

# Diabetes

## Headlines

Diabetes is one of the biggest health challenges facing people living in the UK. Since 1996 the number of people diagnosed with diabetes has increased from 1.4 million to 2.9 million. By 2025 it is estimated that five million people will have diabetes. Most of these cases will be Type 2 diabetes, because of our ageing population and rapidly rising numbers of overweight and obese people<sup>1</sup>.

It is estimated that in 2012, 7.8% of people aged 16 years and older had diabetes in the Kirklees area. If current trends in population change and obesity persist the total prevalence of diabetes is expected to rise to 8.8% by 2020 and 9.9% by 2030<sup>2</sup>.

Locally diabetes is increasing because of rising obesity levels, an ageing population and a growing population of south Asian origin.

The prevalence of diagnosed diabetes among people aged 17 years and older in NHS Kirklees is 5.7% compared to 5.6% in all PCTs with similar diabetes risk factors<sup>3</sup>. The 2012 Current Living in Kirklees (CLIK) survey showed that 7.2% of respondents were diagnosed with diabetes<sup>4</sup>.

In 2010/11 1 in 16 adults (18,923 people aged 17 years and older) had been diagnosed with diabetes in Kirklees,. There are also an estimated 6,963 adults with undiagnosed diabetes<sup>3</sup>.

Areas with higher levels of deprivation and larger south Asian populations have more people with diabetes such as Batley (9%) and Dewsbury 1 in 11 (8%).

When diabetes is not well managed it can lead to serious complications including heart disease, stroke, blindness, kidney disease, nerve damage and amputations leading to disability and earlier death.

Life expectancy is reduced by more than 20 years in people with Type 1 and up to 10 years in people with Type 2. Type 2 diabetes in young people did not exist 10 years ago in Kirklees.

## Why is this issue important?

Diabetes is a chronic and progressive disease, which, if left uncontrolled, can severely damage blood vessels and nerves leading to loss of eyesight, impotency, impaired kidney function, amputation of limbs or even death. It develops when the levels of blood glucose become too high caused by a lack of insulin or the insulin not being used properly. Insulin controls glucose levels in the blood. Diabetes is one of the biggest health challenges facing people living in the UK<sup>1</sup>, with the proportion of the people with the condition predicted to rise to 1 in 10 by 2030<sup>2</sup>.

There are two main types of diabetes. Type 1 diabetes develops when the body stops making insulin and usually appears before the age of 40. It is the less common type – only 10% of people with diabetes have Type 1. The cause of Type 1 is unknown and there is nothing that can be done to prevent onset. Type 2 diabetes is where the body still produces insulin, but not enough, or where the body ignores the insulin. This type of diabetes is linked to poor diet and to obesity. It usually develops in people over the age of 40, but is now appearing at younger ages<sup>1</sup>.

Life expectancy is reduced, on average, by more than 20 years in people with Type 1 and up to 10 years in people with Type 2<sup>1</sup>. Since 1996 the number of people diagnosed with diabetes has increased from 1.4 million to 2.9 million. By 2025 it is estimated that five million people will have diabetes. Most of these cases will be Type 2 diabetes, because of our ageing population and rapidly rising numbers of overweight and obese people<sup>1</sup>. It is estimated that there are half a million people who are unaware that they have diabetes in the UK. People with a family history of Type 2 diabetes are at higher risk of developing the disease. The most deprived people in the UK are two and a half times more likely than the average to have diabetes at any age<sup>1</sup>. Type 2 diabetes is preventable by eating a healthy diet and not becoming obese which improves insulin sensitivity<sup>5</sup>.

Locally in 2012, 7.2% of adults had diabetes, a slight decrease from 2008<sup>4</sup>. However, the number of people with diabetes is expected to rise locally because of rising [obesity](#) levels, an ageing population and a growing population of south Asian origin.

Of people living with diabetes in Kirklees<sup>4</sup>:

- Men were more than twice as likely to have diabetes than women, i.e. 67% compared to 31% respectively, a much wider gap than nationally.
- 84% were over the age of 45 years, with 43% over the age of 65.

- 14% were smokers and 4.6% were regular smokers.
- 25% reported that their health in general was “very bad” compared to 8.6% overall; with 2.1% reporting “very good” general health compared to 64% overall.
- People with diabetes were less likely to report “medium to high” for life satisfaction (48%); “things in life that are worthwhile” (51.3%); “happy yesterday” (51%) and “anxious yesterday” (15.6%). More people living with diabetes were classified as “Unconfident fatalists” (44% compared to 27% overall), however, 74% of people with diabetes reported “being confident in managing their own health” compared to 35% of people with a long-term condition or disability.
- People with diabetes reported a high likelihood of consumption of fruit and veg (66%) and no consumption of fizzy drinks (65%).
- 51% were classed as “increasing risk drinkers” (compared with 71% overall), and 13% reported “alcohol binging”, compared with 21% overall.
- 78% of people with diabetes were overweight (compared to 50% overall), of which 38% were obese (compared with 17% overall).
- 30% of people living with diabetes were in employment, with 16% on long-term sick/disabled and 44% were retired.
- 25% reported “money worries” all the time (with the same as 25.7% overall) and 69% of people having an annual income of less than £20,000 (compared with 51% overall).

## What significant factors are affecting this issue?

When diabetes is not well managed it can lead to serious complications including [heart disease](#), stroke, blindness, [kidney disease](#), nerve damage and amputations leading to disability<sup>1</sup>. With early identification and good management of diabetes the risk of complications is reduced. However, up to half of people newly diagnosed with diabetes will already have some complications, as they may begin five to six years before diagnosis<sup>6</sup>.

