

RECENT TRENDS IN CORONARY HEART DISEASE INCIDENCE: THE ARIC STUDY

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Community rates of myocardial infarction (MI) incidence and coronary heart disease (CHD) mortality from large, geographically and ethnically diverse populations in the United States are rare. Moreover, data available from vital statistics alone are not sufficient to estimate incidence and are not based on validated events. The Atherosclerosis Risk in Community (ARIC) study provides community surveillance of hospitalized MI events and out-of-hospital deaths among persons age 35-74 in Forsyth County NC, Jackson MS, suburban Minneapolis MN and Washington County MD (1990 population = 329,645). Throughout, hospitalized MI discharges and cause of death for out-of-hospital events (except Washington Co.) were validated. Between 1987 and 1993, 60% (7784) of the 12,914 MI or fatal CHD events occurred in individuals without a prior history of MI. The combined age adjusted rate (per 1000 persons) of incident MI or fatal CHD (without a history of MI) was stable over time.

Rate (/1000) of Incident MI plus Fatal CHD (no prior history of MI)

	<u>'87</u>	<u>'88</u>	<u>'89</u>	<u>'90</u>	<u>'91</u>	<u>'92</u>	<u>'93</u>
Black Men	5.3	6.7	6.3	4.4	4.7	7.1	6.4
White Men	5.2	5.0	5.4	5.0	4.5	4.9	5.5
Black Women	3.7	3.0	3.0	5.0	4.3	3.0	4.3
White Women	1.9	2.1	1.8	2.1	2.1	2.0	1.8

Examining trends in MI and fatal CHD separately, we found that the average annual percent change in incident MI was positive but not significantly different from 0% (1.3% men, 0.35% women). By contrast, fatal CHD among those without prior MI declined annually 5.2% (95% CI: -7.9%, -2.4%) in men and 3.1% (-7.1%, 1.1%) in women. Total CHD mortality, including persons with previous MI, declined an average of 2.7% (-4.6%, -0.8%) in men and 6.6% (-9.4%, -3.7%) in women per year. The continued fall in CHD mortality in the late 80's and early 90's is somewhat opposed by a stable or slightly increasing rate of incident MI.

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