The National Child Measurement Programme (NCMP) in Derbyshire

Presented by Ashley King, Public Health
November 30th, 2018
Overview

• Risks associated with child obesity
• Causes of obesity
• What is the National Child Measurement Programme?
• Participation in the NCMP
• Obesity Prevalence:
  o Current
  o Historic trends
  o Deprivation
  o District & Electoral Ward
Risks associated with childhood obesity

Abnormal or excessive fat accumulation that presents a risk to health[^1]:

- Type 2 diabetes
- Hypertension
- Exacerbation of conditions such as asthma
- Psychological issues – low self esteem, bullying
- Likelihood of obesity into adulthood:
  - Increased cancer risk
  - Increased risk of coronary heart disease
  - Increased risk of stroke[^2]

[^1]: Source: World Health Organization, [^2]: Source: National Health Service
Causes of Obesity

“The fundamental cause of childhood overweight & obesity is an energy imbalance between calories consumed & calories expended”

Source: World Health Organization
Causes of Obesity

- Global increases in childhood overweight and obesity are attributable to a number of factors including:
  
  **Diet** – a shift towards energy dense foods high in fat and sugar, sugary drinks.

  **Physical Activity** – decrease due to sedentary nature of recreational activities, transportation, urbanisation.

- Criticisms of the energy imbalance concept – total calorie focused, does not consider diet composition & metabolic processes such as insulin response.
The National Child Measurement Programme

- Key element of the Government’s approach to tackling child obesity.
- Annual weighing and measuring of children in reception (aged 4-5 years) & year 6 (aged 10-11 years) in mainstream state schools.
- Launched in 2005/06
- Enables local areas to plan services to tackle child obesity and monitor progress.
Participation in the NCMP

Participation rate (2017/18)

<table>
<thead>
<tr>
<th></th>
<th>Yr R</th>
<th>Yr 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>England</td>
<td>95.2</td>
<td>94.3</td>
</tr>
<tr>
<td>Derbyshire</td>
<td>98.9</td>
<td>96.5</td>
</tr>
</tbody>
</table>

- Participation in Derbyshire higher than England (historically consistent)
Obesity Prevalence (2017/18)

England

Year R: 9.5%
Year 6: 20.1%

Derbyshire

Year R: 9.9%
Year 6: 18.6%

- Y6 obesity statistically, significantly lower in Derbyshire compared to England. No difference in Reception.
In Derbyshire excess weight was significantly higher in Reception & significantly lower in Y6 than England.
The effect of deprivation on obesity in Derbyshire

2016/17

Most deprived

Yr 6: 21.9%
Yr R: 12.4%

Least deprived

Yr 6: 15.6%
Yr R: 6.3%
Obesity Prevalence by Derbyshire District

Child Obesity in Derbyshire, by District (2016/17)
Derived from the postcode of School. Includes 95% confidence intervals

- Derbyshire County
- Bolsover
- South Derbyshire
- Chesterfield
- Amber Valley
- Erewash
- North East Derbyshire
- High Peak
- Derbyshire Dales

Prevalence

District
Obesity Prevalence by Electoral Ward

Year R- % obese 2014/15-2017/18 at ward compared to Derbyshire average

Year 6 - % obese 2014/15-2017/18 at ward compared to Derbyshire average