

# Obesity: A North East Update Report

## Introduction

Obesity is a serious, complex public health problem, and as such has been identified as a Government priority area. In England, the prevalence of obesity has increased between 1993-2005 from 13.2% to 23.1% in men and from 16.4% to 24.8% in women<sup>1</sup>. For children aged 2-15 years, obesity prevalence has increased from 10.9% in 1995 to 18.0% in 2005 among boys and from 12.0% to 18.1% in girls, over the same period<sup>1</sup>. Regional data from 2003 showed that in the North East prevalence of obesity in men was 23.0% (1.3% of which were morbidly obese)<sup>1</sup>. In women obesity prevalence was 24.3%, 1.6% of whom were morbidly obese. Regional data from 2002-2004 for children aged 2-15 years showed a prevalence of 19.5% in the North East, the third highest nationally<sup>1</sup>. It has been hypothesised that obesity, in particular morbid obesity, may decrease life expectancy by up to nine years and significantly increase the risk of developing diseases such as diabetes, heart disease and some cancers<sup>2</sup>. The Wanless report 'Securing Good Health for the Whole Population'<sup>3</sup> likened obesity to smoking in terms of associated disease burden and

The public health priority of obesity was further confirmed by the Public Service Agreement (2004) to halt the year on year rise in childhood obesity, in the context of a broader strategy to tackle obesity in the population as a whole. A target which is supported by PCT Local Delivery Plans to: 1) submit quarterly data on: the number of patients with a BMI equal or greater than 30 in the last 15 months and number of patients on the register aged

15 to 75 and 2) measure the height and weight of at least 80% of all eligible children from Reception and Y6 as part of the National Child Measurement Programme. Obesity was also identified as one of six key priorities in the White Paper *Choosing Health: Making Healthy Choices Easier*<sup>4</sup>, drawing together a series of other initiatives such as the Coronary Heart Disease,<sup>5</sup> Diabetes<sup>6</sup>, National Service Frameworks and the National

Cancer Plan<sup>7</sup>, with further information provided in the White Paper Delivery Plan<sup>8</sup> and Department of Health document, *Choosing Health? Choosing a Better Diet*.<sup>9</sup>

A later joint report from the Audit and Health Care Commissions and the National Audit Office,<sup>10</sup> highlighted the need for fundamental changes to individual lifestyles and the environment if the current obesity trend is to be halted

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## Summary

- NEPHO will continue to support the Department of Health National Child Measurement Programme
- Incidence of maternal obesity is increasing and presents a serious public health problem
- Uptake of obesity surgery is increasing nationally but appears to predominate in women
- There is increasing evidence to support the link between obesity and disability, which presents a serious public health concern

## Childhood Obesity

As part of the Governments commitment to tackling the rise in childhood obesity and monitoring progress towards the PSA agreement, a new initiative was launched in 2006 whereby all children from England in reception (ages 4-5) and year 6 (ages 10-11) have their height and weight recorded.<sup>11,12,13,14</sup>

The national database the largest of it's kind<sup>15</sup>, demonstrated patterns of childhood obesity, comparable to those estimated from the Health Survey for England.<sup>16</sup>

Although response rates across the country were highly variable, uptake in the North East was relatively good.

NEPHO continues to work closely with the North East Primary Care Trusts to:

- 1) identify lessons learnt from each measurement exercise, to help inform future guidance
- 2) identify ways in which the PHO can support ongoing measurements;
- 3) perform local level analyses;
- 4) identify future epidemiological research possibilities and how this could support local needs assessment and target resources.

NEPHO has recently published a pilot qualitative research project with the Universities of Durham and Teesside to examine experiences of the National Child Measurement Programme in the North East.

The research was conducted in two phases:

- 1) an audit of all independent and special needs schools within the NE Strategic Health Authority, to examine voluntary participation and inclusion in the programme; and
- 2) a qualitative study in two mainstream schools, to examine experiences of teachers, parents and children involved in the programme.

The report concludes with a number of recommendations for future rounds of the programme, such as the inclusion of independent schools in the programme, the continued exemption of special needs schools, the provision of clearer information for teachers, parents and children concerning the purpose of the measurement programme, and the need to incorporate the programme into wider health initiatives in school, in order to facilitate children's participation and prevent distress regarding measurement of body size and weight.

A copy of the full report is available on the NEPHO website [www.nepho.org.uk/index.php?c=1579](http://www.nepho.org.uk/index.php?c=1579)

The PHOs will continue to take an active role in supporting the implementation and local level analyses of this important dataset.

