

Executive Summary: Heart Disease and Stroke Statistics—2012 Update

A Report From the American Heart Association

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*The findings and conclusions of this report are those of the authors and do not necessarily represent the views of the Centers for Disease Control and Prevention. The 2012 Statistical Update full text is available online at <http://circ.ahajournals.org/content/125/1/e2.full>.

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Summary

Each year, the American Heart Association (AHA), in conjunction with the Centers for Disease Control and Prevention, the National Institutes of Health, and other government agencies, brings together the most up-to-date statistics on heart disease, stroke, other vascular diseases, and their risk factors and presents them in its Heart Disease and Stroke Statistical Update. The Statistical Update is a valuable resource for researchers, clinicians, healthcare policy makers, media professionals, the lay public, and many others who seek the best national data available on disease morbidity and mortality and the risks, quality of care, medical procedures and operations, and costs associated with the management of these diseases in a single document. Indeed, since 1999, the Statistical Update has been cited more than 8700 times in the literature (including citations of all annual versions). In 2010 alone, the various Statistical Updates were cited \approx 1600 times (data from ISI Web of Science). In recent years, the Statistical Update has undergone some major changes with the addition of new chapters and major updates across multiple areas. For this year's edition, the Statistics Committee, which produces the document for the AHA, updated all of the current chapters with the most recent nationally representative data and inclusion of relevant articles from the literature over the past year and added a new chapter detailing various disorders of heart rhythm. Also, the 2012 Statistical Update is a major source for monitoring both cardiovascular health and disease in the population, with a focus on progress toward achievement of the AHA's 2020 Impact Goals. Below are a few highlights from this year's Update.

Rates of Death Attributable to CVD Have Declined, Yet the Burden of Disease Remains High

- The 2008 overall rate of death attributable to cardiovascular disease (CVD) (*International Classification of Diseases, 10th Revision*, codes I00–I99) was 244.8 per 100 000. The rates were 287.2 per 100 000 for white males, 390.4 per 100 000 for black males, 200.5 per 100 000 for white females, and 277.4 per 100 000 for black females. Table 1 contains complete details for males; Table 2 for females.
- From 1998 to 2008, the rate of death attributable to CVD declined 30.6%. Mortality data for 2008 show that CVD (I00–I99; Q20–Q28) accounted for 32.8% (811 940) of all 2 471 984 deaths in 2008, or 1 of every 3 deaths in the United States.
- On the basis of 2008 mortality rate data, more than 2200 Americans die of CVD each day, an average of 1 death every 39 seconds. About 150 000 Americans killed by CVD (I00–I99) in 2008 were <65 years of age. In 2008, 33% of deaths due to CVD occurred before the age of 75 years, which is well before the average life expectancy of 77.9 years.
- Coronary heart disease caused \approx 1 of every 6 deaths in the United States in 2008. Coronary heart disease mortality in 2008 was 405 309. Each year, an estimated 785 000 Americans will have a new coronary attack, and \approx 470 000 will have a recurrent attack. It is estimated that an additional 195 000 silent first myocardial infarctions occur each year. Approximately every 25 seconds, an American will have a coronary event, and approximately every minute, someone will die of one.
- Each year, \approx 795 000 people experience a new or recurrent stroke. Approximately 610 000 of these are first attacks, and 185 000 are recurrent attacks. Mortality data from 2008 indicate that stroke accounted for \approx 1 of every 18 deaths in the United States. On average, every 40 seconds, someone in the United States has a stroke. From 1998 to 2008, the stroke death rate fell 34.8%, and the actual number of stroke deaths declined 19.4%.
- In 2008, 1 in 9 death certificates (281 437 deaths) in the United States mentioned heart failure.

