1. Background

The gap in Life Expectancy estimates across Bristol has long been a central issue in the Joint Strategic Needs Assessment (JSNA) process, and the inequalities that this represents when people in the least deprived areas of Bristol, on average, may live up to 9 years longer than those in the most deprived areas. However, this 9 year gap in “Life Expectancy at Birth” is based on an estimate for the “average resident” in an area, and in fact there is a substantial gap between male and female life expectancy (as well as inequalities between areas).

This JSNA Factsheet provides initial analysis of the gender inequalities in life expectancy, and major causes of early death (people dying before age 75), to inform Bristol's Health Inequalities Partnership and support the work of the Bristol Women’s Commission sub-group for women’s health, and Bristol’s Men’s Health Group.

2. Life Expectancy – city wide

Current estimates of life expectancy at birth (Feb 2014) show the expected continuation of people living longer, for both genders. 2010-12 average life expectancy in Bristol is 

- **male:** 78.3 years (significantly lower than England average, 79.2yrs)
- **female:** 83.0 years (now same as England, 83.0yrs).

This is a gender gap of 4.7 years in Bristol, greater than the England average gap of 3.8 years, due to Bristol’s lower male life expectancy. Over the last 2 decades, men in Bristol now live 4.9 years longer than they did, and women live 3.7 years longer. Compared within the 8 “Core Cities” (2010-12), average male life expectancy in Bristol is 2nd highest, and female life expectancy is the highest of these cities.

![Life Expectancy at birth, 2000-2012](image)

*Fig. 1, Source: Office for National Statistics; & Public Health England (Feb 2014)*

3. Life Expectancy – differences within Bristol

The range of life expectancy within Bristol from the most to least deprived small areas (“Slope Index of Inequality”; 2010-12; released Public Health England 2014) indicates an **average life expectancy is 8.2 years lower for men** and **6.1 years lower for women** in the most deprived 10% areas of Bristol than in the least deprived 10%.

The male life expectancy gap is lower than in previous Slope Index of Inequality estimates (8.4 years, 2009-11, & 9.4 years, 2006-10), but the female gap appears worse (4.9 years, 2009-11, & 5.8 years, 2006-10). *(Note: This is gap between output areas, not wards).*
To illustrate differences, local life expectancy estimates (taken over 5 years, 2008-12) are mapped by gender onto the Bristol wards. The average male life expectancy for a Bristol ward is 77.6yrs, and female life expectancy is 82.4yrs, giving a local gender gap of 4.8yrs. Male estimates range from 74.4yrs in Southville* (Southmead & Hartcliffe under 75yrs) to 84.2yrs in Henleaze. Female estimates range from 77.9yrs in Southmead (Southville* under 80yrs) to 88.7yrs in Henleaze. [*Southville ward includes the most deprived areas of “Bedminster”]

Fig. 2, (2008-12). Source: Office for National Statistics via Bristol Public Health Intelligence, July 2014

The trend in life expectancy, using the 3 Locality areas of the Bristol Clinical Commissioning Group to compare (fig 3), highlight that North and West locality has by far the highest life expectancy for both genders, although further analysis (not shown) identifies this is due to the very high “inner” wards (eg Clifton & Henleaze). North & West “outer” wards (such as Southmead & Lockleaze) have low average life expectancy, especially for women. The Inner City and East locality has consistently the lowest average life expectancy. For men this is due to a very low life expectancy in the Inner City, but for women in the Inner City life expectancy is above average, and it’s lower in East Bristol (though lowest in N&W “outer”).
4. Healthy Life Expectancy – city wide

This is an estimate of “lifetime spent in ‘Very good’ or ‘Good’ health based upon self-perceived health”, and is intended to take account of health *quality* as well as *length of life*.

Average “Healthy life expectancy” in Bristol is **male: 63.1 years** and **female: 63.2 years** (2009-11), giving a gender gap of only 0.1 years. England averages are male: 63.2 years and female: 64.2 years, an average gap of 1.0 years, though Bristol is not significantly different to national, and has the highest Healthy life expectancies of the Core Cities for both genders.

However, as a “proportion of life spent in 'Good' health”, for males this represents an average of 80.9%, and for females 76.4%, of life being in 'Good' health. Both genders have similar Healthy life expectancies (around 63 years), but women spend a lower proportion of life in good health due to living longer overall, and so on average spend 19.4 years in poor health compared to 14.9 years for men.

5. Premature mortality – city wide

In 2010-12 there were 3,290 premature deaths, under 75 years, in Bristol (Longer Lives tool, Public Health England, Feb 2014). This is a rate of 387 deaths under 75 per 100,000, which is ranked as 92nd out of the 150 local authorities in England (in the worst ranking section).

Within this, Cancer (all types) accounted for 1,280 deaths (premature mortality rate of 158 deaths per 100,000, 98th in England, in worst rankings), Heart disease & stroke for 694 deaths (rate of 86 per 100,000, 78th in England), Lung disease for 296 deaths (rate of 37 per 100,000, 87th ranking) and Liver disease (rate of 20 deaths per 100,000, 80th ranking). For these, Bristol is ranked as worse than average (compared to all authorities nationally).

6. Cause of mortality – inequalities by gender

Recent information on causes of death which contribute most to our life expectancy gap (Segment Tool, Public Health England, Jan 2014) highlights the different causes by gender.

In 2009-11, there were 4900 male deaths and 5200 female deaths in Bristol (all ages). Some categories were the cause of a large number of deaths but were in similar proportions to what one would expect to see nationally, so accounted for little of the gap (Chart 1 below). Eg circulatory diseases (including heart disease and stroke) accounted for 1400 male & 1400 female deaths, but accounted for only 9% of the estimated “excess male deaths” in Bristol, and no excess female deaths. Cancers accounted for 1500 male and 1300 female deaths, but these represent 32% of the male and 35% of the female gap for Bristol’s 2009-11 life expectancy estimates compared to the England average. The main discrepancies between the genders are that “External causes” (inc 100 suicides and over 200 other deaths) were a major factor for males (causing 20% of the gap, compared to 1% for female) but “Other” (inc 430 Mental & behavioural disorder deaths, plus 900 other) were a major factor for females.
However, the causes of life expectancy inequalities within Bristol are different (chart 2 below). When the focus is on causes of death (2009-11) between the most deprived areas in Bristol (1000 males & 900 female deaths) compared to causes of deaths in the least deprived, circulatory diseases play a bigger part in this (270 male deaths are 22% of the excess deaths, and 230 female deaths are 14% excess deaths). Cancer is a major gender difference, as the 310 male deaths are 26% of the inequality gap (less impact within Bristol than in the national difference) whereas the 270 female cancer deaths represent almost half (46%) of the life expectancy gap within Bristol (inc 21% being due to female Lung cancer alone, compared to 10% for males). “External causes” of death in deprived areas also have a bigger impact for males (80 deaths, inc 23 suicides, 15% of the difference) than females (5%).

---

Footnote: Circulatory diseases includes coronary heart disease and stroke. Digestive diseases includes alcohol-related conditions such as chronic liver disease and cirrhosis. External causes include deaths from injury, poisoning and suicide.

Chart 1: Scarf chart showing the breakdown of the life expectancy gap between Bristol as a whole and England as a whole, by cause of death, 2009-2011.

Chart 2: Scarf chart showing the breakdown of the life expectancy gap between the most deprived quintile in Bristol and the least deprived quintile in Bristol, by cause of death, 2009-2011.