## Maternal Obesity

NEPHO is involved with a large ongoing collaborative project with the Regional Maternity Survey Office (RMSO), James Cook University Hospital and the Centre for Food, Physical Activity and Obesity Research at the University of Teesside, to investigate the incidence, trends, predictors and implications of maternal obesity.

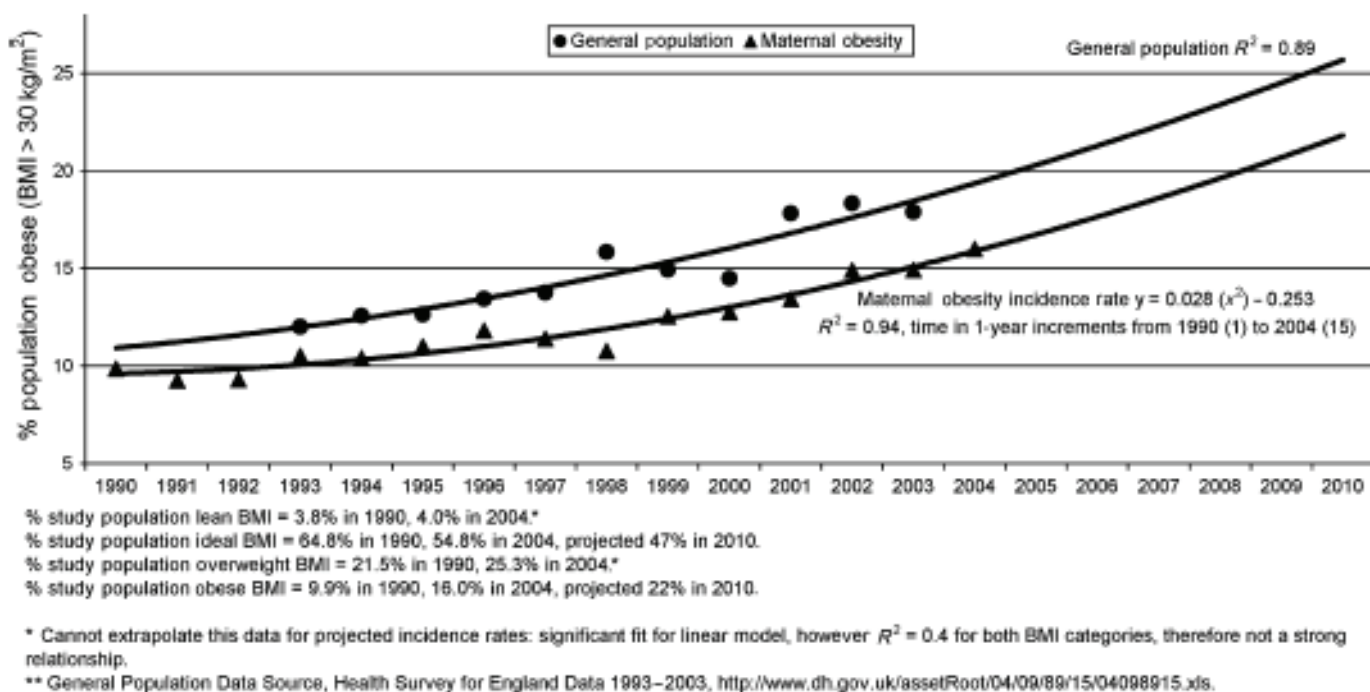
During 2006/07 this research involved:

1) A qualitative scoping study to investigate the impact of maternal obesity on NHS maternity services. The findings from this study of 16 maternity units in the North East, revealed that healthcare professionals felt that maternal obesity had a significant impact on services and resources, the health of both mother and child, and the psychological well being of the mother. The findings were published in a NEPHO occasional paper and the British Journal of Obstetrics and Gynaecology<sup>17,18</sup>

2) A quantitative pilot study examining the trends, incidence and demographic predictors of maternal obesity in women from the James Cook University Hospital, Middlesbrough over the past 15 years. The findings from this study demonstrated that the incidence of maternal obesity (recorded during the first 16 weeks of pregnancy) was found to be increasing and accelerating, particularly within women from lower socio-economic groups (see Figure 1).

The findings were published in the British Journal of Obstetrics and Gynaecology<sup>19</sup> and have led to the development of a large national study to investigate the trends, incidence and demographic predictors of maternal obesity across England (this work is currently in progress).

**Figure 1** Incidence of Maternal Obesity in 36,821 women over a 15 year period, the projected incidence of maternal obesity by 2010, and the prevalence of obesity in women of childbearing age (16-44 years) in England's general population\*\*.



