it had provided an opportunity for individuals at all levels of the community to become involved in activities for better health. As evidence of insecticide resistance in vectors of human pathogens accumulates, it is critical to focus on this important issue. WHOPES functions at the intersection of efforts to control neglected tropical diseases and malaria; it maintains strong ties with pesticide manufacturers and researchers and also with public health interests from global to local level. Through the GCDPP, WHOPES brings together the private sector, national and international organizations and academic leaders to confront key issues in vector control and support the development of new pesticides and approaches to monitoring and managing insecticide resistance.

Dr Dirk Engels, Director, WHO Department of Control of Neglected Tropical Diseases, welcomed the participants, noting that the large, diverse participation reflected increasing interest in vector management for the control of neglected tropical diseases. The third report on those diseases, which is in preparation, will provide a vision beyond 2020 and describe progress in vector control tools and management strategies. The two objectives are: to go as far as

possible with current tools and to develop new tools that can be evaluated quickly, made widely available and deployed to the field. As the GCDPP comprises a broad constituency of industry, academia, foundations, nongovernmental organizations and multilateral and bilateral partners, it can provide valuable input to WHOPES on key issues in vector control. We must keep ahead of the vectors, adjusting procedures to the rapidly changing global environment. The theme of the meeting is monitoring and managing insecticide resistance; protecting current tools and ensuring the continued availability of effective control methods are paramount to the future of neglected tropical diseases.

Dr Raman Velayudhan, Coordinator, Vector Ecology and Management, introduced the theme and objectives of the meeting, which were agreed by consensus:

- to review evidence on insecticide resistance in vectors of malaria, dengue, leishmaniasis, Chagas and other arboviral diseases;
- to discuss options for tools and approaches for managing insecticide resistance;
- to collect information on operational experience in insecticide resistance management;
- to collect evidence on innovative vector control techniques in the pipeline;
- to identify and acknowledge the role of partners in insecticide resistance management; and
- to discuss the potential of the GCDPP partnership and identify priorities.