

# STRESS AND HEALTH NEWS



SEPTEMBER 1989

Contrary to the popular view clerical and blue-collar workers are far more likely to die young from a heart attack than senior managers in the public or private sectors. Smoking, lack of exercise, and poor diet are important, but they are only part of the problem. The health effects of stress, both at home and work, are therefore now coming under close examination.

The *Stress and Health Study* aims to show which kinds of work are linked to health problems. This, the largest study of occupational stress ever conducted, may have important consequences for the way that work is organised in the future.

The project looks at new factors which may be linked to heart disease, cancer and other important causes of death in the UK. For example, the associations between the reaction of an individual's blood pressure to stress, their blood clotting characteristics, and the state of their heart and circulation may provide a missing link in the causes of heart disease.

## Prevention

The first phase of the study, which started in 1985, was of immediate benefit to the 10,000+ participants. This phase consisted of a screening examination as well as a questionnaire. The screening test is designed to reveal early signs of poor health. Raised blood pressure, too high a level of blood cholesterol, and an abnormal or suspicious heart function (detected with an electrocardiogram or ECG) may go unnoticed. Previous research showed that one in ten civil servants had raised blood pressure without knowing it.



Participants, men and women aged 35 to 55, who showed any of these three problems were notified directly and via their family doctor. We know that a large number took positive action to improve their health. A clear screening result provided reassurance for the majority of participants. The screening test will be repeated in a later phase of the study.

The study is attracting international attention both because the scope of the research is so broad, and because of its size and statistical power. As well as analysing information on working conditions, social networks, details of smoking, diet, alcohol consumption and physical activity will be matched with the development of ill-health, both physical and mental.



Some people may need to learn how to relax...

### Angina

Sudden death from heart attack is perhaps not such a bad way to go. But angina - severe chest pain - causes disability for years. The study shows large differences in rates of angina across job grades

#### Prevalence of Angina (per cent)

sex	Grades 1-6	Grade 7	SEO	HEO	EO	AO,AA
female	2.7	4.9	5.3	4.5	7.2	5.4
male	2.4	3.2	3.4	4.5	3.6	5.4

#### preliminary results

Cigarette smoking is a known risk factor for heart disease. The pattern of smoking rates across grades and between the sexes closely, but not entirely, mirrors the pattern for angina (see tables). The message is clear: cut out cigarette smoking and you are more likely to avoid angina. The link between job stress and angina will be part of future data analysis.

#### Cigarette Smokers (per cent)

sex	Grades 1-6	Grade 7	SEO	HEO	EO	AO,AA
female	10.3	11.6	15.2	20.3	22.7	27.5
male	8.3	10.2	13.0	18.4	21.9	33.6

#### preliminary results

### Long-term goals

The first "Whitehall" study started 20 years ago. Civil servants were followed to determine how lifestyles related to risk of heart disease. The results of this study helped to inform national policy on heart disease prevention. Disease rates, though still very high, are falling.

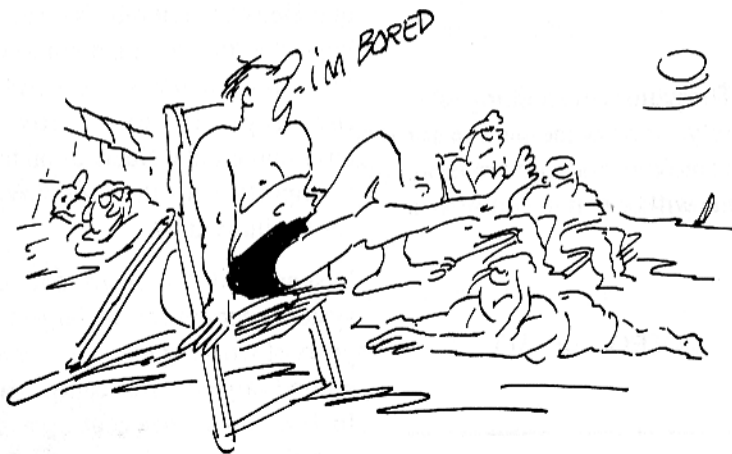
In 1984 the UK had the third highest mortality rates for heart disease among 13 European countries, ahead only of Finland and Eire. Britain has a long way to go.

The Whitehall study answered some questions and left others unanswered. We hope that this next generation study, the *Stress and Health Study*, will fill many of the gaps in our knowledge of environmental influences on health. This is important for the economy as well as for the individual.

Diseases of the heart and circulatory system account for the largest fraction of years of working life lost for men, and the second largest, after cancer, for women. In 1984-85 11 per cent of working days lost through certified sickness absence were due to heart disease resulting in the loss of an estimated £1431M of lost production.

It has been estimated that 5 per cent of Gross National Product is lost as a result of sickness, stress, poor productivity, staff turnover and premature death.

The overriding purposes of the research are to improve disease prevention methods and the quality of working life. The study is of the widest significance, and could not have taken place without the active support and cooperation of individuals in the twenty participating departments and the Civil Service Occupational Health Service. The research group at University College London thank all those individuals who participated in phase one. We hope your enthusiasm will make the follow-up phase as much a success as the first.



#### **Participating Departments**

British Library, British Museum, Cabinet Office, Central Office of Information, Customs and Excise, Department of Employment, Department of Energy, Department of Education and Science, Department of Environment, Departments of Health and Social Security, Department of Trade and Industry, Department of Transport, Government Actuary's Department, Home Office, Land Registry, Ministry of Agriculture, Fisheries and Food, Ministry of Defence, National Audit Office, Property Services Agency, Training Agency (formerly the Manpower Services Commission).