## Obesity Surgery & Prescribing Data

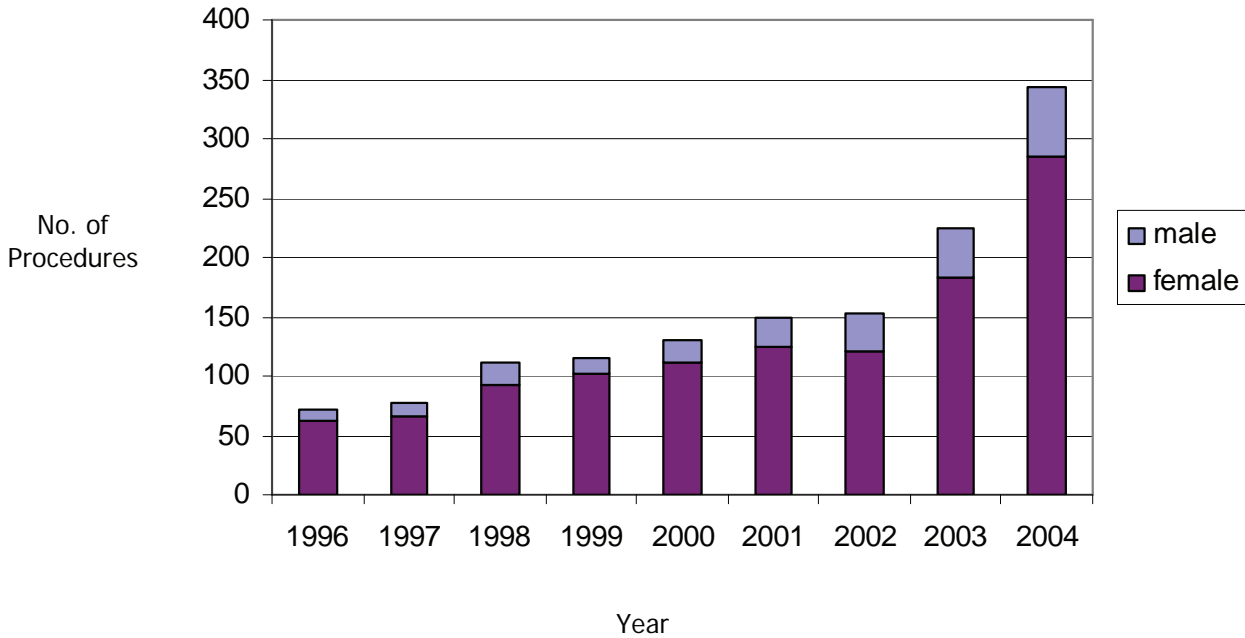
In light of the recent NICE guidance<sup>20</sup>, NEPHO carried out an examination of the Hospital Episode Statistics (HES) to examine the trends and predictors of obesity surgery uptake across England, over the past 10 years.

The findings from this study indicate that uptake of obesity surgery appears to vary across England and is predominated by women, many of whom reside within the two lowest ranking quintiles of deprivation<sup>21</sup>.

Nationally the number of patients undergoing this form of surgery has increased significantly over time (Figure 2). However, this figure is likely to underestimate true uptake rates, given the current inconsistencies in surgery procedure coding, which are broad ranging and hard to conclusively define. Further clarification on which obesity surgery codes are in use is required before further analyses can occur.

Trends in the uptake of obesity prescribing data for the Northern region are also in progress, as part of a collaborative project with the Regional Drug and Therapeutic Centre.

**Figure 2** Uptake of obesity surgery 1996-2004 (2005 data is not shown as it is incomplete) (surgery data from the Hospital Episode Statistics<sup>21</sup> - identified with obesity as primary diagnostic code in combination with the following surgery codes: G28.2,3,8,9; G30.1,2,3,4,8,9; G32.1,8,9; G61.1,2).



## Obesity & Disability

In response to the mounting evidence suggesting a link between obesity and disability, NEPHO has been involved with a small programme of work in 2006 investigating the link between obesity and disability, in collaboration with the University of Teesside.

