



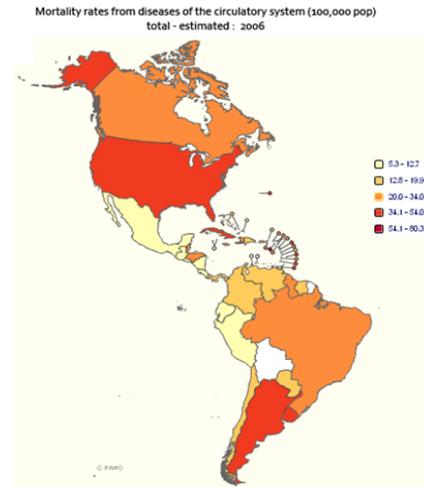
# Cardiovascular Diseases in the Americas



## Defining the Problem

Cardiovascular diseases (CVD) include a group of disorders that affect the heart and blood vessels and typically manifest in the form of coronary heart disease, cerebrovascular disease, hypertension, peripheral artery disease, rheumatic heart disease and heart failure. CVDs are the number one cause of death worldwide and account for approximately 10% of the total global burden of disease.

The majority of cardiovascular diseases are caused by three main modifiable risk factors, tobacco use, physical inactivity, and unhealthy diet. At least 80% of premature deaths from heart diseases and stroke could be prevented avoiding these three risk factors. These clear causes are influenced by a myriad of indirect causes or social determinants of disease.



## Burden in the Americas

Cardiovascular diseases are the leading cause of death in the Americas. In Latin America and the Caribbean, 31% of all deaths are attributable to cardiovascular diseases. Mortality rates for ischemic heart disease are high throughout all sub-regions with highest rates in North America and the Latin Caribbean. It is estimated that the number of deaths in the Region attributed to cardiovascular disease will increase by more than 60% between 2000 and 2020, unless preventive measures are introduced.

In 2002, stroke, or cerebrovascular disease, was responsible for over 271,865 deaths in the region and the average number of years of life lost to disability resulting from stroke was between 5 and 14 per 1,000. The level of disability observed in the countries of the Americas is higher than most countries in the developed world.

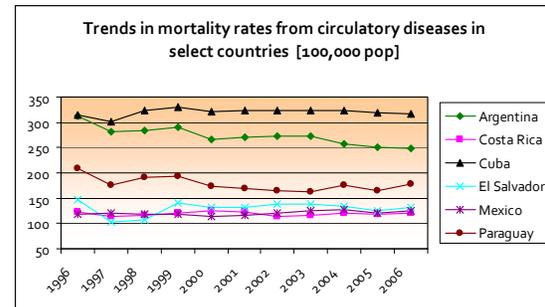
In some developed countries as the USA or Canada, a reduction of cardiovascular diseases mortality of up to 60% has been observed, due especially to improvements in risk factors

Adjusted mortality rates (100,000 pop) (2003-2005)	Stroke	Ischemic heart diseases
<b>Regional</b>		
The Americas	42.3	81.0
North America	30.7	93.9
Latin America and the Caribbean	54.3	65.5
<b>Subregional</b>		
Latin America	54.1	65.2
Mexico	34.5	66.2
Central American	39.6	59.1
Latin Caribbean	69.1	82.1
Andean Area	44.2	73.1
Brazil	70.9	67.4
Southern Cone	48.6	44.6
English Caribbean	86.0	108.7

control, like tobacco or physical activity, and also to hypertension or hyperlipidemia control.

This situation is not occurring in most countries of Latin America and the Caribbean. The decline in mortality rates is not so clear and is even increasing in some countries as Costa Rica, Ecuador, and Mexico. The absence of a decline on the CVD mortality rates is due to the lack of risk factor reduction and control measures, and also to the demographic transition and effects of globalization and economic growth.

The burden of CVD is directly related to socioeconomic factors. Approximately 80% of the CVD burden occurs in low and middle income countries, which contributes to the increase of the inequity gap in the Region. In consequence it is critical that interventions addressing CVD are done within a framework that addresses the social determinants of health and cardiovascular diseases.



#### References:

1. PAHO. *Regional Strategy and Plan of Action on an integrated approach to the prevention and control of chronic diseases*. Washington, D.C.: PAHO; 2007.
2. WHO. *Preventing Chronic Diseases: a vital investment*. Geneva: WHO; 2005.
3. PAHO. Health Analysis and Statistics Unit. *Regional Core Health Data Initiative; Technical Information System in Health*. Washington DC, 2008.
4. PAHO. *Health of the Americas* (2006 DD.). Special Topic: The ten leading cause of death in countries of the Americas. PAHO; 2006. Available at: [www.paho.org/English/DD/AIS/HSA2006\\_TOX.pdf](http://www.paho.org/English/DD/AIS/HSA2006_TOX.pdf)
5. Baker JL, Olsen LW, Sørensen IT. Childhood body-mass index and the risk of coronary heart disease in adulthood. *N Engl J Med*. 6;357:2329-37 2007.
6. Rodríguez T, Malvezzi M, Chatenoud L, Bosetti C, Levi F, Negri E, La Vecchia C. Trends in mortality from coronary heart and cerebrovascular diseases in the Americas: 1970–2000. *Heart*. 2006 92:453–460.
7. Barceló A. Cardiovascular diseases in Latin America and the Caribbean. *Lancet*. 2006 Aug 19;368(9536):625-6.