

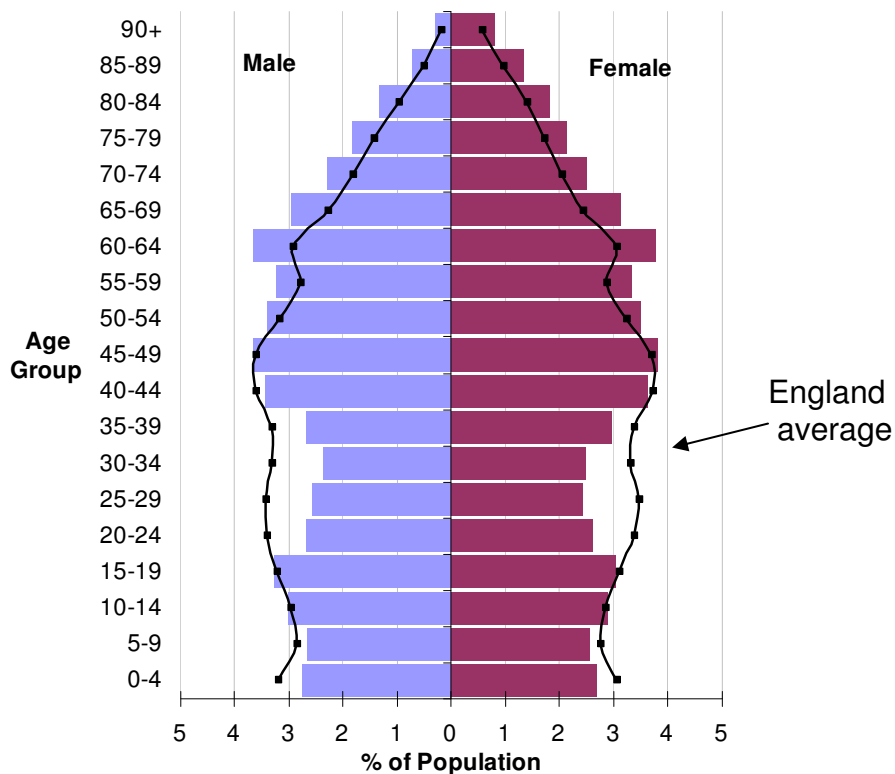
# Census 2011

## Understanding the 'Population Pyramid'



The first release of the 2011 Census population estimates was accompanied by various means of illustrating the data. The ONS [website](#) features a comprehensive range of explanatory documents, tables and charts, including those often described as 'population pyramids'.

This diagram shows the age-sex profile of an area, with the oldest at the top, males on the left, females on the right of a central axis. The picture for Somerset is shown below.



Source: ONS Census 2011, Somerset

However, the above resembles nothing like a pyramid shape, so why the name?

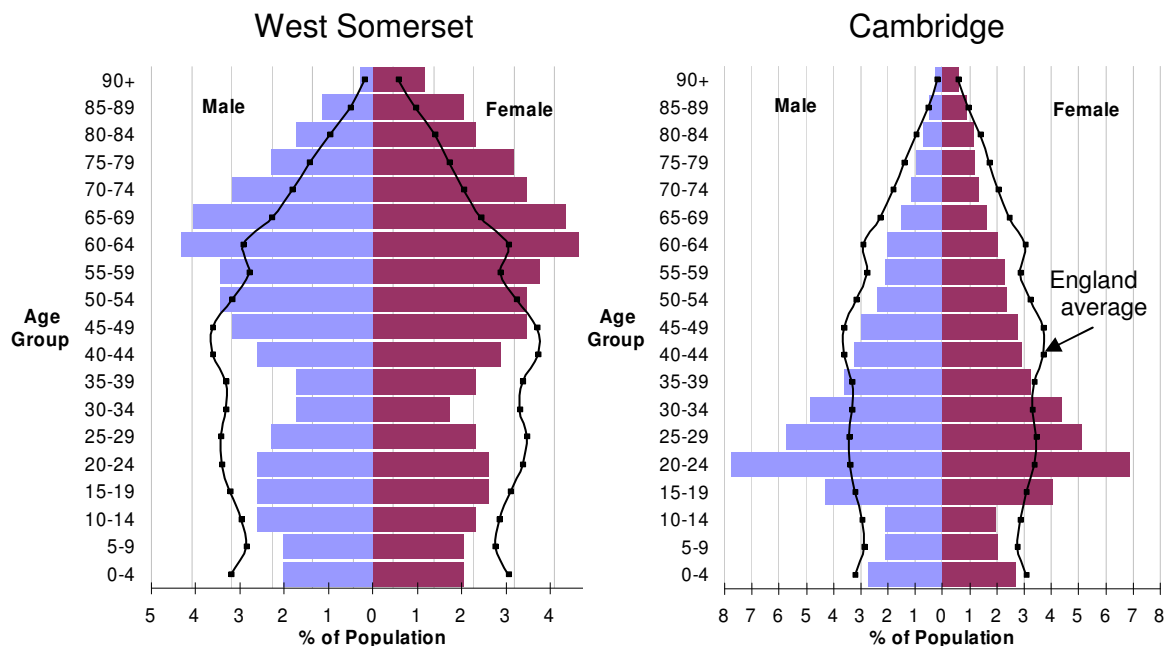
The pyramid, or triangular shape, would be typical of a population with high birth and death rates. An example is that of England and Wales a hundred years ago, shown as part of an interactive tool on the ONS website here:

<http://www.ons.gov.uk/ons/interactive/vp1-story-of-the-census/index.html>. You can use this tool to track the changes since then.

In 1911, women tended to have more babies, but the infant mortality rate was high: more than one in eight babies born that year died before their first birthday. Adults also died at a much earlier age than they do now, largely because of infectious diseases. Also, by the time of the 1921 Census, the First World War and 'flu pandemic had altered the shape slightly, and it has continued to evolve since then, becoming a more rounded shape as birth rates have fallen and people live much longer, largely because of improved health care and lifestyle changes.

The 2011 chart for Somerset on the previous page shows the 'baby booms' of the immediate post-World War 2 period and the mid-1960s showing up as mini-bulges in the 45-49 and 60-64 age groups. This is also true nationally.

While the diagram name has stuck, a true pyramid shape is no longer observed in any part of England and Wales. However, different local authorities do have contrasting age-sex population profiles. For instance, many rural areas have more of an 'hourglass' shape (relatively small proportions of those in their 20s or 30s), while the profiles for university cities and some London boroughs resemble 'Christmas trees' (signifying younger populations, see examples below).



Source: ONS Census 2011 estimates (note the scales are different on each diagram)

You can look at and compare the age-sex 'population pyramids' for all local authorities and regions at <http://www.ons.gov.uk/ons/interactive/vp2-2011-census-comparator/index.html>.

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