



Life expectancy

Introduction

- Average life expectancy in 2012-2014 for Bedford Borough is 80.2 years for men and 83.9 years for women. At 3.7 years, this gradually closing gap is the smallest it has been since 2006-2008.
- Average life expectancy is increasing in Bedford Borough; however there is room for further improvement.
- There are variations in life expectancy within Bedford Borough associated with social class / deprivation and gender.
- For small areas within the Bedford Borough life expectancy varies from 78.1 to 89.2 years for women and from 72.4 to 84.5 years for men in 2010-2014.
- Cancer, heart disease and stroke are the biggest causes of premature death which reduce life expectancy.
- Smoking and obesity are the biggest risk factors for poor health and diseases that reduce life expectancy.
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To increase healthy life expectancy within Bedford Borough the focus should be on:

- Reducing inequalities in health through tackling the wider determinants of health such as education, housing and employment.
- Preventative initiatives such as NHS Health Checks and reducing the prevalence of smoking, obesity and harmful drinking.
- Minimising the impact of long-term conditions and ensuring services are designed to reduce mortality and morbidity due to heart attack, stroke, cancers and respiratory disease.
- Improving cancer awareness to increase early detection and treatment.
- Promoting the influenza vaccine to people in 'at risk groups'.
- Suicide prevention.

What do we know?

The overall health of a population can be measured using life expectancy at birth. Life expectancy at birth is a summary measure, which describes in a single number the average length of life of babies born now if they experience current death rates at each age throughout their lives. It reflects the current death rates of people living in the area, whether they were born in the area or not.

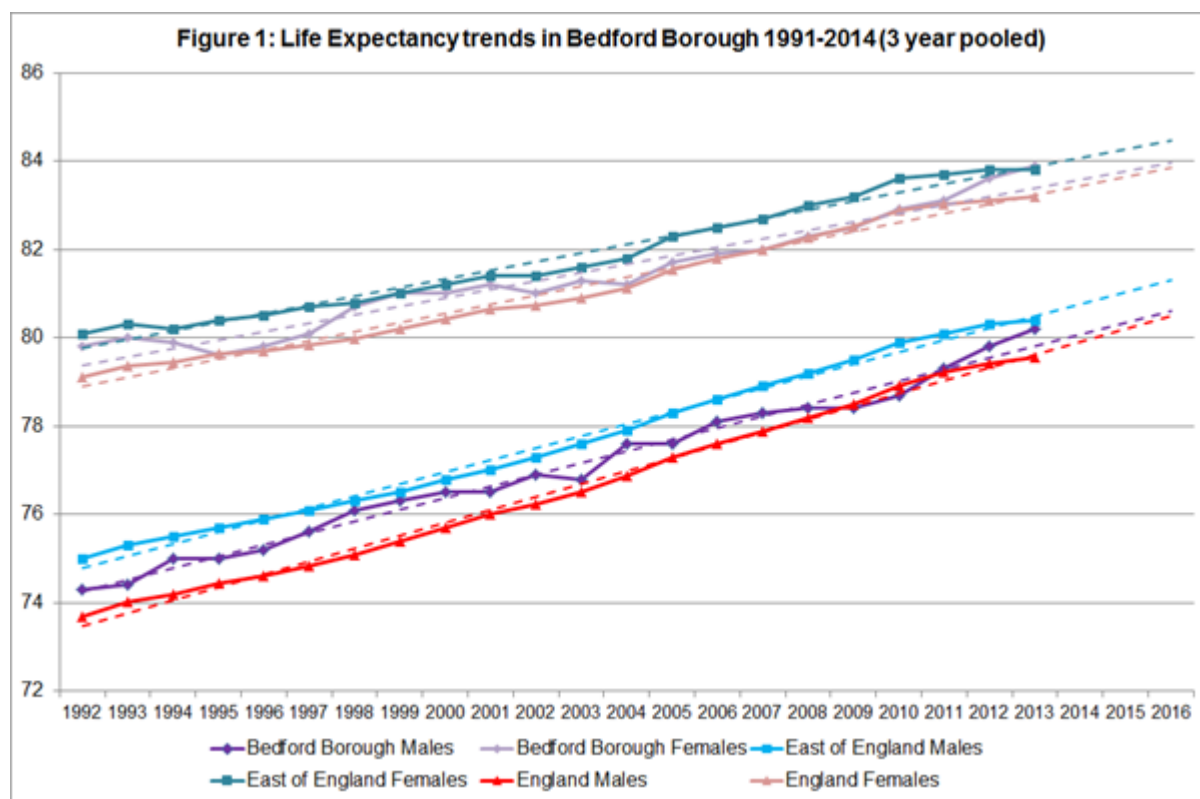
Within Bedford Borough in 2012-14, life expectancy was 80.2 years for men and 83.9 years for women. This compares to 80.4 years for men and 83.8 years for women in the East of England. In Bedford Borough, since 1991-93, the gap between male and female life expectancy has narrowed from 5.5 years to 3.7 years due to



