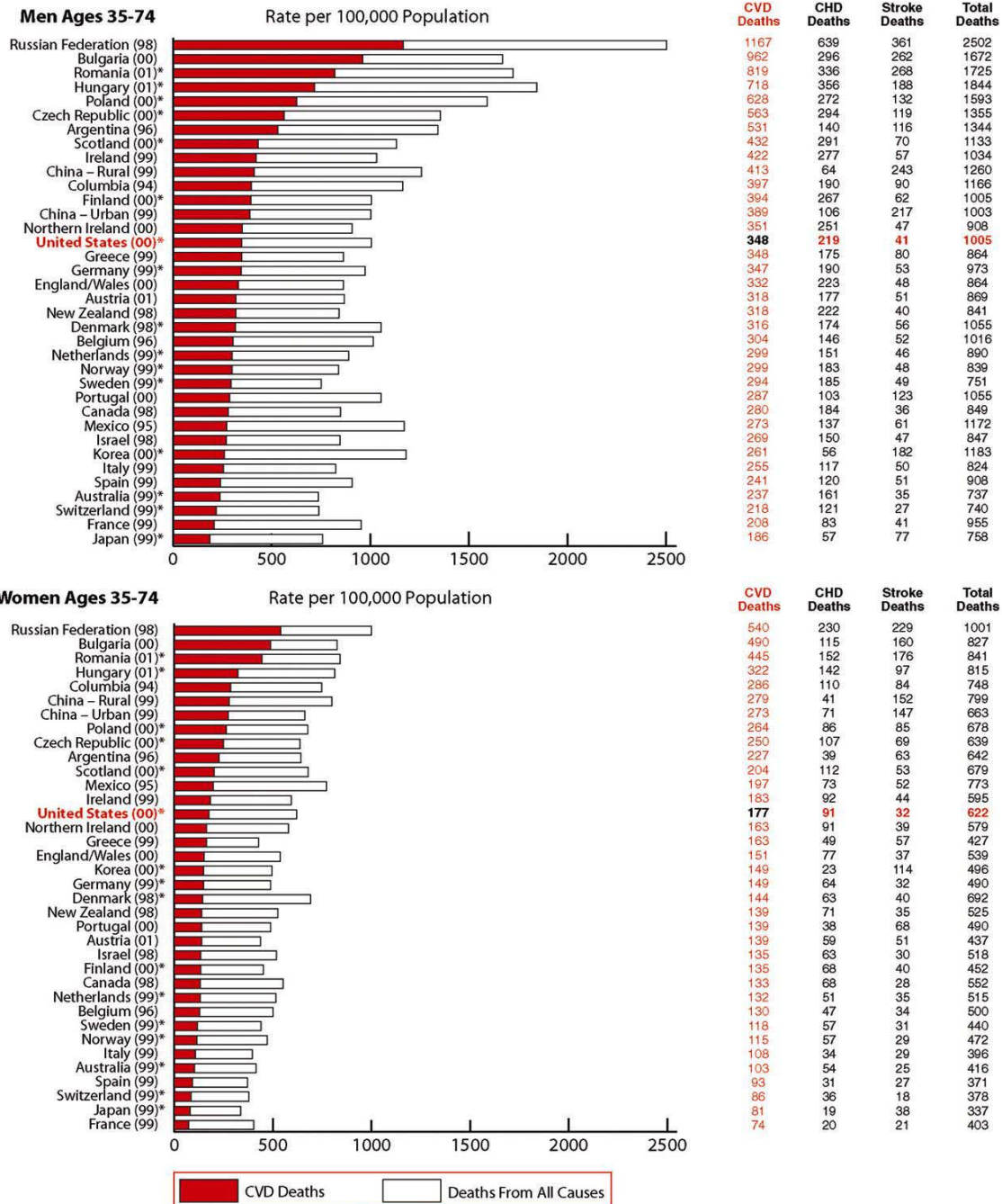


Statistical Fact Sheet — Populations

International Cardiovascular Disease Statistics

Death Rates for Total Cardiovascular Disease, Coronary Heart Disease, Stroke and Total Deaths in Selected Countries (most recent year available)



Note: Rates adjusted to the European Standard population. ICD/9 codes are 390-459 for cardiovascular disease; 410-414 for coronary heart disease; and 430-438 for stroke. Countries using ICD/10 are noted with *.

* ICD/10 codes are I00-I99 for cardiovascular disease; I20-I25 for coronary heart disease; and I60-I69 for stroke.

Source: The World Health Organization Web page, who.int/whosis/ and NCHS.