Prevalence and Control of Traditional Risk Factors Remains an Issue for Many Americans

- Data from the National Health and Nutrition Examination Survey (NHANES) 2005–2008 indicate that 33.5% of US adults \geq 20 years of age have hypertension (Chapter 7, Table 7-1). This amounts to an estimated 76 400 000 US adults with hypertension. The prevalence of hypertension is nearly equal between men and women. African American adults have among the highest rates of hypertension in the world, at 44%. Table 3 contains complete details by race/ethnicity.
- Among hypertensive adults, \approx 80% are aware of their condition, 71% are using antihypertensive medication, and only 48% of those aware that they have hypertension have their condition controlled.
- Despite 4 decades of progress, in 2010, among Americans \geq 18 years of age, 21.2% of men and 17.5% of women continued to be cigarette smokers. In 2009, 19.5% of students in grades 9 through 12 reported current cigarette use. Table 4 contains complete details for children and youth.
- The percentage of the nonsmoking population with detectable serum cotinine (indicating exposure to secondhand smoke) declined from 52.5% in 1999 to 2000 to 40.1% in 2007 to 2008, with declines occurring, and was higher for those 3 to 11 years of age (53.6%) and those 12 to 19 years of age (46.5%) than for those 20 years of age and older (36.7%).
- An estimated 33 600 000 adults \geq 20 years of age have total serum cholesterol levels \geq 240 mg/dL, with a prevalence of 15.0% (Chapter 14, Table 14-1).
- In 2008, an estimated 18 300 000 Americans had diagnosed diabetes mellitus, representing 8.0% of the adult population. An additional 7 100 000 had undiagnosed diabetes mellitus, and 36.8% had prediabetes, with abnormal fasting glucose levels. African Americans, Mexican Americans, Hispanic/Latino individuals, and other ethnic minorities bear a strik-

ingly disproportionate burden of diabetes mellitus in the United States (Chapter 17, Table 17-1).

The 2012 Update Expands Data Coverage of the Obesity Epidemic and Its Antecedents and Consequences

- The estimated prevalence of overweight and obesity in US adults (≥ 20 years of age) is 149 300 000, which represents 67.3% of this group in 2008. Fully 33.7% of US adults are obese (body mass index ≥ 30 kg/m²). Men and women of all race/ethnic groups in the population are affected by the epidemic of overweight and obesity (Chapter 16, Table 16-1).
- Among children 2 to 19 years of age, 31.7% are overweight and obese (which represents 23.6 million children), and 16.9% are obese (12.6 million children). Mexican American boys and girls and African American girls are disproportionately affected. Over the past 3 decades, the prevalence of obesity in children 6 to 11 years of age has increased from $\approx 4\%$ to $>20\%$.
- Obesity (body mass index ≥ 30 kg/m²) is associated with marked excess mortality in the US population. Even more notable is the excess morbidity associated with overweight and obesity in terms of risk factor development and incidence of diabetes mellitus, CVD end points (including coronary heart disease, stroke, and heart failure), and numerous other health conditions, including asthma, cancer, degenerative joint disease, and many others.
- The prevalence of diabetes mellitus is increasing dramatically over time, in parallel with the increases in prevalence of overweight and obesity.
- On the basis of NHANES 2003–2006 data, the age-adjusted prevalence of metabolic syndrome, a cluster of major cardiovascular risk factors related to overweight/obesity and insulin resistance, is $\approx 34\%$ (35.1% among men and 32.6% among women).
- The proportion of youth (≤ 18 years of age) who report engaging in no regular physical activity is high, and the proportion increases with age. In 2009, among adolescents in grades 9 through 12, 29.9% of girls and 17.0% of boys reported that they had not engaged in 60 minutes of moderate-to-vigorous physical activity, defined as any activity that increased heart rate or breathing rate, even once in the previous 7 days, despite recommendations that children engage in such activity ≥ 5 days per week.
- Thirty-three percent of adults reported engaging in no aerobic leisure-time physical activity.
- Data from NHANES indicate that between 1971 and 2004, average total energy consumption among US adults increased by 22% in women (from 1542 to 1886 kcal/d) and by 10% in men (from 2450 to 2693 kcal/d; see Chart 20-1).
- The increases in calories consumed during this time period are attributable primarily to greater average carbohydrate intake, in particular, of starches, refined grains, and sugars. Other specific changes related

to increased caloric intake in the United States include larger portion sizes, greater food quantity and calories per meal, and increased consumption of sugar-sweetened beverages, snacks, commercially prepared (especially fast food) meals, and higher energy-density foods.

The 2012 Update Provides Critical Data About Cardiovascular Quality of Care, Procedure Utilization, and Costs

In light of the current national focus on healthcare utilization, costs, and quality, it is critical to monitor and understand the magnitude of healthcare delivery and costs, as well as the quality of healthcare delivery, related to CVDs. The Statistical Update provides these critical data in several sections.

