

educate the public and encourage cardiac-only resuscitation could improve survival following cardiac arrest.

**Original article** Iwami T *et al.* (2007) Effectiveness of bystander-initiated cardiac-only resuscitation for patients with out-of-hospital cardiac arrest. *Circulation* **116**: 2900–2907

### Waist:hip ratio might help to predict CHD

Previous studies have produced inconsistent findings regarding the potential association between fat distribution and coronary heart disease (CHD). To address this issue, Canoy *et al.* conducted a population-based, prospective study of residents of Norfolk, UK, who were recruited from general practice databases during the period 1993–1997.

A total of 24,508 patients (45% men; age range 45–79 years; mean age 60.3 years for men, 59.6 years for women) were divided into sex-specific quintiles of waist circumference to hip circumference (waist:hip ratio), waist circumference, and BMI. Risk of CHD was estimated with a Cox proportional hazards regression model. There were 2,600 CHD events (1,708 in men and 892 in women) over a mean follow-up of 9.1 years. In total, 662 of these events were fatal. Increasing quintiles of BMI, waist circumference, and waist:hip ratio all correlated with increased incidence of CHD; however, only waist:hip ratio showed a strong graded linear association with risk of CHD following adjustment for various potential confounders ( $P < 0.001$  for all trends except  $P = 0.002$  in healthy, nonsmoking women). The association between waist:hip ratio and CHD was not seen in those with heart disease, stroke or diabetes at baseline.

These findings indicate that waist:hip ratio could improve CHD risk assessment and estimates of the burden of obesity-related CHD in the general population. The authors suggest that the observed relationship between waist:hip ratio and CHD might result from the capacity of this ratio to reflect the separate and opposite associations of waist and hip circumference with CHD.

**Original article** Canoy D *et al.* (2007) Body fat distribution and risk of coronary heart disease in men and women in the European Prospective Investigation Into Cancer and Nutrition in Norfolk cohort: a population-based prospective study. *Circulation* **116**: 2933–2943

### Decline in CHD mortality is slowing in individuals under 55 years of age

Although annual mortality from coronary heart disease (CHD) in the US has declined since the 1960s, there is concern that the rate of decline has begun to slow in recent decades. Ford and Capewell used vital statistics data for individuals in the US aged  $\geq 35$  years and census counts for the years 1980, 1990 and 2000 to determine trends in the annual change in CHD mortality.

From 1980 to 2002, the age-adjusted mortality for CHD declined by 52% in men and 49% in women; however, the average annual rate of decline was greater during the 1980s than in the 1990s for both men (2.9% vs 2.6%) and women (2.6% vs 2.4%). In women aged 35–54 years, the annual mortality decreased by 5.4% between 1980 and 1989 and by 1.2% between 1989 and 2000, and increased by 1.5% between 2000 and 2002. The rate of decline also slowed among men of the same age (decrease of 6.2% between 1980 and 1989 and of 0.5% between 2000 and 2002).

The rate of decline in CHD mortality has decreased in recent years in both men and women, and particularly in individuals younger than 55 years. The authors suggest that the increased incidence among young people of CHD risk factors such as obesity and hypertension might be responsible for this change, and they recommend vigorous screening for such risk factors.

**Original article** Ford ES and Capewell S (2007) Coronary heart disease mortality among young adults in the U.S. from 1980 through 2002: concealed leveling of mortality rates. *J Am Coll Cardiol* **50**: 2128–2132

### An increase in adult obesity-related CHD is predicted for overweight adolescents

In the year 2000, approximately 16% of adolescents (age 12–19 years) in the US were overweight and were likely to remain obese in adulthood. Obese individuals have increased risk factors for coronary heart disease (CHD), so Bibbins-Domingo and colleagues used the CHD Policy Model (a computerized statistical modeling program) to predict the effect that