Cardiovascular Disease (CVD)

- According to WHO estimates, in 2002, 16.7 million people around the globe die of cardiovascular diseases each year. ³³ This represents about 1/3 of all deaths globally
 - Today, men, women, and children are at risk and 80 percent of the burden in low- and middle-income countries. ³³
- By 2020 heart disease and stroke will become the leading cause of both death and disability worldwide, with the number of fatalities projected to increase to over 20 million a year and by 2030 to over 24 million a year. ³³
- Between 1990 and 2020, deaths from non-communicable diseases and injury are expected to rise from 33 million to 58 million annually, with a similar proportional increase in years of life lost. By 2020, cardiovascular diseases, injury and mental illnesses will be responsible for about one half of all deaths and one half of all healthy life years lost, worldwide.⁶
 - It's been projected that by 2020, chronic diseases will account for almost three-fourths of all deaths.⁷
 - 71 percent of deaths due to ischemic heart disease, 75 percent due to stroke and 70 percent due to diabetes will occur in developing countries.
 - 60 percent of the burden of chronic diseases will occur in developing countries.
 - CVD is now more numerous in India and China than in all economically developed countries in the world added together.
 - CVD causes 8.5 million deaths among women annually. It's the largest single cause of mortality among women, accounting for one-third of all deaths in women worldwide. In developing countries, half of all deaths of women over 50 are due to heart disease and stroke.⁸
 - CVD is the leading cause of death in Europe, accounting for over 4 million deaths each year. Nearly half (49 percent) of all deaths are from CVD (55 percent of deaths in women and 43 percent of deaths in men). About half of all deaths from CVD are from CHD and nearly one-third are from stroke.⁹
 - The average rates of hospital discharges in the European Union (EU) were
 - For CVD, 2,190,000.
 - For coronary heart disease (CHD), 629,000.
 - For stroke, 356,000.

These data are for the latest available year. Hospital discharges include people both living and dead.¹⁰
 - CVD is the leading cause of death in the European Union, accounting for over 1.5 million deaths each year. Nearly half (42 percent) of all deaths in the EU are from CVD (46 percent of deaths in women and 38 percent of deaths in men). Between one-third and one-half of deaths from CVD are from CHD and over one-fourth are from stroke.⁹
 - CVD accounted for more than 238,000 deaths in the UK in 2002. 39 percent of deaths in the UK are from CVD. 35 percent of premature deaths in men and 27 percent in women are from CVD.¹¹

- Every 7 minutes, a Canadian dies of heart disease and stroke. CVD accounts for more deaths than any other disease. 2000CVD mortality: 76,426; 34 percent of male deaths and 36 percent of female deaths. CVD costs the Canadian economy about \$18.4 billion annually.³²
- Mortality rates for CHD and AMI continue to decrease, but mortality rates for stroke have not changes significantly during the past 10 years. The number of elderly Canadians has been increasing. As a result there has been an increase in the number of deaths due to stroke and CHD. This trend is expected to continue for the next 15 years. ³²
- Women will continue to experience disproportionately high mortality from CVD. By 2040, women in the study countries (Russia, Brazil, India, China, South Africa) will represent a higher proportion of CVD deaths than men. In 2040, women in China are projected to be 49.5% of the population, but even if death rates no higher than now apply then, they will represent 54.6% of CVD deaths. In Brazil and China, the growth of CVD deaths among working aged women between 2000 and 2040 will be higher than for men.²⁹
- Compared to 2000, the number of years of productive life lost to CVD will have increased in 2030 by only 20% in the U.S. and by 30% in Portugal. For Brazil the figure is 64%, for China 57% and for India 95%. The increase in South Africa is 28%, greater than that for the U.S. and comparable to Portugal. Only in Russia does the number of years lost lag, largely because death rates are already at such high levels and the size of the population at risk is falling.³⁰

Coronary Heart Disease (CHD), Angina Pectoris and Heart Failure

- The latest available data from the World Health Organization (WHO) MONICA Project indicate that the coronary event rate (per 100,000) in men was highest in Finland (North Karelia, 835) and lowest in China (Beijing, 81). For women the highest event rate was in the United Kingdom (UK) (Glasgow, Scotland, 265) and the lowest in Spain (Catalonia, 35) and China (Beijing, 35). These data represent results from 35 MONICA Project populations collected during the mid-1980s until the mid-1990s.¹³
- About 268,000 heart attacks (myocardial infarctions) occur annually in the UK (147,000 in men and 121,000 in women in 2002). The Health Survey for England shows that more than 1.2 million people living in the UK have had a heart attack (838,000 men and 394,000 women). Overall, about 1.5 million men and 1.2 million women living in the UK have had CHD (either angina or heart attack or both).¹¹
- Total prevalence of heart failure (definite and probable) in the UK is estimated at 892,000 in people age 45 and over (489,000 men and 403,000 women).¹¹
- In 2000-01 there were 28,500 bypass procedures performed in the UK. In addition, 44,913 angioplasty and other coronary intervention procedures were performed in 2002.¹¹
- According to the WHO, in 2002 there were 7.22 million deaths from coronary heart disease globally..³³
- In both developed and developing countries, 40 to 75 percent of all heart attack victims die before reaching the hospital.³
- CHD alone is the most common cause of death in Europe, accounting for nearly 2 million deaths each year. More than 1 in 5 deaths of women (22 percent) and men (21 percent) are from CHD.⁹

