Modal Age at Death: Mortality Trends in England and Wales 1841–2010

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Abstract

Mortality in England and Wales has changed dramatically since 1841. Recent studies of the late modal age at death show that some low mortality countries are demonstrating a shifting mortality scenario following overall mortality compression, which dominated from 1900. England and Wales have appeared briefly in these works but are not the sole focus. This report will focus solely on males and females in England and Wales by smoothing, using a nonparametric method, mortality rates used to construct period life tables from which modal age at death can be extracted for each year from 1841 to 2010. Mortality compression around and above the mode are also measured.

The modal age at death increased by 14.59 years for males and 11.37 years for females between 1841 and 2010. Mortality in England and Wales has compressed into a shorter age interval; mortality above the mode has also compressed but is now stagnating for females. Evidence is not strong enough to suggest England and Wales are demonstrating a shifting mortality scenario. In fact, females may be in an "intermediate situation" characteristic of moving into the shifting mortality scenario.

This report recommends modal age at death should be used in combination with other measures of life duration in order to draw a comprehensive picture of mortality changes in low mortality countries. A further recommendation is for the Office for National Statistics (ONS) to use this technique to gain a greater understanding of the mortality and longevity they project for the future for England, Wales and the rest of the United Kingdom.

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