

## Trends in life expectancy by social class 1972 - 1999

This note provides figures on trends in expectation of life by social class for England and Wales over the period 1972 to 1999. It updates figures previously published in *Health Statistics Quarterly 02* covering the period 1972 to 1996.<sup>1</sup> The figures are based on the ONS Longitudinal Study sample.

### What data are presented?

*Table 1* shows, for men in each social class, life expectancy at birth and at age 65, for each of the five-year periods from 1972 to 1996 and the three year period 1997-9. A 95 per cent confidence interval is shown for each estimate.

*Table 2* shows, for men in each social class, the difference in life expectancy between the periods 1972-6 and 1997-9, and between the periods 1992-6 and 1997-9.

*Table 3* and *Table 4* show the corresponding information for women in each social class.

*Figure 1* and *Figure 2* illustrate the trend in life expectancy at birth in social classes I and V, for males and females respectively.

For example, in 1997-9, life expectancy at birth for professional social classes was 78.5 years for males and 82.8 years for females, 6.5 and 3.6 years more than in 1972-6, respectively

*Box 1* below contains a brief description of the Registrar General's Social Classes with examples of occupations included in each social class.

### What does life expectancy mean?

Life expectancy at birth for a particular social class and time period is an estimate of the number of years a new born baby would survive, were he or she to experience the average age specific mortality rates of a social class for that time period throughout his or her life. Life expectancy at 65 is an estimate of the number of additional years a person who has reached the age of 65 would survive, were he or she to experience the average age specific mortality rates of a social class for that time period for the remainder of his or her life.

### How was life expectancy calculated?

These figures are based on the ONS Longitudinal Study (LS), a one per cent representative sample of the population of England and Wales linking Census data from 1971 onwards with death registrations and other data.<sup>2</sup> Social class was based on data relating to the individual, their spouse or parents, according to priority rules. Methods used for allocating LS sample members to a social class and calculating life expectancy accordingly were described in *Health Inequalities*<sup>3</sup> and in *Health Statistics Quarterly 02*.<sup>1</sup>

Life expectancy figures based on the LS were calculated using abridged life tables for men and women separately.

The Government Actuary's Department (GAD) publishes life tables (including life expectancy) for the United Kingdom and its constituent countries. Figures based on the LS may differ slightly from those calculated by GAD as the latter are based on complete rather than abridged life tables. A detailed description of the methods and notation associated with the calculation of life expectancy using a complete life table can be found on the GAD website.<sup>4</sup>

## Further information

These tables are also available as an Excel spreadsheet.

If you require additional information on the data presented here please contact:

Health Variations Team  
B710  
Office for National Statistics  
1 Drummond Gate  
London SW1V 2QQ  
Tel: 020 7533 5186  
Email: [healthineq@ons.gov.uk](mailto:healthineq@ons.gov.uk)

### Box 1 Registrar General's Social Class (based on occupation)

Class	Description	Examples of occupations
<b>Non-manual</b>		
I	Professional	Doctors, accountants, engineers
II	Managerial and technical/intermediate	Marketing and sales managers, teachers, journalists
IIIN	Skilled non-manual	Clerks, cashiers, retail staff
<b>Manual</b>		
IIIM	Skilled manual	Carpenters, goods van drivers, joiners
IV	Partly skilled	Warehousemen, security guards, machine tool operators
V	Unskilled	Building and civil engineering labourers, other labourers, cleaners

## References

- 1 Hattersley L. Trends in life expectancy by social class - an update. *Health Statistics Quarterly* 02 (1999)16-24
- 2 Hattersley L, Creeser R. *Longitudinal Study 1971-1991: History, Organisation and Quality of Data. Series LS no. 7.* HMSO (London 1997)
- 3 Drever F, Whitehead M (eds). *Health Inequalities. Series DS no. 15.* TSO (London 1997)
- 4 <http://www.gad.gov.uk/b2/b2div11.htm>