- CHD alone is the most common cause of death in the EU, accounting for over 600,000 deaths each year. One in 6 deaths of men (17 percent) and 1 in 7 deaths of women (15 percent) in the EU are from CHD.⁹
- CHD alone is the most common cause of death in the United Kingdom, causing more than 117,000 deaths in 2002. One in 5 deaths of men and 1 in 6 deaths of women are from CHD. Other forms of heart disease cause more than 33,500 deaths. Total deaths from heart disease in the UK in 2002 were just under 151,000.¹¹
- The CHD death rate for men ages 35-74 fell by 39 percent from 1988 and 1998 in the UK, but by 47 percent in Norway and Austria. For women, the death rate fell by 41 percent in the UK, but in Australia, Finland and Ireland the rate fell by 52, 46 and 44 percent respectively.¹¹
- The premature death rate from CHD for male manual workers is 58 percent higher than for non-manual workers. For female manual workers the death rate is more than twice as high as that for female non-manual workers.¹¹
- Projections suggest that for CHD, the mortality for all developing countries will increase by 120% for women and 137% for men. Predictions for the next two decades include tripling of CHD and stroke mortality in Latin America, the Middle East, and even sub-Saharan Africa, a rate of increase that exceeds that for any other region, except for Asian and Pacific Island countries. By contrast, the increase in more-developed nations, largely attributable to an expansion of the population of older people at risk, will range between 30% and 60%.²⁹
- The WHO predicts 11.1 million deaths from coronary heart disease in 2020.⁴
- About 21 percent of CHD globally is attributable to body mass index (BMI) above 21 kg/m².¹³
- About 22 percent of CHD globally is caused by physical inactivity.¹³
 - Data from the INTERHEART study showed that rates of CVD have risen greatly in low-income and middle-income countries with about 80 percent of the burden occurring in these countries. Nine potentially modifiable risk factors associated with MI were identified. These varied by populations. Approaches to prevention have the potential to prevent premature cases of MI. 34

Stroke

- According to WHO estimates, 15 million people each year suffer strokes and 5 million are left permanently disabled.³³
- The WHO estimates 5.5 million deaths from stroke worldwide in 2002.³³
- Stroke accounts for a higher proportion of deaths among women than men (11% vs. 8.4%). Among women, 3 million deaths from stroke occur annually.³³
- Stroke kills about 16,000 Canadians a year. Almost 60 percent of the 50,000 strokes each year in Canada affect women. 9,038 women died from stroke in 1999. About 300,000 Canadians are living with the effects of stroke. It costs about \$2.7 billion a year.¹²
- In Canada (1997), Colombia (1996) and Costa Rica (1995) there were more female than male deaths from stroke in the 35-49 age group.¹⁶

- In England, the death rates for stroke for people under 65 fell by 23 percent in the last 10 years. Recently, rates have declined at a slower rate, particularly in the younger age groups.¹¹

High Blood Pressure (HBP) or Hypertension

- The WHO estimates that 600 million people with high blood pressure are at risk of heart attack, stroke and cardiac failure.¹⁵
- A study of hypertension in 6 European countries, Canada and the United States showed the average BP was 136/83 mm Hg in the European countries and 127/77 mm Hg in Canada and the U.S. among men and women ages 35-74. For all age groups, BP measurements were lowest in the U.S. and highest in Germany. The European countries were Germany, Finland, Sweden, England, Spain and Italy.¹⁷
- About 15-37 percent of the global adult population has hypertension. In those older than age 60, as many as one-half in some populations are hypertensive.³
- Women with hypertension have a risk of developing CHD that is 3.5 times that of females with normal blood pressure.⁸
- About 140 million people in the Americas suffer from hypertension. In Mexico (1997) female deaths from hypertension surpassed those for males, starting at age 35. The prevalence of hypertension in Latin America and the Caribbean has been estimated at between 8 and 30 percent.¹⁶
- The Heart Health Surveys of 1985-90 found that 22 percent of Canadian adults had high blood pressure, but only 13 percent had been diagnosed. The overall rate for 1994-95 was 9 percent.¹⁸
- In England, 37 percent of men and 34 percent of women have high blood pressure (140/90 mmHg or higher) or are being treated for hypertension. Almost 80 percent of men and 70 percent of women with HBP are not being treated. Of those being treated, over 60 percent remain hypertensive.¹¹
- In Africa the prevalence of hypertension is estimated at 20 million. Some 250,000 deaths could be prevented each year through effective case management. Hypertension-related stroke rate is high in Africa, and victims are relatively young.¹⁹
- In South Africa, a 1998 survey found that 36.6% of women known to be hypertensive had their illness controlled with medication. In general, awareness of hypertension and use of medication increased with income. Hypertension was only half as common among rural as among urban women. In Asia, a steep increase in stroke mortality has accompanied a rapid rise in the prevalence of hypertension. Projections suggest that in China, hypertension will increase from 18.6% to 25% between 1995 and 2025. In India, the equivalent figures are 16.3% to 19.4%.³⁰
- Worldwide, high blood pressure is estimated to cause 7.1 million deaths, about 13 percent of the global fatality total. Across WHO regions, research indicates that about 62 percent of strokes and 49 percent of heart attacks are caused by high blood pressure.¹³
- Hypertension causes 5 million **premature** deaths a year worldwide.¹³