Quality-of-Care Metrics for CVDs

Chapter 21 reviews many metrics related to the quality of care delivered to patients with CVDs, as well as healthcare disparities. In particular, quality data are available from the AHA's "Get With The Guidelines" programs for coronary artery disease and heart failure and from the American Stroke Association/AHA's "Get With The Guidelines" program for acute stroke. Similar data from the Veterans Healthcare Administration, national Medicare and Medicaid data, and Acute Coronary Treatment and Intervention Outcomes Network—"Get With The Guidelines" Registry data are also reviewed. These data show impressive adherence with guideline recommendations for many, but not all, metrics of quality of care for these hospitalized patients. Data are also reviewed on screening for cardiovascular risk factor levels and control.

Cardiovascular Procedure Utilization and Costs

Chapter 22 provides data on trends and current usage of cardiovascular surgical and invasive procedures. For example, the total number of inpatient cardiovascular operations and procedures increased 22%, from 6 133 000 in 1999 to 7 453 000 in 2009 (National Heart, Lung, and Blood Institute computation based on National Center for Health Statistics annual data).

Chapter 23 reviews current estimates of direct and indirect healthcare costs related to CVDs, stroke, and related conditions using Medical Expenditure Panel Survey data. The total direct and indirect cost of CVD and stroke in the United States for 2008 is estimated to be \$297.7 billion. This figure includes health expenditures (direct costs, which include the cost of physicians and other professionals, hospital services, prescribed medications, home health care, and other medical durables) and lost productivity resulting from mortality (indirect costs). By comparison, in 2008, the estimated cost of all cancer and benign neoplasms was \$228 billion (\$93 billion in direct costs, \$19 billion in morbidity indirect costs, and \$116 billion in mortality indirect costs). CVD costs more than any other diagnostic group.

The AHA, through its Statistics Committee, continuously monitors and evaluates sources of data on heart disease and stroke in the United States to provide the most current data available in the Statistics Update.

Finally, it must be noted that this annual Statistical Update is the product of an entire year's worth of effort by dedicated professionals, volunteer physicians and scientists, and outstanding AHA staff members, without whom publication of this valuable resource would be impossible. Their contributions are gratefully acknowledged.

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Committee and Stroke Statistics Subcommittee*

Note: Population data used in the compilation of NHANES prevalence estimates is for the latest year of the NHANES survey being

used. Extrapolations for NHANES prevalence estimates are based on the census resident population for 2008 because this is the most recent year of NHANES data used in the Statistical Update.

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KEY WORDS: AHA Statistical Update ■ cardiovascular diseases
■ epidemiology ■ risk factors ■ statistics ■ stroke