faster improvement in male life expectancy (figure 1).

Life expectancy has been increasing in England, the East of England and Bedford Borough over the last few decades (see figure 1). Male and female life expectancy in Bedford Borough are similar to those in the East of England, however, the trends for male and female life expectancy in the future looks to be increasing slower than in the East of England and looks to drop below the England trend in the next few years. Male and female life expectancies are similar to that in countries with the highest male and female life expectancies.

Life expectancy can also be measured from other ages as starting points. Life expectancy at age 65 is 19.4 years for men and 21.9 years for women in Bedford Borough (2012-14) compared to England (18.8 and 21.2) and EOE (19.3 and 21.6).



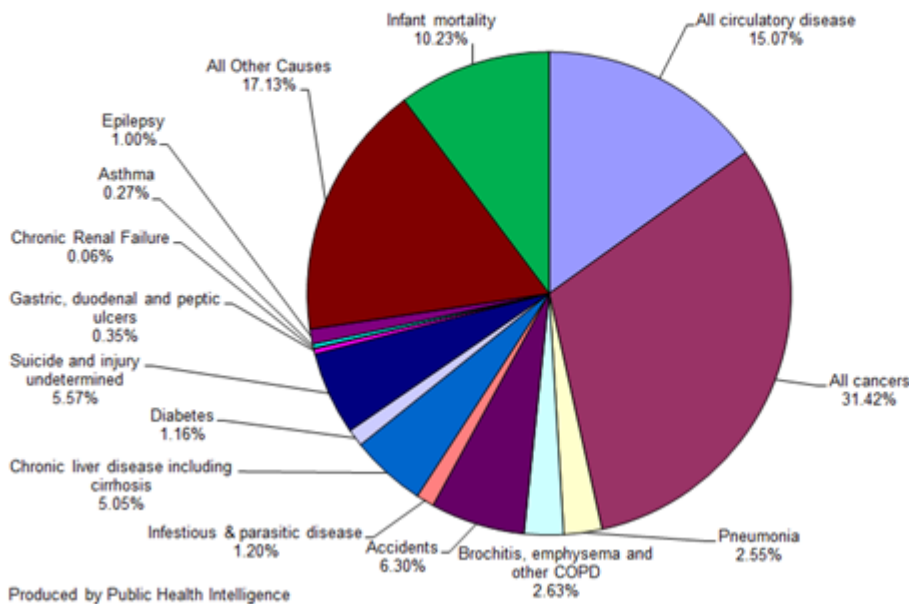
Source of data: HSCIC

Drivers of life expectancy

Calculation of life expectancy is complex, but the contribution of the different factors that reduce life expectancy can be seen by using Years of Life Lost (YLL) due to deaths before age 75 years. YLL is calculated by adding together the years before 75 that people die. So a death at 70 contributes 5 years to the total and a death at 25 contributes 50 years.



