

Heart attack

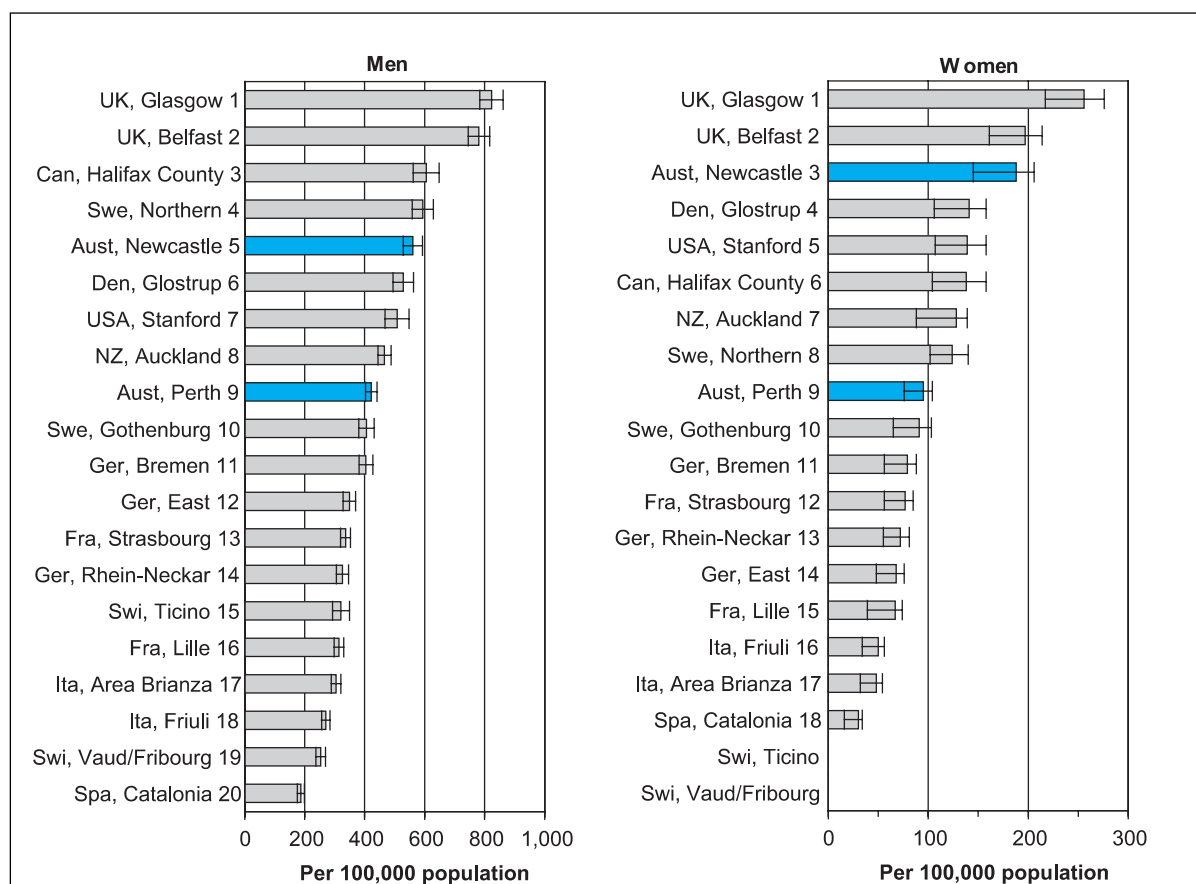


Figure 1: Age-standardised annual event rates with 95% confidence interval, ages 35–64, selected MONICA study populations, 1985–1987