Table 1. Males and CVD: At-a-Glance Table

Diseases and Risk Factors	Both Sexes	Total Males	White Males	Black Males	Mexican American Males
Total CVD					
Prevalence, 2008*	82.6 M (36.2%)	39.9 M (37.4%)	37.4%	44.8%	30.7%
Mortality, 2008†	811.9 K	392.2 K	335.2 K	46.8 K	N/A
CHD					
Prevalence, CHD, 2008*	16.3 M (7.0%)	8.8 M (8.3%)	8.5%	7.9%	6.3%
Prevalence, MI, 2008*	7.9 M (3.1%)	4.8 M (4.3%)	4.3%	4.3%	3.0%
Prevalence, AP, 2008*	9.0 M (3.9%)	4.0 M (3.8%)	3.8%	3.3%	3.6%
New and recurrent CHD‡§	1.26 M	740.0 K	675.0 K	70.0 K	N/A
New and recurrent MI§	935.0 K	565.0 K	N/A	N/A	N/A
Incidence, AP (stable angina)	500.0 K	320.0 K	N/A	N/A	N/A
Mortality, 2008, CHD†	405.3 K	216.2 K	189.4 K	21.4 K	N/A
Mortality, 2008, MI†	134.0 K	72.4 K	63.8 K	6.9 K	N/A
Stroke					
Prevalence, 2008*	7.0 M (3.0%)	2.8 M (2.7%)	2.4%	4.5%	2.0%
New and recurrent strokes†	795.0 K	370.0 K	325.0 K	45.0 K	N/A
Mortality, 2008†	134.1 K	53.5 K	44.5 K	7.2 K	N/A
HBP					
Prevalence, 2008*	76.4 M (33.5%)	36.5 M (34.1%)	33.9%	43.0%	27.8%
Mortality, 2008†	61.0 K	26.8 K	19.6 K	6.4 K	N/A
HF					
Prevalence, 2008*	5.7 M (2.4%)	3.1 M (3.0%)	2.7%	4.5%	2.3%
Mortality, 2008†	56.8 K	23.0 K	20.3 K	2.4 K	N/A
Smoking					
Prevalence, 2010¶	44.1 M (19.3%)	23.7 M (21.2%)	23.0%	23.4%	15.2%#
Blood cholesterol					
Prevalence, 2008					
Total cholesterol ≥200 mg/dL*	98.8 M (44.4%)	45.0 M (41.8%)	41.2%	37.0%	50.1%
Total cholesterol ≥240 mg/dL*	33.6 M (15.0%)	14.6 M (13.5%)	13.7%	9.7%	16.9%
LDL cholesterol ≥130 mg/dL*	71.3 M (31.9%)	35.3 M (32.5%)	30.5%	34.4%	41.9%
HDL cholesterol <40 mg/dL*	41.8 M (18.9%)	30.8 M (28.6%)	29.5%	16.6%	31.7%
PA**					
Prevalence, 2010¶	20.7%	25.1%	26.7%	24.6%	N/A
Overweight and obesity					
Prevalence, 2008					
Overweight and obesity, BMI ≥25.0 Kg/m ² *	149.3 M (67.3%)	78.0 M (72.4%)	72.3%	70.8%	77.5%
Obesity, BMI ≥30.0 Kg/m ² *	75.0 M (33.7%)	34.9 M (32.4%)	32.1%	37.0%	31.4%
DM					
Prevalence, 2008					
Physician-diagnosed DM*	18.3 M (8.0%)	8.3 M (7.9%)	6.8%	14.3%	11.0%
Undiagnosed DM*	7.1 M (3.1%)	4.4 M (4.1%)	3.9%	4.8%	6.3%
Prediabetes*	81.5 M (36.8%)	48.1 M (44.9%)	45.4%	31.6%	44.9%
Incidence, diagnosed DM*	1.6 M	N/A	N/A	N/A	N/A
Mortality, 2008†	70.6 K	35.3 K	28.6 K	5.5 K	N/A

CVD indicates cardiovascular disease; M, millions; K, thousands; N/A, data not available; CHD, coronary heart disease (includes heart attack, angina pectoris chest pain, or both); MI, myocardial infarction (heart attack); AP, angina pectoris (chest pain); HBP, high blood pressure; HF, heart failure; LDL, low-density lipoprotein; HDL, high-density lipoprotein; PA, physical activity; BMI, body mass index; and DM, diabetes mellitus.

*Age ≥20 y.

†All ages.

‡New and recurrent MI and fatal CHD.

§Age ≥35 y.

||Age ≥45 y.

¶Age ≥18 y.

#Hispanic.