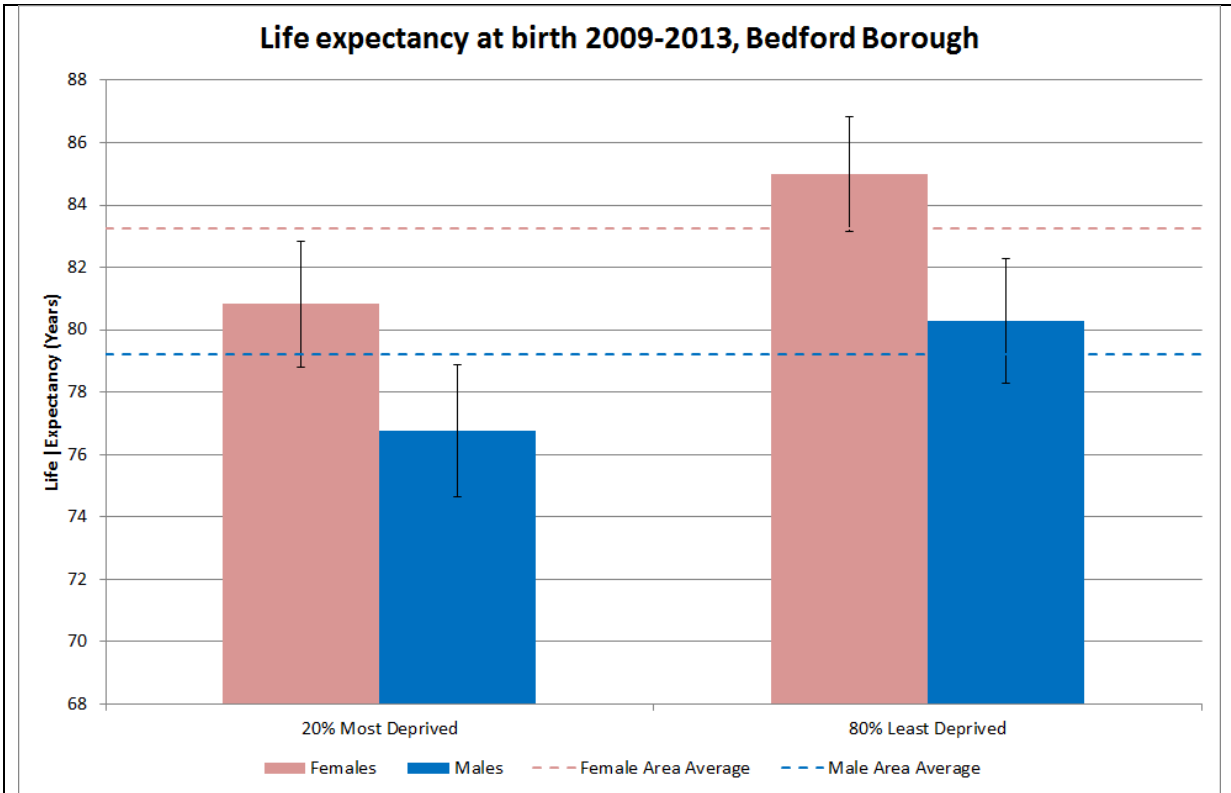
Figure 2: Main causes of reduced life expectancy in Bedford Borough - Years of life lost under 75 years, 2012-2014 (pooled)



Inequalities in life expectancy

Geographically there is a large range of life expectancy within Bedford Borough; the gap between the 'best' and 'worst' areas is 10.0 years for women and 4.2 years for men.