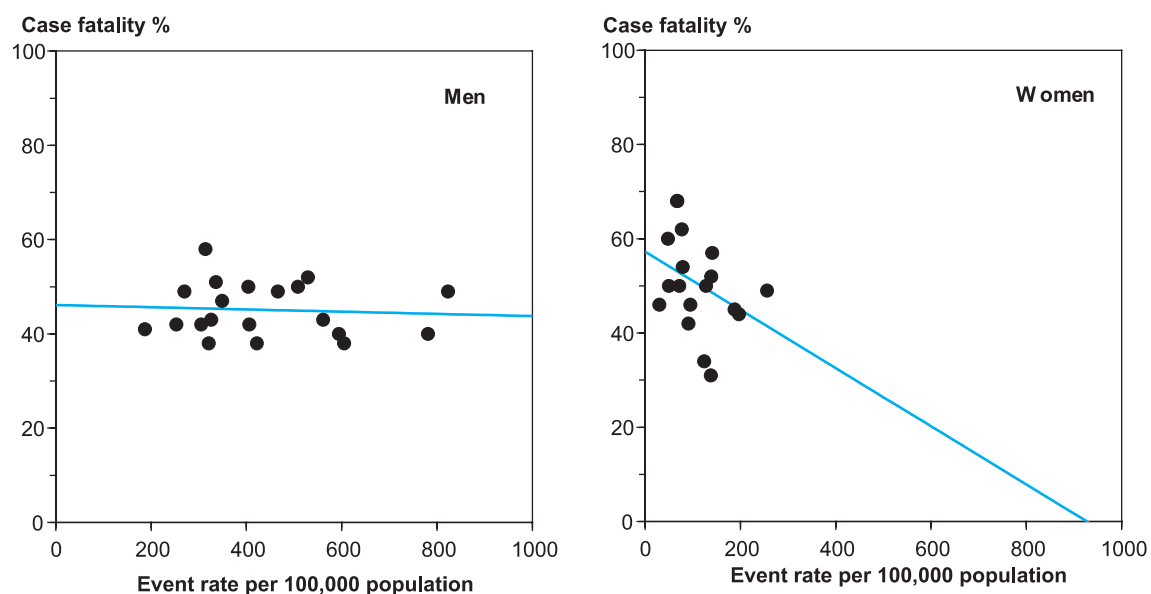


Figure 2: Scatterplot of 28-day case-fatality rates and event rates, selected MONICA study populations, 1985–1987

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Coronary events^(a) and case-fatality, 1985–1987

Region and country	Men aged 35–64		Women aged 35–64	
	Event rate, ±95% CI	% case fatality, ±95% CI	Event rate, ±95% CI	% case fatality, ±95% CI
Australia, Newcastle	561±32	43±3	188±18	45±5
Australia, Perth	422±19	38±2	95±9	46±5
Canada, Halifax County	605±43	38±3	138±20	31±6
Denmark, Glostrup	529±34	52±3	141±17	57±6
France, Lille	314±16	58±3	67±7	68±5
France, Strasbourg	336±17	51±3	77±8	62±5
Germany, Bremen	404±23	50±3	79±9	54±6
Germany, East	349±21	47±3	68±8	68±6
Germany, Rhein-Neckar region	326±20	43±3	72±9	50±6
Italy, Area Brianza	305±16	42±3	48±6	60±6
Italy, Friuli	270±14	49±2	50±6	50±6
New Zealand, Auckland	466±22	49±2	128±11	50±4
Spain, Catalonia	187±12	41±3	30±4	46±8
Sweden, Gothenburg	406±26	42±3	91±12	42±7
Sweden, Northern	594±35	40±3	124±16	34±6
Switzerland, Ticino	321±28	38±4	—	—
Switzerland, Vaud/Fribourg	253±16	42±3	—	—
UK, Belfast	781±36	40±2	197±17	44±4
UK, Glasgow	823±39	49±2	256±20	49±4
USA, Stanford	508±40	50±4	139±19	52±7

(a) Age-standardised to the World Standard Population. Event rates are per 100,000 population.

Sources: WHO MONICA Project Principal Investigators 1994.

- The WHO MONICA project is an international collaborative project aiming to MONITOR trends and determinants in CARDIOVASCULAR disease over a 10-year period. The MONICA study remains one of the most comprehensive studies yet undertaken for cardiovascular disease and its risk factors, although it is based on regional (and not national) data. The study has produced event (i.e. occurrence) rate and case-fatality (i.e. death) rate data for acute myocardial infarction (or 'heart attack') for a number of study populations, including Newcastle and Perth in Australia.
- In 1985–87, both males and females had higher rates of heart attack in Newcastle than Perth, with rates higher for males than for females in both cities. The Australian sites ranked in the top half of the 20 sites included here for comparison purposes, for both males and females. For males, Newcastle ranked fifth and Perth ninth amongst 20 sites. For females, Newcastle ranked third and Perth ninth (Figure 1). Case-fatality rates in both Newcastle and Perth ranked somewhat lower.
- Although not included here, rates of heart attack among males from Finland were high (824±49 events per 100,000 population in Kuopio Province, 915±62 in North Karelia), and low among males from China (76±9 in Beijing). In Poland, 28-day case-fatality was high for both males (81% in Tarnobrzeg Voivodship, 60% in Warsaw) and females (91% in Tarnobrzeg Voivodship, 63% in Warsaw).
- Among the populations included for comparison, rates of heart attack were high for the United Kingdom and low for Spain and Italy. Case-fatality was high in the two French study populations. Event and case fatality rates were significantly correlated for females ($r=-0.33$, $p<.05$), but not males (Figure 2), suggesting that non-fatal attacks were being missed where event rates were low.

For more information, see:

WHO MONICA Project Principal Investigators 1994. Myocardial infarction and coronary deaths in the World Health Organization MONICA project. *Circulation* 90: 583–612.

Boyle CA, Dobson AJ 1995. Morbidity from cardiovascular disease in Australia. Canberra: AIHW.