

Section 1: demographics

Demographics: gender



a single version of the truth



Related briefings in the JSA for Health and Wellbeing

Briefing (and hyperlink)	Section
Age and the ageing population	Demographics
Minority groups	Health inequalities
Demographics	Children and young people
Sexual health	Children and young people
Cardiovascular disease (CVD)	Burden of ill-health: general health
Demographics	Burden of ill-health: disability and conditions effecting older people
Men's health	Health promotion and preventative services
Screening	Health promotion and preventative services

Edition

Edition	Version no.	Changes/Comments
2012/13	1	
2013/14	2	Mid-year 2012 population data

Executive summary

The 2012 mid-year estimates from the Office for National Statistics (ONS)¹ show that Wiltshire had a population of 476,816 and that the ratio of males to females in the Wiltshire population is similar to the South West and England

According to ONS projections based on the 2011 Census², the number of males in Wiltshire will increase by 6.4% between 2011 and 2021 to 249,300. The number of females will increase by 6.7% to 256,100 in the same period.

Calculations involving estimates of working age people have been complicated by changes to the state pension age (SPA) for women. The SPA for women will increase by six months every year (one month every two months) between April 2010 and March 2020.

Calculations of fertility rate measures usually involve the number of women of child-bearing age, conventionally 15 to 44 years. Projections based on the 2011 Census estimate that there are 84,950 women aged between 15 and 44 in Wiltshire in 2011 and by 2021 this number will decrease by 9.7% to 76,740.

Projections indicate the number of women aged between 50 and 69, and therefore currently eligible for the breast screening programme, will increase by 16.3% in the ten years between 2011 and 2021; this is much more than the estimated population increases for cervical (1.7%) or abdominal aortic aneurysm (AAA) (4.4%) screening.

Introduction

Understanding the size and structure of Wiltshire's population is fundamental if the council and its partners are to have the ability to prioritise and deliver services efficiently. Implications of the male to female ratio of the population are important in terms of planning services and addressing health and social care needs, which can vary by gender. For example Chronic Obstructive Pulmonary disease (COPD) and cardiovascular disease (CVD) are more common among males, whilst diabetes and arthritis-associated conditions linked to demand for knee/hip replacement are more common among females.

Additionally, detailed knowledge of population figures for specific genders and age groups is crucial in planning services that relate wholly or mainly to one gender. These services could include maternity services; breast and cervical cancer screening; teenage conceptions; gender specific cancers and sexual health services.

Overall population

Current population

The 2012 mid-year estimates from the Office for National Statistics (ONS) are the most up to date and accurate population figures currently available at local authority level. They show that Wiltshire had a population of 476,816.

The ratio of males to females in the Wiltshire population is similar to the South West and England. Table 1 presents the current population by gender, for Wiltshire, South West, and England.

Table 1: Population by gender, 2012

	Wiltshire (numbers)	%	South West (numbers)	%	England (numbers)	%
All	476,816	100	5,339,637	100	53,107,900	100
Males	235,648	49.4	2,619,914	49.1	26,133,200	49.2
Females	241,168	50.6	2,719,723	50.9	26,974,000	50.8

Source: ONS 2012 mid-year estimates: <http://www.ons.gov.uk/ons/rel/pop-estimate/population-estimates-for-england-and-wales/mid-2012/mid-2012-population-estimates-for-england-and-wales.html>

Historical change: Census 2001 to mid-year 2011

Analysis has been performed on the growth of Wiltshire's population between census 2001 and mid-year estimates in 2011³. Between the 2001 census and the 2011 mid-year estimates the population increased by 9.6% overall, 9.8% in the male population and 9.3% in the female population.

Future population

The According to ONS projections based on the 2011 Census, the number of males in Wiltshire will increase by 6.4% between 2011 and 2021 to 249,300. The number of females will increase by 6.7% to 256,100 in the same period.

Gender specific issues

Working age: changes for women

A range of statistics are calculated using classifications of people into different age groups based on their working life stage. For example dependency ratios look at the simple ratio of those of non-working age to those of working age. As the ratio increases there may be an increased burden on the economically active part of the population. See the [age and ageing population section](#) for more details. Calculation of dependency ratios and other similar statistics has been complicated by changes to the state pension age for women.