Figure 3: Life Expectancy at birth

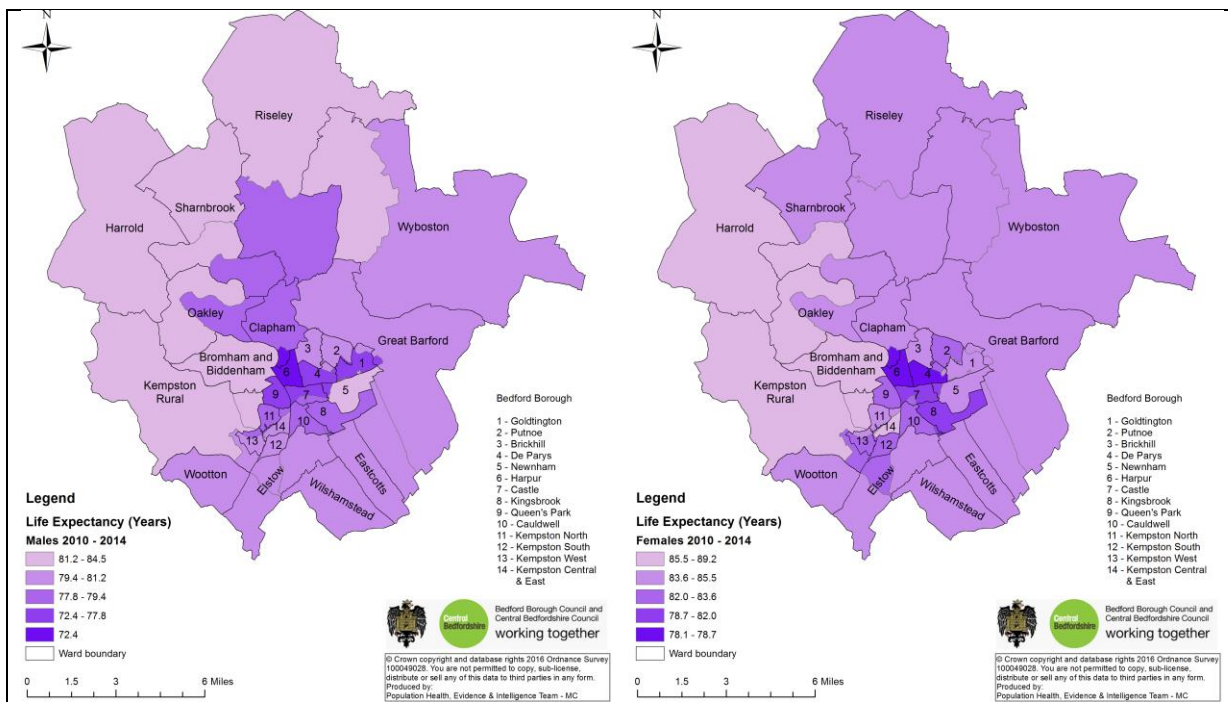


Source: ONS PHE 2015

Life expectancy has been calculated for Middle Super Output Areas (MSOAs). Some of these correspond exactly to wards, for others the match is not so straightforward. For women the gap in life expectancy is 14.8 years (77.2 years in Harpur Ward and the southern part of Clapham Ward and 91.9 years in Bromham and Biddenham Ward and the eastern part of Kempston Rural Ward). For men the gap is 12.2 years (71.3 years in Harpur Ward and the southern part of Clapham Ward and 83.5 years in the northern two-thirds of Riseley and Sharnbrook wards and the north west portion of Wyboston ward).

Using MSOA data may exaggerate the differences, as the confidence intervals are large. Additionally, certain disadvantaged groups have even lower life expectancy which is not identified in these area based measures.

