

# **WHO technical workshop on the role of laboratory detection of human papillomavirus in global disease prevention and control**

Geneva, Switzerland, 15–17 August 2005

**Immunization, Vaccines and Biologicals**

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World Health  
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**The Department of Immunization, Vaccines and Biologicals  
thanks the donors whose unspecified financial support  
has made the production of this document possible.**

This document was produced by the  
*Initiative for Vaccine Research*  
of the Department of Immunization, Vaccines and Biologicals

*Ordering code: WHO/IVB/06.04*  
*Printed: April 2006*

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**Printed by the WHO Document Production Services, Geneva, Switzerland**

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# Abbreviations and acronyms

The acronyms listed below appear in this report.

CIN	cervical intraepithelial neoplasia
DNA	deoxyribonucleic acid
ECBS	Expert Committee on Biological Standardization
ELISA	enzyme-linked immunosorbent assay
GE	genome equivalent
GST	glutathione S-transferase
H	haemagglutinin
HAV	hepatitis A virus
HBV	hepatitis B virus
HCV	hepatitis C virus
HIV	human immunodeficiency virus
HPV	human papillomavirus
IgM	immunoglobulin M
IS	international standard
IU	international unit
N	neuraminidase
NAT	nucleic acid amplification test
NIBSC	National Institute for Biological Standards and Control (UK)
PATH	Program for Appropriate Technology for Health (USA)
PCR	polymerase chain reaction
PDZ	Psd-95, Dlg and Z01
QA	quality assurance
QC	quality control
RNA	ribonucleic acid
SARS	severe acute respiratory syndrome
SEAP	secreted alkaline phosphatase
SOP	standard operating procedure
VLP	virus-like particle



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# Summary

Acknowledging that human papillomavirus (HPV) is a common infectious virus with carcinogenic potential that is strongly associated with cancer development, especially with cancer of the cervix in chronically infected women, WHO convened a meeting of HPV experts to consider the role of the laboratory in the prevention of HPV-related cancers. The group reviewed the role that WHO-coordinated laboratory networks play in the context of other important infectious diseases, such as influenza, measles, pneumococcal infections, and poliomyelitis. For example, the influenza laboratory network has the task of conducting annual antigenic analysis on samples from patients with “influenza-like” symptoms, collected worldwide, in order to develop recommendations for the annual strain composition of influenza vaccines, and to assist in the adaptation of influenza vaccine formulation in preparedness for possible pandemics. The poliomyelitis laboratory network was set up as part of the poliomyelitis eradication initiative, and has a crucial role in ensuring that the initiative meets its objectives. The measles network provides expertise for the development and quality control of testing procedures, as well as accurate information for the measles mortality reduction and elimination initiative.

In the light of these WHO-coordinated laboratory networking activities, the HPV laboratory experts recommended the establishment of a global HPV laboratory network. The network’s mission would be to contribute to improving quality of laboratory services for effective surveillance and HPV vaccination impact monitoring, through enhanced, state-of-the-art laboratory support.

Initially, the proposed network would consist of a group of between 7–10 laboratories, including at least one HPV expert laboratory in each of the WHO regions, namely African, Americas, Eastern Mediterranean, European, South-East Asia, and Western Pacific Regions. These laboratories would need to fulfil quality criteria that were drafted by the expert group. Interested laboratories would be able to apply

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