Rheumatic Fever/Rheumatic Heart Disease

- In developing countries, rheumatic fever is the most frequent cause of heart disease in the 5-13-year-old group, causing 25-40 percent of all cardiovascular diseases and 33-50 percent of all hospital admissions.²⁰
- An estimated 12 million are currently affected by rheumatic fever and rheumatic heart disease. 2/3 are children between 5 and 15 years of age.³³
- There are about 300,000 deaths a year, with 2 million requiring repeated hospitalization and 1 million likely to require surgery in the next 5 to 20 years. 33
- Of the estimated 12 million with RF/RHD, at least 3 million had congestive heart failure (CHF), that required hospitalization. A large proportion with CHF required cardiac valve surgery within 5-10 years. 31
- Data from developing countries suggest that mortality due to RF/RHD remains a problem and that children and young adults still die from acute RF. 31
- The annual incidence of RF in developed countries began to decrease in the 20th century, with a marked decrease after the 1950's; it is now below 1.0 per 100,000. A few studies conducted in developing countries report incidence rates ranging from 1.0 per 100,000 school-age children in Costa Rica, 72.2 per 100,000 in French Polynesia, 100 per 100,000 in Sudan, to 150 per 100,000 in China. 31
- Rheumatic heart disease prevalence may reach 15 per 1,000 in school children, and it remains active during the second and third decades of life.¹⁹

Peripheral Arterial Disease (PAD)

- Based on current epidemiologic projections, 27 million people in Europe and North America have PAD. An estimated 10.5 million are symptomatic and 16.5 million are asymptomatic. The prevalence of asymptomatic PAD is estimated in one study as high as 20 percent of the adult population.²¹

Social and Economic Consequences of CVD

- Clinical care of CVD is costly and prolonged. These direct costs divert the scarce family and societal resources to medical care.⁴ (WHO, 2001)
- CVD affects individuals in their peak mid-life years, disrupting the future of the families dependent on them and undermining the development of nations by depriving them of workers in their most productive years.⁴
- In developed countries, lower socioeconomic groups have a greater prevalence of risk factors, higher incidence of disease and higher mortality. In developing countries, as the CVD epidemic matures, the burden will shift to the lower socioeconomic groups.⁴
- CHD is estimated to cost the UK economy a total of 7.06 billion pounds a year in direct and indirect costs.¹¹
- Low SES status is associated with increased risk of CVD. 33

CVD Risks in Developing Countries

- In most adult populations, the prevalence of high blood pressure (hypertension) exceeds 20 percent, using the criteria of 140/90 mm Hg or higher. Developing countries show an increasing prevalence, with higher rates in urban than in rural areas.⁵

- Economic transition, urbanization, industrialization and globalization bring about lifestyle changes that promote heart disease. These risk factors include tobacco use, physical inactivity and unhealthy diet.⁵
- Rapid acculturation and improvement in economic conditions have led to the disappearance of the protective effects of a healthy diet. Urban dwellers may believe that a diet high in energy and fat, similar to that of Western affluent countries, is a symbol of their new status. The global availability of cheap vegetable oils and fats has led to greatly increased fat consumption among low-income countries. This transition is accelerated by rapid urbanization.⁵
- Increased energy intake from refined foods and sedentary lifestyle are partly responsible for the increased rate of type 2 diabetes, excess weight and insulin resistance among various populations in developing countries. Being overweight is often regarded as a sign of wealth and well-being and is not considered as a risk factor for CVD.⁵
- High blood pressure, high blood cholesterol and obesity are likely to become more prevalent in developing countries.⁵