**Met 2008 Federal PA guidelines for adults.

Table 2. Females and CVD: At-a-Glance Table

Diseases and Risk Factors	Both Sexes	Total Females	White Females	Black Females	Mexican American Females
Total CVD					
Prevalence, 2008*	82.6 M (36.2%)	42.7 M (35.0%)	33.8%	47.3%	30.9%
Mortality, 2008†	811.9 K	419.7 K	360.4 K	49.8 K	N/A
CHD					
Prevalence, CHD, 2008*	16.3 M (7.0%)	7.5 M (6.1%)	5.8%	7.6%	5.6%
Prevalence, MI, 2008*	7.9 M (3.1%)	3.1 M (2.2%)	2.1%	2.2%	1.1%
Prevalence, AP, 2008*	9.0 M (3.9%)	5.0 M (4.0%)	3.7%	5.6%	3.7%
New and recurrent CHD‡§	1.26 M	515.0 K	445.0 K	65.0 K	N/A
New and recurrent MI§	935.0 K	370.0 K	N/A	N/A	N/A
Incidence, AP (stable angina)	500.0 K	180.0 K	N/A	N/A	N/A
Mortality, 2008, CHD†	405.3 K	189.1 K	164.5 K	20.5 K	N/A
Mortality, 2008, MI†	134.0 K	61.5 K	53.3 K	6.9 K	N/A
Stroke					
Prevalence, 2008*	7.0 M (3.0%)	4.2 M (3.3%)	3.3%	4.4%	2.7%
New and recurrent strokes†	795.0 K	425.0 K	365.0 K	60.0 K	N/A
Mortality, 2008†	134.1 K	80.6 K	68.8 K	9.5 K	N/A
HBP					
Prevalence, 2008*	76.4 M (33.5%)	39.9 M (32.7%)	31.3%	45.7%	28.9%
Mortality, 2008†	61.0 K	34.2 K	26.3 K	7.0 K	N/A
HF					
Prevalence, 2008*	5.7 M (2.4%)	2.6 M (2.0%)	1.8%	3.8%	1.3%
Mortality, 2008†	56.8 K	33.8 K	30.2 K	3.1 K	N/A
Smoking					
Prevalence, 2010¶	44.1 M (19.3%)	20.4 M (17.5%)	20.5%	16.7%	9.0%#
Blood cholesterol					
Prevalence, 2008					
Total cholesterol ≥200 mg/dL*	98.8 M (44.4%)	53.8 M (46.3%)	47.0%	41.2%	46.5%
Total cholesterol ≥240 mg/dL*	33.6 M (15.0%)	19.0 M (16.2%)	16.9%	13.3%	14.0%
LDL cholesterol ≥130 mg/dL*	71.3 M (31.9%)	36.0 M (31.0%)	32.0%	27.7%	31.6%
HDL cholesterol <40 mg/dL*	41.8 M (18.9%)	11.0 M (9.7%)	10.1%	6.6%	12.2%
PA**					
Prevalence, 2010¶	20.7%	16.4%	19.1%	11.2%	N/A
Overweight and obesity					
Prevalence, 2008					
Overweight and obesity, BMI ≥25.0 Kg/m ² *	149.3 M (67.3%)	71.3 M (62.3%)	59.3%	77.7%	75.1%
Obesity, BMI ≥30.0 Kg/m ² *	75.0 M (33.7%)	40.1 M (35.2%)	32.8%	51.0%	43.4%
DM					
Prevalence, 2008					
Physician-diagnosed DM*	18.3 M (8.0%)	10.0 M (8.2%)	6.5%	14.7%	12.7%
Undiagnosed DM*	7.1 M (3.1%)	2.7 M (2.3%)	1.9%	4.0%	3.8%
Prediabetes*	81.5 M (36.8%)	33.4 M (28.8%)	27.9%	27.1%	34.3%
Incidence, diagnosed DM*	1.6 M	N/A	N/A	N/A	N/A
Mortality, 2008†	70.6 K	35.2 K	27.3 K	6.6 K	N/A

CVD indicates cardiovascular disease; M, millions; K, thousands; N/A, data not available; CHD, coronary heart disease (includes heart attack, angina pectoris chest pain, or both); MI, myocardial infarction (heart attack); AP, angina pectoris (chest pain); HBP, high blood pressure; HF, heart failure; LDL, low-density lipoprotein; HDL, high-density lipoprotein; PA, physical activity; BMI, body mass index; and DM, diabetes mellitus.

*Age ≥20 y.

†All ages.

‡New and recurrent MI and fatal CHD.

§Age ≥35 y.

||Age ≥45 y.

¶Age ≥18 y.

#Hispanic.

