

## Preface

*Infection with the human immunodeficiency virus (HIV) continues to represent a primary public-health concern, even into the 21st century, and until a definitive treatment or vaccine is found, the only possible means of controlling the infection are early diagnosis and antiretroviral therapy. Over time, much progress has been made in what we know about the pathogenic mechanisms of HIV, which has contributed to the development of drugs that can markedly improve the quality of life and life expectancy for seropositive persons, so that HIV infection has become a chronic disease. However, this is also one of the likely reasons for which less resources are now invested in prevention. In fact, prevention activities had once played a predominant role, yet in the past ten years these activities have dwindled. Moreover, this has occurred simultaneously with a shift in the epidemiology of HIV infection, which has gone from being considered as a "plague" which affected only marginalised persons and was confined to so-called "risk categories" to a disease that affects everyone, with sexual contact having become the main mode of transmission.*

*In this context, a lack of awareness of infection status is harmful for both the individual, in that it precludes the possibility of early antiretroviral therapy, and the community at large, in that measures for reducing the risk of transmission are lacking. For individuals with a recognised risk of exposure to the virus, adequate information and assistance must be provided, so that these individuals are encouraged to make the informed and responsible choice to undergo a diagnostic test.*

*In Italy, HIV testing has also been shown to be of extreme importance for callers to the National AIDS Help-Line (Telefono Verde AIDS of the Istituto Superiore di Sanità). According to information collected during the Help-Line's telephone counselling activities, one out of every three questions concerns testing, in particular, whether or not to undergo testing, when and where the test should be performed, how the test is performed, and what laboratory methods are used. One of the problems in Italy is that access to and the use of testing are not uniform among the country's Regions, as revealed by data provided by clinical*

*diagnostic centres. Thus there is a need to develop, based on scientific evidence, well-defined standardised criteria for testing, to which all health facilities should adhere. In particular, all testing facilities must agree to provide pre- and post-test counselling, so that the healthcare professional and the individual undergoing testing can develop an effective relationship. This relationship needs to be structured in phases, in which the individual is provided with information on HIV, so that he/she is aware of any risks; strategies for modifying the individual's lifestyle can be identified; and the individual must also be prepared for the possibility of a positive test result.*

*With regard to diagnostic criteria, procedures that were developed in the early 1990s are still being adopted today, yet these procedures cannot be used to exclude infection before six months from the time of possible contagion. In recent years, new serological and virological diagnostic methods have been developed, and they can be used to more accurately diagnosis infection earlier. In particular, the latest generation of immunoenzymatic tests, because of their greater sensitivity, can be used to detect extremely low anti-HIV antibody titres, whereas tests that identify parts of the virus (RNA, viral proteins) allow the virus to be detected even before the appearance of the antibody response.*

*This complex and multifaceted situation regarding HIV testing has induced groups of experts in diverse fields working at the Istituto Superiore di Sanità and the Ministry of Labour, Health and Social Policy to collaborate on making an important scientific contribution to this issue. This contribution, in addition to its usefulness as a reference tool for healthcare professionals, can be considered as a starting point, so that the need to render homogeneous the modes, criteria, procedures and methods for proposing and performing HIV testing can be met in the immediate future.*

**Giovanni Rezza**

*Dipartimento di Malattie Infettive,  
Parassitarie ed Immunomediate,  
Istituto Superiore di Sanità, Rome, Italy*