Tobacco Use

- The number of smokers in the world, estimated at 1.3 billion, is estimated to rise to 1.7 billion by 2025 if the global prevalence of tobacco use remains unchanged.¹
- Smoking is an important CVD risk factor in both men and women. Despite that fact, worldwide trends show more young smokers, especially young women. Cigarette smoking is also an important CVD risk factor in women after menopause and in women of reproductive age who use oral contraceptives.⁵
- Women who take oral contraceptives and smoke up to 15 cigarettes a day have 3-5 times higher coronary risk. For women who smoke more than 15 cigarettes a day, the risk is 20 times higher.⁸
- Among women, the risk of myocardial infarction (heart attack) is 1-7 times higher in moderate nicotine users and 4 times higher in heavy smokers. Stroke is more likely to occur in smokers than in nonsmokers. Passive smoking is associated with a 30 percent excess coronary risk for women.⁸
- In 1996-97, 29 percent of Canadian adults aged 15 and over smoked cigarettes. An estimated 329,000 began smoking in 1996-97. There has been little change in overall rates since 1991.¹⁸
- In Great Britain in 2002, 27 percent of men and 25 percent of women age 16 and older smoked cigarettes.¹¹
- A 40-year cohort study of British doctors showed that mortality from CHD was 50 percent higher in smokers (and over 75 percent higher in heavy smokers) than in non-smokers. Mortality from any cardiovascular disease was around 60 percent higher in smokers (and 85 percent higher in heavy smokers) than in non-smokers. ¹¹
- Alarming high rates of tobacco use and exposure to secondhand smoke among schoolchildren ages 13-15 in the Western Pacific Region are revealed by data from the first group of countries within the Region to complete the Global Youth Tobacco Survey. Many of

these children started smoking before age 10. An overwhelming majority want to quit but are unable to do so because of nicotine addiction.¹

- According to the WHO, 1 year after quitting, the risk of coronary heart disease decreases by 50 percent. Within 15 years, the relative risk of dying from CHD for an ex-smoker approaches that of a long-time (lifetime) nonsmoker.⁴
- The consumption of cigarettes and other tobacco products and exposure to tobacco smoke are the world's leading preventable cause of death. Tobacco use is responsible for about 5 million deaths a year, mostly in poor countries and poor populations.¹
- Smokers of all ages have death rates 2-3 times higher than nonsmokers.¹³
- Prospective studies show that cigarette smoking causes about 30 percent of CVD deaths worldwide, considering first and recurrent events. This is especially evident in populations whose diets are high in saturated fat with subsequent high blood cholesterol and high blood pressure.⁵
- According to estimates of the British Heart Foundation, about 22 percent of CVD deaths in men and 4 percent of CVD deaths in women living in Europe are due to smoking. The equivalent figures for the EU are 16 percent for men and 4 percent for women.⁹
- The WHO estimates that by 2020, tobacco is expected to be the single greatest cause of death and disability worldwide, accounting for about 10 million deaths per year.²²
- The impact of tobacco-related disease and death until recently has been a problem mainly for developed countries, but the WHO now estimates that by 2020, 7 of every 10 tobacco-related deaths will be in the developing world.²³
- Analyses by the WHO concluded that by 2030, current smoking patterns will produce about 500 million premature deaths from tobacco-related disease among people alive today.²³ (WHO, 1999)
- The global tobacco epidemic is predicted to prematurely claim the lives of some 250 million children and adolescents, a third of whom are in developing countries.²²
- China predicts that of the 300 million males now aged 1-29, about 200 million will become smokers and 100 million will eventually die from related diseases. Half of these deaths will occur in middle-age and before age 70.²⁴
- A World Bank Study estimates that the health care costs associated with tobacco-related illnesses result in a net loss of 200 billion U.S. dollars per year, half occurring in developing countries.²²
- In India, projections estimate that tobacco-attributable mortality will grow from 1% in 1990 to 13% in 2020. In Brazil, studies of acute MI indicate that heavy smoking is the most important risk factor for early heart attack.³⁰

High Blood Cholesterol

- A blood cholesterol level of less than 5.0 millimoles per liter (mmol/L) is suggested for both primary and secondary prevention of CHD. About 66 percent of men and 67 percent of women in the UK have blood cholesterol levels of 5.0 mmol/L and above.¹¹

- High blood cholesterol is estimated to cause about 4.4 million deaths (7.9 percent of total). This amounts to 18 percent of strokes and 56 percent of global CHD.¹³
- High blood cholesterol causes more than 4 million premature deaths a year.¹³

Physical Inactivity

- From 60 to 85 percent of the world population from both developed and developing countries are not physically active enough to gain health benefits.⁸
- About one-third of young people are active enough to benefit their health. The prevalence of inactivity is greater among teenage girls. In Europe only 3 countries offer at least 2 hours per week of physical education courses. In the United States, daily participation in high school PE classes dropped from 42 percent in 1991 to 29 percent in 1999.⁸
- In 1996-97, 57 percent of adults were physically inactive in their leisure time. More women than men were physically inactive in the 15-24 age group. Physical inactivity increased for both men and women after age 25.¹⁸
- Physical inactivity doubles the risk of developing heart disease and increases the risk of hypertension by 30 percent. It also double the risk of dying from CVD and stroke.⁸
- Only 37 percent of men and 25 percent of women in the UK meet the government's current physical activity guidelines. In addition, over one-third of adults are currently inactive.¹¹
- Every year, more than 2 million deaths are attributable to physical inactivity worldwide.⁸