**Met 2008 Federal PA guidelines for adults.

Table 3. Race/Ethnicity and CVD: At-a-Glance Table

Diseases and Risk Factors	Both Sexes	Whites		Blacks		Mexican Americans		Hispanics/Latinos		Asians: Both Sexes	American Indian/Alaska Native: Both Sexes
		Males	Females	Males	Females	Males	Females	Males	Females		
Total CVD											
Prevalence, 2008*	82.6 M (36.2%)	37.4%	33.8%	44.8%	47.3%	30.7%	30.9%	N/A	N/A	N/A	N/A
Mortality, 2008†	811.9 K	335.2 K	360.4 K	46.8 K	49.8 K	N/A	N/A	N/A	N/A	N/A	N/A
CHD											
Prevalence, CHD, 2008*	16.3 M (7.0%)	8.5%	5.8%	7.9%	7.6%	6.3%	5.6%	5.2%		4.9%	5.9% #
Prevalence, MI, 2008*	7.9 M (3.1%)	4.3%	2.1%	4.3%	2.2%	3.0%	1.1%	N/A	N/A	N/A	N/A
Prevalence, AP, 2008*	9.0 M (3.9%)	3.8%	3.7%	3.3%	5.6%	3.6%	3.7%	N/A	N/A	N/A	N/A
New and recurrent CHD‡§	1.26 M	675.0 K	445.0 K	70.0 K	65.0 K	N/A	N/A	N/A	N/A	N/A	N/A
Mortality, CHD, 2008†	405.3 K	189.3 K	164.5 K	21.4 K	20.5 K	N/A	N/A	N/A	N/A	N/A	N/A
Mortality, MI, 2008†	134.0 K	63.8 K	53.3 K	6.9 K	6.9 K	N/A	N/A	N/A	N/A	N/A	N/A
Stroke											
Prevalence, 2008*	7.0 M (3.0%)	2.4%	3.3%	4.5%	4.4%	2.0%	2.7%	2.6%		2.0%	5.9% #
New and recurrent strokes†	795.0 K	325.0 K	365.0 K	45.0 K	60.0 K	N/A	N/A	N/A	N/A	N/A	N/A
Mortality, 2008†	134.1 K	44.4 K	68.8 K	7.2 K	9.5 K	N/A	N/A	N/A	N/A	N/A	N/A
HBP											
Prevalence, 2008*	76.4 M (33.5%)	33.9%	31.3%	43.0%	45.7%	27.8%	28.9%	24.7%		20.5%	30.0%
Mortality, 2008†	61.0 K	19.6 K	26.3 K	6.4 K	7.0 K	N/A	N/A	N/A	N/A	N/A	N/A
HF											
Prevalence, 2008*	5.7 M (2.4%)	2.7%	1.8%	4.5%	3.8%	2.3%	1.3%	N/A	N/A	N/A	N/A
Mortality, 2008†	56.8 K	20.3 K	30.2 K	2.4 K	3.1 K	N/A	N/A	N/A	N/A	N/A	N/A
Smoking											
Prevalence, 2010	44.1 M (19.3%)	23.0%	20.5%	23.4%	16.7%	12.0%		15.2%	9.0%	9.3%	26.6%
Blood cholesterol											
Prevalence, 2008											
Total cholesterol ≥200 mg/dL*	98.8 M (44.4%)	41.2%	47.0%	37.0%	41.2%	50.1%	46.5%	N/A	N/A	N/A	N/A
Total cholesterol ≥240 mg/dL*	33.6 M (15.0%)	13.7%	16.9%	9.7%	13.3%	16.9%	14.0%	N/A	N/A	N/A	N/A
LDL cholesterol ≥130 mg/dL*	71.3 M (31.9%)	30.5%	32.0%	34.4%	27.7%	41.9%	31.6%	N/A	N/A	N/A	N/A
HDL cholesterol <40 mg/dL*	41.8 M (18.9%)	29.5%	10.1%	16.6%	6.6%	31.7%	12.2%	N/A	N/A	N/A	N/A
PA¶											
Prevalence, 2010	20.7%	21.3%		17.2%		13.2%		14.4%		17.8%	12.5%
Overweight and obesity											
Prevalence, 2008											
Overweight and obesity, BMI ≥25.0kg/m ² *	149.3 M (67.3%)	72.3%	59.3%	70.8%	77.7%	77.5%	75.1%	N/A	N/A	N/A	N/A
Overweight and obesity, BMI ≥30.0kg/m ² *	75.0 M (33.7%)	32.1%	32.8%	37.0%	51.0%	31.4%	43.4%	N/A	N/A	N/A	N/A
DM											
Prevalence, 2008											
Physician-diagnosed DM*	18.3 M (8.0%)	6.8%	6.5%	14.3%	14.7%	11.0%	12.7%	N/A	N/A	N/A	N/A
Undiagnosed DM*	7.1 M (3.1%)	3.9%	1.9%	4.8%	4.0%	6.3%	3.8%	N/A	N/A	N/A	N/A
Prediabetes*	81.5 M (36.8%)	45.4%	27.9%	31.6%	27.1%	44.9%	34.3%	N/A	N/A	N/A	N/A
Incidence, diagnosed DM*	1.6 M	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mortality, 2008†	70.6 K	28.6 K	27.3 K	5.5 K	6.6 K	N/A	N/A	N/A	N/A	N/A	N/A

CVD indicates cardiovascular disease; M, millions; N/A, data not available; K, thousands; CHD, coronary heart disease (includes heart attack, angina pectoris chest pain, or both); MI, myocardial infarction (heart attack); AP, angina pectoris (chest pain); HBP, high blood pressure; HF, heart failure; LDL, low-density lipoprotein; HDL, high-density lipoprotein; PA, physical activity; BMI, body mass index; and DM, diabetes mellitus.