People with diabetes are twice as likely as the general population to have a stroke in the first five years after diagnosis and four times more likely to have a stroke or heart disease. It is suggested that 52% of people with Type 2 diabetes die from heart disease<sup>1</sup>. Almost 1 in 3 people with Type 2 diabetes will develop serious kidney disease<sup>1</sup> (see CKD section).

Diabetes is the leading cause of blindness in people of working age in the UK<sup>1</sup> caused by a complication called retinopathy. However it can be treated (by laser) if identified early enough. Annual screening can monitor eyes to identify this issue.

Being overweight or obese is a significant factor, as people who are obese are over four times more likely to be diabetic than people with a healthy weight.

## Which groups are most affected by this issue?

### Ethnicity

Locally, in 2012 south Asian people were 1.6 times more likely to have diabetes (10.7%) than white people (6.5%), with 11.2% of black people having diabetes.

### Women of childbearing age

Diabetes is the most common pre-existing medical disorder complicating [pregnancy](#) in the UK. Approximately one pregnant woman in 250 has pre-existing diabetes<sup>7</sup>. This is associated with increased risks for both mother and baby<sup>8</sup>. Gestational diabetes is a type of diabetes which usually occurs during the second or third trimester of pregnancy due to the body's inability to produce enough insulin to meet the extra demands of pregnancy. It is also linked to being overweight or obese. It affects 2-12% of all pregnancies<sup>9</sup>. Women diagnosed with gestational diabetes are 30% more at risk of developing Type 2 diabetes later in life. Women with Type 2 or gestational diabetes are likely to be older, have had several children previously, live in a deprived area, and come from a black Caribbean, south Asian or Middle Eastern ethnic group<sup>7</sup>.

Pregnancy outcomes for women with diabetes and their babies are poor compared to those without diabetes<sup>9</sup>. Newborn babies affected by their mother's gestational diabetes may themselves be at risk of Type 2 diabetes in later life<sup>10</sup>.

### Children and young people

Over 7,000 children and young people were under the care of hospital diabetes teams in 2011. Of those, 95.6% had Type 1 diabetes; 4.4 had Type 2 diabetes or other types of diabetes. The prevalence of Type 2 diabetes differs by ethnic group and sex; 12% of Asians with diabetes have Type 2 compared to 1.2% of whites. More than twice as many females as males are recorded with Type 2<sup>11</sup>.

Locally, in 2010, 185 children and young people were known to have diabetes i.e. 1.8 per 1,000 of those aged under 18 years compared to 2.1 per 1,000<sup>12</sup> nationally. Most of

these had Type 1 diabetes, 178 or 1.8 per 1,000. Of more concern, the rest had Type 2 diabetes. The number of children with Type 2 diabetes is increasing, directly linked to increasing obesity levels, and locally was non-existent 10 years ago<sup>13</sup>. Children of south Asian origin are 13 times more likely to have diabetes than white children<sup>1</sup>. Of 14-year olds, 0.7% had some form of diabetes in 2009<sup>14</sup>.

### [Older people](#)

The rate of diabetes rises dramatically with age, from less than 1% in those aged 16-24 years to over 1 in 8 for men aged over 65 years and 1 in 9 for women aged over 65 years<sup>15</sup>. In one report more than 1 in 4 people in care homes (27%) had diabetes<sup>16</sup>.

Locally, in 2012, diabetes affected 5% of those under 65 years and 15.7% of those over 65 years. In the under 75 years age group 6.2% were diagnosed with diabetes rising to 17.4% over the age of 75 years.

## Where is this causing greatest concern?

The rate of diabetes in those aged over 17 years and older is higher in Kirklees than nationally, but Kirklees has a higher proportion of residents of south Asian origin than nationally. There are an estimated 6,963 adults with undiagnosed diabetes in Kirklees.

[Batley](#), [Dewsbury](#) and [Huddersfield](#) North have the highest rates of diabetes, however rates are above national levels across Kirklees, [Holme Valley](#) and [Denby Dale & Kirkburton](#) being the only exceptions. Of 14-year olds, although numbers were very small, Dewsbury had the highest rate per 1,000 residents<sup>14</sup>.

## What could commissioners and service planners consider?

Services need to be culturally appropriate and tailored to meet the needs of the population.

Early identification of those at high risk of diabetes is paramount to enable early good diabetes control and avoid unnecessary complications. A screening programme for high risk patients needs to be incorporated into the routine work of general practice.

Self-management is the foundation of good diabetic control. Offering structured self-care programmes to all those with diabetes and adopting a care planning approach will support patients to better self-care. Over the past three years NHS Kirklees has been implementing a redesign of their adult diabetes services which includes widespread adoption of the National Year of Care – Care Planning model (supporting self-care);

training for community and primary care; a new foot care model; on-going support for primary and community care from the specialist teams through e-consultation and dissemination of a patient resource “The Diabetes Self Care Handbook”. Much progress has been made in the provision of high quality care closer to home and a change in the culture for both patients and professionals in the adoption of the self-care model is mounting. However, further embedding of the new model is required, with more tailored support being offered to areas with the highest incidences of diabetes and poorest outcomes. Analysis of patients’ goals and action plans is also required to ensure the intelligent commissioning of appropriate local services. Kirklees also has a well-established retinal screening programme, however provision for housebound patients or those living in residential and nursing care needs reviewing.

The rising prevalence of diabetes is alarming and confirms that diabetes is one of the biggest health challenges facing the UK today. If we are to curb this growing health crisis and see a reduction in the number of people dying from diabetes and its complications, we need to increase awareness of the risks, bring about whole scale changes in lifestyle, improve self-management among people with diabetes and continue to improve access to our integrated diabetes care services.

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## Date this section was last reviewed

19/07/2013 (PL)