

## 1. INTRODUCTION

Cardiovascular disease (CVD) is the leading cause of death and hospitalization in both genders in nearly all countries of Europe, thus representing a substantial public health burden. Given the pressing need to implement comprehensive strategies to address this growing epidemic, surveillance remains the primary tool to evaluate the burden of disease, to assess trend, to plan preventive actions at both population and individual levels and to estimate efficacy of prevention.

The most frequent CVD are those of atherosclerotic origin, mainly Ischaemic Heart Disease (IHD) and stroke. CVD clinically manifests itself in middle life and older age, after many years of exposure to unhealthy lifestyles (unhealthy diet, physical inactivity, and smoking habit) and risk factors (high blood pressure, high cholesterolemia, diabetes, obesity). Although CVD prevalence is very high, its occurrence is largely preventable: this makes CVD a priority for public health. Epidemiological studies have demonstrated that cardiovascular risk is 'reversible', that means that by lowering the level of risk factors it is possible to reduce the number and severity of events, or delay the event occurrence.

Even though the clinical onset is mainly acute, CVD often evolves gradually, causing substantial loss of quality of life, disability, and life long dependence on health services and medications. CVD may also result in premature deaths and is associated with adverse outcomes in elderly people, including cognitive impairment, dementia and decreased physical performance. The societal costs of CVD are substantial and include not only those directly related to health care and social services, but also those linked to illness benefits and retirement, impact on families and caregivers, and loss of years of productive life.

The magnitude of the CVD burden and the possibility of prevention contrasts with the usual paucity, poor quality and comparability of data available on attack/incidence rate and prevalence of CVD beyond mortality, on distribution of risk factors and prevalence of high risk conditions, other than rigorous but limited studies carried out in certain geographical areas.

The development, testing and implementation of effective surveillance systems for CVD produce reliable and comparable indicators, thus enabling policy makers to trace differences within and between countries and to make better decisions on planning and evaluation of prevention programs, healthcare delivery, resource allocation, and research.

The **European Cardiovascular Indicators Surveillance Set (EUROCISS) Project** was launched in 2000 by a partnership of European Union (EU) countries with the overall aim of developing health

indicators and recommendations for monitoring the distribution and impact of CVD in Europe in order to facilitate cross-country comparisons and improve the prevention and control of CVD.

The *first phase* of the EUROCISS Project (2000-2003) involved experts from 14 countries and aimed at a) prioritizing those CVD of greatest interest in public health; b) identifying specific indicators for assessing mortality and morbidity in CVD. The indicators were selected after an in-depth discussion among experts, on the basis of the available data. Some indicators can be produced in a short time, while others need a long period of time to be implemented and then validated; c) developing recommendations for collection and harmonization of data for monitoring CVD in EU countries.

The first phase ended with the production of a Final Report 2003 and the issue of a publication entitled '*Coronary and Cerebrovascular Population-based Registers in Europe: are morbidity indicators comparable? Results from the EUROCISS Project on behalf of the EUROCISS Working Group. European Journal of Public Health 2003; 13 (3 Supplement); 55-60*'.

At the end of the first phase, attack/incidence rate and case fatality for acute events and prevalence for chronic conditions were suggested for inclusion in the European Community Health Indicators Monitoring (ECHIM) short list (<http://www.echim.org/>).

In the year 2004 the Project was re-funded and more European countries and the European Heart Network were involved. The second phase mainly aimed at suggesting how to build the above core indicators in a simple way, taking into account the experience of those countries already able to provide such indicators.