The state pensionable age (SPA) for women will increase by six months every year (one month every two months) between April 2010 and March 2020. The age groupings used in the 2011 mid-year estimates from ONS reflect the SPA for women as of the 30 June 2011. Of the estimated population of females aged 60 on 30 June 2011, 35 per cent are defined as SPA, and the remaining 65 per cent are defined as not SPA.

Fertility

Calculations of fertility rate measures rely on accurate details of the number of women in a population and usually the number of women of child-bearing age, conventionally 15 to 44 years.

When the 2011 Census was conducted it was found that in Wiltshire the ONS projections had under-estimated the number of women of child-bearing age, by around 6,000.

New projections based on the 2011 Census estimate that there are 84,950 women aged between 15 and 44 in Wiltshire in 2011 and by 2021 this number will decrease by 9.7% to 76,740. Similar decreases were forecast in the past and did not come to pass and it will be interesting to see if the 2011 based projections are more accurate.

This is discussed further in the [children and young people's demographics section](#).

Screening programme age groups

The national NHS breast screening programme invites all women aged 50 to 70 for screening every three years. As part of national plans breast screening services are currently being expanded in Wiltshire to include those aged 47 to 73. The NHS Cervical Screening Programme (NHSCSP) is for all women between the ages of 25 and 64, who are eligible for a free cervical screening test every three to five years. A Wiltshire Abdominal Aortic Aneurysm (AAA) Screening Service launched on March 1st 2013. All males will be invited for screening during the year of their 65th birthday.

Table 2 shows the 2011 and projected 2021 populations for the age groups covered by these screening programmes or similar age groups where the exact age ranges are not available for 2021.

Table 2: Population of screening programme age, 2011 and 2021

	Women 50 to 70	Women 50 to 69	Women 47 to 73	Women 25 to 64	Men 65	Men 60-64
2011	62,340	60,286	79,683	124,782	2,714	15,270
2021	N/A	70,108	N/A	126,953	N/A	15,939
% change	N/A	16.3%	N/A	1.7%	N/A	4.4%

Source: ONS 2011 based interim population projections: <http://www.ons.gov.uk/ons/rel/snpp/sub-national-population-projections/Interim-2011-based/index.html>

Projections indicate the number of women aged between 50 and 69, and therefore currently eligible for the breast screening programme, will increase by 16.3% in the ten years between 2011 and 2021; this is much more than the estimated population increases for cervical (1.7%) or abdominal aortic aneurysm (AAA) (4.4%) screening.

Many screening programmes are run through primary care services and therefore programme statistics are often calculated using the number of patients registered with GPs. The population figures given here are merely indicative of the size of the

programmes and the changes likely in specific age ranges used in screening not official denominators for performance statistics.

More information on screening is available in the [screening section](#) and [cardiovascular disease section](#) of the health and wellbeing JSA.

Teenage conceptions

Teenage conception rates are usually calculated by dividing the number of conceptions to under 18s by the 15-17 female population. In 2012 there were estimated to be 9,170 females aged between 15 and 17 in Wiltshire. The larger age group 15-19 is expected to decrease by around 10% between 2011 and 2021.

More information on teenage conceptions is available in [the children and young people's sexual health section](#) of the health and wellbeing JSA.

Challenges for consideration

Impact of the ageing population (for both genders).

Change in numbers eligible for screening programmes.

Planning services and addressing health and social care needs, which can vary by gender, in the face of changing population structures.

Uncertainty over projections of the number of women of child bearing age which will effect fertility rate calculations.

Producing accurate statistics reflecting the changes to state pension age for women.

Contact information

Document prepared by:

Simon Hodsdon

Public Health Scientist

Wiltshire Council

Telephone: 01225 718769

Email: simon.hodsdon@wiltshire.gov.uk

With input from:

Doug Anderson, Demographer, Wiltshire Council

¹ ONS mid-year estimate 2012 <http://www.ons.gov.uk/ons/rel/pop-estimate/population-estimates-for-england-and-wales/mid-2012/mid-2012-population-estimates-for-england-and-wales.html>

² ONS population projection, interim 2011-based <http://www.ons.gov.uk/ons/rel/snpp/sub-national-population-projections/Interim-2011-based/index.html>

³ 2001 to 2011 population change excel file available soon from <http://www.intelligencenetwork.org.uk/population-and-census/>