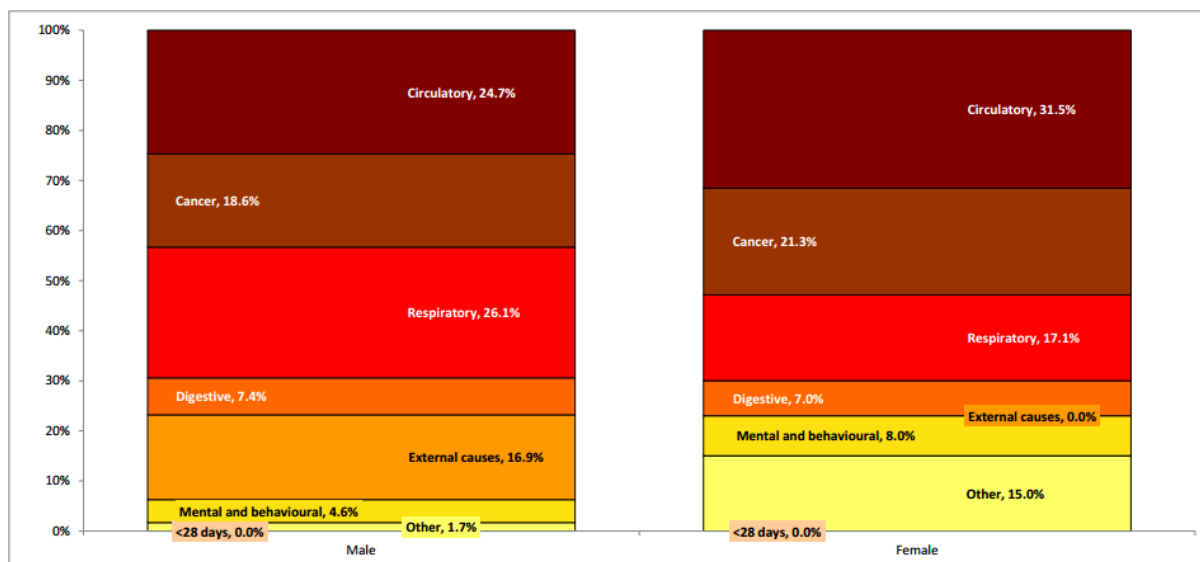
Figure 4: Life Expectancy for males and females 2010-2014



Source of data for map: ERPHO

The gap in life expectancy is driven by increased mortality rates across a range of diseases as shown in the chart below.

Figure 5: breakdown of the life expectancy gap between Bedford Borough's most deprived quintile and Bedford Borough's least deprived quintile, by broad cause of death, 2012-201



Source: <https://fingertips.phe.org.uk/profile/segment>

Figure 5 shows the percentage contributions towards the overall life expectancy



gaps between the top and bottom quintiles in Bedford Borough, for each broad cause of death.

For both males and females, this gap is greatest for circulatory diseases, including coronary heart disease and stroke.

Table 1: the life expectancy gap between Bedford Borough's most deprived quintile and Bedford Borough's least deprived quintile, by broad cause of death, 2012-2014

Broad cause of death	Male				Female			
	Number of deaths in most deprived quintile	Number of excess deaths in most deprived quintile	Number of years of life gained/lost	Contribution to the gap (%)	Number of deaths in most deprived quintile	Number of excess deaths in most deprived quintile	Number of years of life gained/lost	Contribution to the gap (%)
Circulatory	107	40	1.54	24.7	134	61	1.77	31.5
Cancer	115	28	1.16	18.6	103	35	1.19	21.3
Respiratory	82	52	1.63	26.1	70	31	0.96	17.1
Digestive	24	12	0.46	7.4	23	13	0.39	7.0
External causes	31	20	1.06	16.9	13	0	-0.05	*
Mental and behavioural	22	14	0.29	4.6	64	33	0.45	8.0
Other	50	6	0.11	1.7	94	38	0.84	15.0
Deaths under 28 days	3	-1	-0.13	*	3	-2	-0.26	*
Total	433			100	503			100

*The calculated contribution to the gap is negative

Table 1 shows the percentage contributions and years of life lost or gained for each cause of death. The number of deaths occurring in the area in 2012-14 are shown, and alongside, the number of excess deaths. Excess deaths are the number of 'extra' deaths that occur in the most deprived quintile because it has a higher mortality rate for that cause of death than the least deprived quintile. If these deaths were prevented, then the contribution of that cause of death to the overall life expectancy gap would be eliminated. In the case for deaths under 28 days in males, there are no excess deaths in the most deprived quintile, and therefore no impact is made to the life expectancy gap.