Overweight and Obesity

- An expert group convened by the WHO in June 1997 found that overweight and obesity represent a rapidly growing threat to the health of populations in an increasing number of countries worldwide. The WHO recognized obesity as a disease that is prevalent in both developing and developed countries and that affects children and adults alike.²⁵
- The current prevalence of overweight and obesity has reached unprecedented levels, and the annual rate of increase in most developing regions is substantial.⁷
- Obesity among children has reached epidemic proportions. The WHO estimates that about 22 million children under age 5 are overweight. In the United States in the last 30 years the prevalence of overweight children ages 5-14 has increased from 15 to 32 percent. One in four U.S. children is overweight while 11 percent are obese. In Beijing 20 percent of school children are obese. 16 percent of Saudi schoolboys are considered obese.⁸
- There are more than 1 billion overweight adults worldwide and at least 300 million who are clinically obese.¹³
- Obesity rates have tripled or more in some parts of North America, Eastern Europe, the Middle East, the Pacific Islands, Australia and China since 1980.¹³
- From 27 to 35 percent of adults in the EU are overweight, and from 7 to 12 percent are obese.⁹

- Using a body mass index (BMI) of 25-30 kg/m² as overweight, 45 percent of men and 34 percent of women in the UK are overweight. An additional 22 percent of men and 23 percent of women are obese (BMI of more than 30 kg/m²).¹¹
- Obesity rates in men in the UK have tripled since the mid-1980s, with men now as likely to be obese as women.¹¹
- In the 1990s CVD was the leading cause of death in China, accounting for one-third of total deaths. Despite lower BMI levels and rates of overweight, the prevalence of hypertension, high fasting serum glucose, high total blood cholesterol and low HDL cholesterol and their clustering were all raised with increases in BMI or waist circumference.²⁶
- About 18 percent of the Chinese population are overweight. More than 50 percent of those ages 35-59 are overweight. These figures are expected to double within a decade.⁸
- In the 1996-97 National Population Health Study conducted in Canada, 48 percent of adults were overweight (BMI of 26 or 27) and 29 percent were obese (BMI greater than 27).¹⁸
- About 500,000 people in North America and Western Europe die from obesity-related diseases every year. Obesity kills about 220,000 men and women annually in the United States and Canada and about 320,000 men and women in 20 countries of Western Europe.¹³
- The WHO predicts that unless action is taken, by 2020 there will be 5 million deaths attributable to overweight and obesity, compared to 3 million now.²⁷
- Recent rates of increase indicate that in India, the proportion of people overweight (including those who are obese) will increase from 9% to 24% between 1995 and 2025. Overweight is also set to rise in China. Projections indicate that by 2025, 37% of men and 40% of women will be overweight, compared to 8% and 12% in 1995.³⁰

Diabetes

- The prevalence of diabetes in adults globally was estimated to be 4.0 percent in 1995 and was projected to rise to 5.4 percent by the year 2025. The number of adults with diabetes in the world is estimated to rise from 135 million in 1995 to 300 million in 2025.²⁸
- An estimated 150 million people have Type 2 diabetes globally. This figure is expected to double by 2025.³
- The WHO estimates that 75 percent of the 300 million adults with diabetes in 2025 will live in developing countries.⁵
- It's projected that the number of people with diabetes in developed countries will rise 42 percent, from 51 million in 1995 to 72 million in 2025.²⁸
- The number of people in developing countries with diabetes will increase by more than 2.5 times (170 percent), from 84 million in 1995 to 228 million in 2025.^{7, 28}
- The majority of people with diabetes in developing countries is projected to be ages 45-64, while those in developed countries will be age 65 or older.²⁸
- Diabetes will be increasingly concentrated in urban areas, with the greater burden of disease among women.²⁸

- Women with diabetes have 8 times higher CHD risk than women without diabetes. Men with diabetes have 3 times higher CHD risk than men without diabetes.⁸
- About 58 percent of diabetes mellitus globally is attributed to a BMI above 21 kg/m².¹³
- A survey conducted in 1996-97 found that 3 percent of Canadian adults age 15 and older had physician-diagnosed diabetes.¹⁸
- It's estimated that 1.35 million people in the UK have been diagnosed with diabetes.¹¹
- About 75 percent of deaths among men with diabetes and 57 percent among women with diabetes is attributable to CVD.³
- The rate of life expectancy lost from diabetes mellitus is sharp in all 47 countries in the Americas with the exception of Chile and in both sexes with the exception of women in Costa Rica. The rate of increase ranges from 2 to 6 percent in most of the countries and up to 8 percent in men in Barbados. The age distribution shows that its greatest effect is on women starting at age 40.¹⁶
- Projections suggest that in China, diabetes will increase from 1.4% to 2.4% between 1995 and 2025. In India, the equivalent figures are from 2.1% to 3%.³⁰