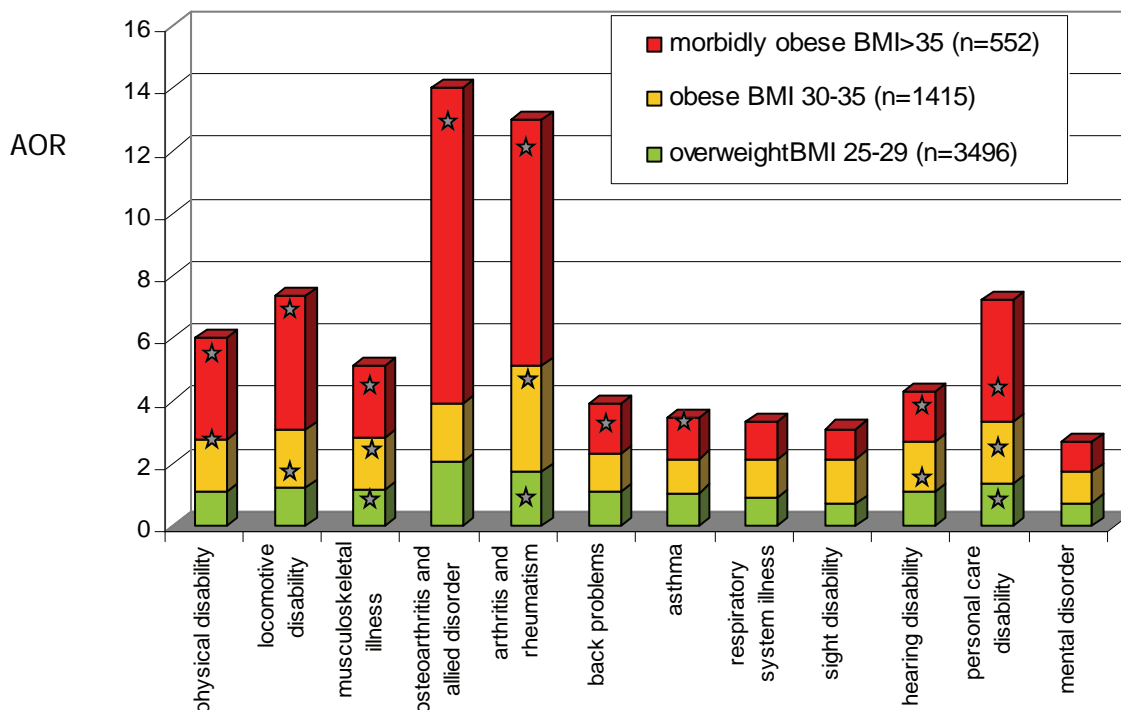
The programme started with the production of a short review of the evidence, published by Obesity Reviews<sup>22</sup>, followed by an examination of the Health Survey for England disability data published by Public Health<sup>23</sup>, the findings from which are summarised in Figure 3.

A small pilot BMI surveillance study was also undertaken to examine the prevalence of obesity in Teesside children from special needs schools<sup>24</sup>.

Collectively this research demonstrates the possible links between obesity and disability in both adult and child populations, and in doing so highlights possible health inequalities that may result from this.

NEPHO will use these findings to further explore the public health implications of obesity and disability.

**Figure 3** Adjusted odds ratios per disabling condition, for overweight, obese and morbidly obese compared to the ideal weight group (\*p<0.05). Data from the Health Survey for England<sup>23</sup>.



## The Foresight Project

The aim of the Foresight project ([www.foresight.gov.uk](http://www.foresight.gov.uk)) was to 'produce a long-term vision of how we can deliver a sustainable response to obesity in the UK over the next 40 years'. As part of this project NEPHO produced a short review on obesity surveillance and monitoring, highlighting the implications in population monitoring exercises.<sup>25</sup>

## Forthcoming Projects

Forthcoming NEPHO obesity projects also include 1) a review of the links between obesity and mental health 2) a large collaborative project with Government Office North East to map and analyse physical activity and obesity data sources across the North East and 3) a briefing paper on the impact of public health genomics and the consequences for obesity research.

## The Future

The Public Health Observatories (PHO) are part of the Government's strategy for improving health and reducing health inequalities.

As part of the PHOs aims to monitor regional health, strengthen the availability and use of regional information and support organisations to improve public health and reduce inequalities, they have an important role in obesity.

The multi-faceted nature of obesity requires a multi-agency approach, of which the PHOs also have a critical role in facilitating and supporting external collaborations to help improve regional obesity public health interventions and maintain clarity and standardisation in data collection and dissemination.

As part of NEPHOs continued role to support obesity related activities within the North East, in 2006, an obesity microsite was created on the NEPHO website ([www.nepho.org.uk/index.php?c=1575](http://www.nepho.org.uk/index.php?c=1575)). Although still partially under construction, it is hoped the site will be expanded in 2007/08 to provide a comprehensive obesity resource for the North East, drawing together all available resources and contacts relating to obesity, diet and physical activity in the North East.

## Further Information

If you require further information, please contact the NEPHO obesity lead:  
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## Useful Resources

[www.direct.gov.uk/en/Parents/YourChildsHealth](http://www.direct.gov.uk/en/Parents/YourChildsHealth)

[www.nepho.org.uk](http://www.nepho.org.uk)

[www.sepho.org.uk](http://www.sepho.org.uk)

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