*Age >20 y.

†All ages.

‡New and recurrent MI and fatal CHD.

§Age ≥35 y.

||Age ≥18 y.

¶Met 2008 Federal PA guidelines for adults.

#Figure not considered reliable.

Table 4. Children, Youth, and CVD: At-a-Glance Table

Diseases and Risk Factors	Both Sexes	Total Males	Total Females	NH Whites		NH Blacks		Mexican Americans	
				Males	Females	Males	Females	Males	Females
Congenital cardiovascular defects									
Mortality, 2008*	3.4 K	1.8 K	1.6 K	1.4 K	1.2 K	0.3 K	0.3 K	N/A	N/A
Smoking, %									
High school students, grades 9–12									
Current cigarette smoking, 2009	19.5	19.8	19.1	22.3	22.8	10.7	8.4	19.4†	16.7†
Current cigar smoking, 2009	14.0	18.6	8.8	21.0	8.0	13.9	11.5	15.8†	9.5†
Blood cholesterol, mg/dL									
Mean total cholesterol									
Ages 4–11 y	164.5	163.8	165.2	163.9	165.6	165.7	162.3	160.7	161.5
Ages 12–19 y	159.2	156.3	162.3	155.9	162.3	157.7	163.6	156.9	161.3
Mean HDL cholesterol									
Ages 4–11 y	54.7	55.6	53.6	54.7	52.8	61.4	58.1	53.6	51.1
Ages 12–19 y	51.6	49.3	54.0	48.1	53.3	54.6	56.9	48.3	53.5
Mean LDL cholesterol									
Ages 12–19 y	88.5	87.1	89.9	87.6	89.8	88.8	92.6	88.4	88.8
PA‡									
Prevalence, grades 9–12, 2009§									
Met currently recommended levels of PA, %	37.0	45.6	27.7	47.3	31.3	43.3	21.9	41.3†	24.9†
Overweight and obesity									
Prevalence, 2008									
Children and adolescents, ages 2–19 y, overweight or obese	23.6 M (31.7%)	12.2 M (32.1%)	11.4 M (31.3%)	29.5%	29.2%	33.0%	39.0%	41.7%	36.1%
Children and adolescents, age 2–19 y, obese§	12.6 M (16.9%)	6.8 M (17.8%)	5.8 M (15.9%)	15.7%	14.9%	17.3%	22.7%	24.9%	16.5%

CVD indicates cardiovascular disease; NH, non-Hispanic; K, thousands; N/A, data not available; HDL, high-density lipoprotein; LDL, low-density lipoprotein; PA, physical activity; and M, millions.

Overweight indicates a body mass index in the 95th percentile of the Centers for Disease Control and Prevention 2000 growth chart.

*All ages.

†Hispanic.

‡Regular leisure-time PA.

§Data derived from Eaton DK, Kann L, Kinchen S, Shanklin S, Ross J, Hawkins J, Harris WA, Lowry R, McManus T, Chyen D, Lim C, Whittle L, Brener ND, Wechsler H; Centers for Disease Control and Prevention (CDC). Youth risk behavior surveillance—United States, 2009. *MMWR Surveill Summ.* 2010;59:1–142.

Disclosures

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This table represents the relationships of writing group members that may be perceived as actual or reasonably perceived conflicts of interest as reported on the Disclosure Questionnaire, which all members of the writing group are required to complete and submit. A relationship is considered to be "significant" if (a) the person receives \$10 000 or more during any 12-month period, or 5% or more of the person's gross income; or (b) the person owns 5% or more of the voting stock or share of the entity, or owns \$10 000 or more of the fair market value of the entity. A relationship is considered to be "modest" if it is less than "significant" under the preceding definition.

*Modest.
†Significant.