Nutrition

- Availability of calories per capita from the mid-1960s to 1997-99 increased globally by about 450 kcal/capita/day and in developing countries by 600 kcal/capita/day. This change was not equal across regions. Per capita supply of calories remained almost stagnant in sub-Saharan Africa and showed a decreasing trend in the transition countries. In contrast, the per capita supply of energy rose dramatically in East Asia (mainly in China) and in the Near East/North Africa.⁷
- While eating fruit and vegetables can prevent cardiovascular diseases, low intake is responsible for 31 percent of CHD and 11 percent of stroke worldwide.¹³
- The current production and consumption of vegetables vary widely among regions. The highest available vegetable supply is in Asia and the lowest in South America and Africa. Only a small and negligible minority of the world's population consumes at present the generally recommended high average intakes of fruits and vegetables. The availability of fruit generally decreased between 1990 and 1998 in most regions of the world.⁷
- British adults derive about 37 percent of their food energy (calories) from total fat and between 14 and 15 percent from saturated fat. About 13 percent of men and 15 percent of women consume the recommended five or more portions of fruit and vegetables daily. Among British children ages 2-15 the average food energy derived from fat is 35 percent for boys and 36 percent for girls.¹¹
- 38 percent of men and 23 percent of women in the UK consume more alcohol than the recommended daily benchmarks. 27 percent of men and 17 percent of women consume more than the weekly recommended levels.¹¹

Links to Web Sources

Note: These links are provided as a helpful reference tool for finding information. The American Heart Association has NOT evaluated, made any determination about quality or efficacy,

and does not endorse any information, service, product or company represented by these hyperlinks. The list is not complete and will not be updated.

British Heart Foundation – Coronary Heart Disease Statistics

<http://www.bhf.org.uk/professionals/index.asp?secondlevel=519>

This site includes European cardiovascular disease statistics.

(Canadian) Cardiovascular Disease Surveillance Online

http://dsol-smed.hc-sc.gc.ca/dsol-smed/cvd/index_e.html

Health Canada provides this site on cardiovascular disease statistics for Canada. See also:

Changing Face of Heart Disease and Stroke in Canada, The

<http://www.hc-sc.gc.ca/hpb/lcdc/bcrdd/hdsc2000/index.html>

Centers for Disease Control (CDC) – Cardiovascular Health – International Information

http://www.cdc.gov/cvh/library/international_resources.htm

This page includes links to CDC affiliated publications and international cardiovascular disease projects. Delete??

European Society of Cardiology

<http://www.escardio.org/>

Eurostat

<http://europa.eu.int/en/comm/eurostat/eurostat.html>

From the Statistical Office of the European Communities, provides statistics on: economy and finance; population and social conditions; energy and industry; agriculture, forestry and fisheries; external trade; distributive trade, services and transport ; environment; research and development; and general areas. Includes full-text online publications

G8 Promoting Heart Health

<http://www.med.mun.ca/g8hearthealth/pages/enter.htm>

The G8 Promoting Heart Health initiative aims at disseminating best practices for implementing cardiovascular disease preventive interventions. The site is searchable and provides summary descriptions of projects.

Global Cardiology Network

<http://www.globalcardiology.org/>

Global Cardiovascular Infobase

<http://www.cvdinfobase.ca/>

This site includes epidemiological data and statistics for cardiovascular diseases for countries throughout the world. However, the focus is on developing nations. The data are not complete and may not be consistent as to the type of data and years available. Please note that more complete data from more developed nations (like the United States) can be found on government health sites for those countries.

Global Health.gov – World Health Statistics

<http://www.globalhealth.gov/worldhealthstatistics.shtml>

Heart and Stroke Foundation of Canada

<http://www.heartandstroke.ca>

This site includes Canadian cardiovascular disease statistics.

Institute for International Health – Global Burden of Disease

<http://www.iih.org/about/burden.html> Delete??

International Burden of Disease Network

<http://www.ibdn.net/>

International Task Force for Prevention of Coronary Disease

<http://www.chd-taskforce.de/>

LAC Health Accounts

<http://www.lachealthaccounts.org/en/webguide.php>

Covers Latin America and the Caribbean. It includes systematic tabulations of health spending by source, use and function.

Morbidity and Mortality Weekly Report (MMWR) International Bulletins

<http://www.cdc.gov/mmwr/international/world.html>

These reports are not available for all countries. Most data are for Europe, North America and Australia.

PAHO Pan American Health Organization

<http://www.paho.org/Project.asp?SEL=HD&LNG=ENG&CD=HTREN>

ProCOR Conference on Cardiovascular Health

<http://procor.org/>

This site includes a list of over 50 epidemiological studies. Included are summaries and bibliographies for each.

UNICEF – Statistical Data

<http://www.unicef.org/statis/>

United Nations Population Fund (UNFPA)

<http://www.unfpa.org/>

United Nations, Department of Economic and Social Affairs – Statistics Division

<http://www.un.org/Depts/unsd/>

Provides “statistics and statistical methods in the fields of international merchandise trade, national accounts, demography and population, social indicators, gender, industry, energy, environment, human settlements and disability.”

