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## **PRESS RELEASE**

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### **Millions face undiagnosed heart risk in the UK say researchers after mass screening**

One in three people with a high risk of developing cardiovascular disease (CVD) over the next 10 years have not been diagnosed, according to a major study in the September issue of **IJCP**, the International Journal of Clinical Practice.

The shortfall in identifying people at high risk is greatest when it comes to middle-aged men, says the study of more than 71,000 men and women, which was carried out by Oxford University and funded by Unilever.

“The aim of our study was to estimate how many people were likely to develop CVD over the next ten years” explains lead author Professor Andrew Neil from the Division of Public Health and Primary Care.

“Our findings reinforce the need for a national CVD risk assessment programme and we welcome the announcement by the Department of Health earlier this year that plans are being put in place to institute primary care checks for people aged from 40 to 74.”

The study suggests that 7.9 million people in the UK have already been diagnosed with CVD or have a medically recognised risk of developing the disease in the next ten years. But there are a further 2.8 million men and 900,000 women who face a high risk but have not been diagnosed. This means that they have not received the treatment and advice that could prevent them from developing CVD.

Professor Neil’s research team screened 71,037 people aged 18 and over in 35 towns and cities in England, Wales and Scotland.

They found that overall, 20 per cent of the men and six per cent of the women had a high risk of developing CVD over the next ten years.

The risk was much higher in the over 50 age group.

“Our research found that 75 per cent of men and 45 per cent of women who were over 50 already had CVD or diabetes, were taking cholesterol or blood pressure drugs or were at high risk of developing CVD” says Professor Neil.

“We were reassured to discover that 60 per cent of them had already been identified by their family doctor or another primary health care professional. However, the challenge now is to identify the other 40 per cent who are at high risk of developing the disease but remain undiagnosed.”

“When we looked at gender differences in this age group, we found that only 47 per cent of men had been identified as having a high CVD risk, considerably lower than the 72 per cent of women identified, possibly because women are more likely to seek medical advice.

“These figures suggest that there is significant unmet need in the UK and points to the need for a national assessment programme to detect those individuals who haven’t already been identified.”

The screening programme was carried out by specially trained nurses at public events and in towns and cities, including supermarket locations. 43,261 women and 27,776 men attended the mobile screening centres, which were widely advertised in local media. Anyone over 18 could take part, with the exception of pregnant women.

Twelve per cent said they had already been diagnosed with CVD or diabetes and a further eight per cent said they were already taking drugs to lower their blood pressure or cholesterol levels.

Detailed notes were made on all the participants – regardless of prior diagnosis - and the 80 per cent who had not received any kind of diagnosis (56,863 people) were given a CVD risk assessment.

The nurses completed a computerised questionnaire. This included the person’s age, sex, smoking habits, a brief medical history - with particular emphasis on conditions and medication related to CVD - and details of close family deaths from the disease.

Cholesterol and trygliceride (fat) level samples were obtained and the nurses also took blood pressure and waist circumference measurements.

The researchers then used the data collected by the nurses to estimate the 10-year CVD risk using the internationally recognised Framingham risk equation, which was developed after a major heart study in Massachusetts.

People were defined as high risk if they had more than a 20 per cent chance of developing CVD over the next 10 years. This criterion is in line with the Joint British Societies Guidelines on Prevention of Cardiovascular Disease in Clinical Practice, which were issued in 2005 and endorsed by the UK’s National Institute of Health and Clinical Excellence in 2006.

All the study subjects who fell into the high-risk category were advised to see their family doctor and take the results from the mobile clinic with them.

People who fell into the medium risk category of 10 to 19 per cent were given verbal advice and a detailed information booklet. They were advised to talk to a pharmacist to see if they were eligible to buy a 10mg daily dose of simvastatin, a drug used to reduce cholesterol and the risk of CVD, over the counter. Smokers were also advised to talk to their pharmacists about how to stop and the best products to use.

The 35 UK locations included in the study were: Ashford, Banbury, Basingstoke, Bath, Birmingham, Bolton, Bournemouth, Brighton, Bristol, Cardiff, Devon (including Exeter), Edinburgh, Glasgow, Huddersfield, Hull, Leeds, Leicester, Liverpool, London, Luton, Manchester, Middlesbrough, Milton Keynes, Newcastle, Norwich, Nottingham, Peterborough, Plymouth, Preston, Reading, Sheffield, Southampton, Stoke-on-Trent, Swansea and Watford.

It was carried out in collaboration with H-E-A-R-T UK - The Cholesterol Charity, which aims to prevent premature deaths caused by high cholesterol and cardiovascular disease.

The paper can be viewed free online at [www.blackwellpublishing.com/ijcp](http://www.blackwellpublishing.com/ijcp)

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For more information and press copies of the paper please contact:

Annette Whibley, Wizard Communications  
+44(0)121 705 3575 / +44(0)7941 465757  
[wizard.media@virgin.net](mailto:wizard.media@virgin.net)

To interview Professor Andrew Neil:  
Press Office, University of Oxford,  
+44(0)1865 280532,  
[press.office@admin.ox.ac.uk](mailto:press.office@admin.ox.ac.uk)

For more information on H-E-A-R-T UK:  
Marian Byrt, Media Advisor,  
on 0845 4500468 (direct line)

#### Notes to editors

- Estimated 10-year cardiovascular risk in a British population: results of a national screening project. Neil et al. **IJCP**, the International Journal of Clinical Practice. 62.9, pp 1322-1331. (September 2008). Free online at: [www.blackwellpublishing.com/ijcp](http://www.blackwellpublishing.com/ijcp)
- The Department of Health strategy referred to in the press release - *Putting prevention first. Vascular checks: risk assessment and management* – was published in April 2008. It outlines proposals for a system of vascular checks to be carried out in primary care. Vascular disease includes coronary heart disease, stroke, diabetes and kidney disease.
- **IJCP**, the International Journal of Clinical Practice was established in 1946 and is edited by Dr Graham Jackson from Guy's and St Thomas' NHS Foundation Trust, London, UK. It provides its global audience of clinicians with high-calibre clinical papers, including original data from clinical investigations, evidence-based analysis and discussions on the latest clinical topics. The journal is published by Blackwell Publishing Ltd, part of the international Blackwell Publishing group. [www.blackwellpublishing.com/ijcp](http://www.blackwellpublishing.com/ijcp)
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