World Bank Home Page

<http://www.worldbank.org/>

Provides data on the history, functions, governance, financing and development progress of members of the World Bank Group (International Bank for Reconstruction and Development; International Development Agency; International Finance Corporation; Multilateral Guarantee Agency; and International Centre for Settlement of Investment Disputes). The "Countries and Regions" pages are of particular interest.

World Health Organization (WHO) Publications – Cardiovascular Diseases

http://www.who.int/cardiovascular_diseases/en/

This page includes links to WHO MONICA Project information.

World Health Organization Statistical Information System (WHOSIS)

<http://www3.who.int/whosis/menu.cfm>

This site is the guide to health and health-related epidemiological and statistical information available from the World Health Organization.

World Federation of Public Health Associations

http://www.apha.org/wfpha/about_wfpha.htm

World Heart Federation – White Book

<http://www.worldheart.org/publications/intro.asp>

This site gives information on how to order the White Book on Cardiovascular Diseases.

World Heart Day (from World Heart Federation, WHO, UNESCO)

<http://www.worldheartday.com/>

Source Footnotes

- ¹ WHO World Health Report, 2003.
- ² WHO news release. www.who.int/mediacentre/releases/2003/pr72/en/.
- ³ Integrated Management of Cardiovascular Risk. Report of a WHO Meeting, Geneva, July 2002.
- ⁴ World Health Organization Web site, www.who.int/ncd/cvd.
- ⁵ Chockalingam A, Balaguer-Vintro I. *Impending global pandemic of cardiovascular diseases*. Barcelona, Spain: Prous Science; 1999.
- ⁶ Institute for International Health Web site, www.iih.org.
- ⁷ Diet, Nutrition and the Prevention of Chronic Diseases. WHO, Geneva, 2003.
- ⁸ World Heart Federation Fact-Sheet, 2002.
- ⁹ British Heart Foundation. *European Cardiovascular Disease Statistics*, 2000 Edition.
- ¹⁰ WHO (1999) European Health for All statistical database.
- ¹¹ British Heart Foundation. *Coronary Heart Disease Statistics*, 2004 Edition.
- ¹² Heart and Stroke Foundation of Canada Web site, www.heartandstroke.ca.
- ¹³ WHO World Health Report, 2002.
- ¹⁴ www.who.int/hpr/nph/docs/successful_prevention.pdf.
- ¹⁵ Cardiovascular Diseases – Prevention and Control. WHO CVD Strategy, 2001-2002.
- ¹⁶ Pan American Health Organization. *Health in the Americas*, 2002 Edition, 2003.
- ¹⁷ Wolf-Maier, et al. Hypertension prevalence and blood pressure levels in 6 European countries, Canada, and the United States. *JAMA*. 2003;289:2363-69.
- ¹⁸ Heart and Stroke Foundation of Canada. *The Changing Face of Heart Disease and Stroke in Canada 2000*.
- ¹⁹ WHO/AFRO. www.afro.who.int/cdp/epidemiology.html.
- ²⁰ Hurst W. *The Heart, Arteries and Veins*. 9th ed. New York, NY: McGraw-Hill; 1998.
- ²¹ Belch, JF, et al. Critical issues in peripheral arterial disease detection and management. *Arch Int Med/col*. 2003;163:884-892.
- ²² World No-Tobacco Day, WHO Web site, Jan. 2004.
- ²³ Reducing Tobacco Use. A Report of the Surgeon General. Executive Summary. *MMWR*. Vol. 49, No. RR-16, Dec. 22, 2000.
- ²⁴ World No-Tobacco Day, WHO Web site, May 1999, www.who.int/toh/worldnotobacco99/english/facts.htm.
- ²⁵ Obesity: Preventing and managing the global epidemic. June, 1997. WHO Web site, www.who.int/ncd/cvd.
- ²⁶ Zhou B, et al. Overweight is an independent risk factor for cardiovascular disease in Chinese populations. *Obesity Review*. 2002;3(3):147-56.
- ²⁷ WHO Report 2002 – Preventing Risks, Promoting Healthy Life.
- ²⁸ King H, et al. Global burden of diabetes. *Diabetes Care*. 1998;21:1414-1431.
- ²⁹ Yusuf, S., et al, “Global burden of cardiovascular diseases: part 1: general considerations, the epidemiologic transition, risk factors, and impact of urbanization.” *Circulation* 2001; 104:2746-2753.
- ³⁰ “A Race Against Time. The Challenge of Cardiovascular Disease in Developing Economies,” 2004 Columbia University, New York.
- ³¹ Rheumatic Fever and Rheumatic Heart Disease. Report of a WHO Expert Consultation, Geneva, 29 Oct. – Nov. 2001, WHO 2004.
- ³² 2004 QuickFacts, Heart and Stroke Foundation of Canada Web Site, www.heartandstroke.ca.
- ³³ Atlas of Heart Disease and stroke, WHO, Sept. 2004.
- ³⁴ Effect of potentially modifiable risk factors associated with myocardial infarction in 52 countries (the INTERHEART study): case-control study. *The Lancet* 2004;364:937-52.