**Table 1 Life expectancy at birth and at age 65 by social class, men, England and Wales**

Years

Social Class	1972-76		1977-81		1982-86		1987-91		1992-96		1997-99	
	Life expect.	95% CI	Life expect.	95% CI	Life expect.	95% CI	Life expect.	95% CI	Life expect.	95% CI	Life expect.	95% CI
<b>At birth</b>												
I	72.0	± 1.4	74.7	± 1.4	75.1	± 1.2	76.7	± 1.1	77.7	± 1.0	78.5	± 1.3
II	71.7	± 0.3	72.4	± 0.6	73.8	± 0.6	74.4	± 0.6	75.8	± 0.5	77.5	± 0.7
IIIN	69.5	± 0.5	70.8	± 0.8	72.2	± 0.8	73.5	± 0.8	75.0	± 0.8	76.2	± 1.0
IIIM	69.8	± 0.3	70.0	± 0.5	71.4	± 0.4	72.4	± 0.4	73.5	± 0.4	74.7	± 0.5
IV	68.4	± 0.4	68.8	± 0.7	70.6	± 0.6	70.4	± 0.6	72.6	± 0.6	72.7	± 0.8
V	66.5	± 0.9	67.0	± 1.1	67.7	± 1.1	67.9	± 1.0	68.2	± 1.2	71.1	± 1.3
All men	69.2	± 0.2	70.0	± 0.3	71.4	± 0.2	72.3	± 0.2	73.9	± 0.2	75.0	± 0.3
<b>At age 65</b>												
I	14.2	± 1.3	15.5	± 1.2	15.4	± 1.0	15.8	± 1.0	16.8	± 0.8	17.5	± 1.0
II	13.3	± 0.1	14.2	± 0.5	14.4	± 0.4	14.8	± 0.4	15.5	± 0.4	16.8	± 0.5
IIIN	12.6	± 0.1	13.3	± 0.6	13.6	± 0.5	14.1	± 0.5	15.1	± 0.6	16.3	± 0.7
IIIM	12.2	± 0.1	12.6	± 0.3	13.0	± 0.3	13.4	± 0.3	14.2	± 0.3	15.1	± 0.4
IV	12.3	± 0.1	12.1	± 0.4	12.6	± 0.4	12.7	± 0.4	13.8	± 0.4	13.8	± 0.6
V	11.6	± 0.1	11.9	± 0.5	11.7	± 0.6	11.8	± 0.6	12.6	± 0.7	13.4	± 0.9
All men	12.3	-	12.7	± 0.2	13.1	± 0.2	13.5	± 0.2	14.6	± 0.2	15.4	± 0.2

Source: ONS Longitudinal Study

CI Confidence interval

- Less than 0.05

**Table 2 Change in life expectancy at birth and at age 65 by social class, men, England and Wales**

Years

Social Class	Difference between 1972-76 and 97-99	Difference between 1992-96 and 97-99
<b>At birth</b>		
I	6.5	0.8
II	5.8	1.7
IIIN	6.7	1.2
IIIM	4.9	1.2
IV	4.3	0.1
V	4.6	2.9
All men	5.8	1.1
<b>At age 65</b>		
I	3.3	0.7
II	3.5	1.3
IIIN	3.7	1.2
IIIM	2.9	0.9
IV	1.5	0.0
V	1.8	0.8
All men	3.1	0.8

Source: ONS Longitudinal Study

**Table 3 Life expectancy at birth and at age 65 by social class, women, England and Wales**

Years

Social Class	1972-76		1977-81		1982-86		1987-91		1992-96		1997-99	
	Life expect.	95% CI	Life expect.	95% CI	Life expect.	95% CI	Life expect.	95% CI	Life expect.	95% CI	Life expect.	95% CI
<b>At birth</b>												
I	79.2	± 2.4	79.9	± 2.2	80.4	± 1.5	80.9	± 1.2	83.4	± 1.2	82.8	± 1.5
II	77.0	± 0.7	78.1	± 0.6	78.5	± 0.6	80.0	± 0.6	81.1	± 0.5	81.5	± 0.7
IIIN	78.0	± 0.9	78.1	± 0.7	78.6	± 0.6	79.4	± 0.6	80.4	± 0.6	81.2	± 0.7
IIIM	75.1	± 0.8	76.1	± 0.6	77.1	± 0.5	77.6	± 0.5	78.8	± 0.5	79.2	± 0.6
IV	75.0	± 0.8	76.1	± 0.7	77.3	± 0.6	77.0	± 0.6	77.7	± 0.6	78.5	± 0.7
V	73.9	± 1.4	74.9	± 1.2	75.3	± 1.1	76.2	± 1.0	77.0	± 1.0	77.1	± 1.3
All women	75.1	± 0.3	76.3	± 0.3	77.1	± 0.2	77.9	± 0.2	79.3	± 0.2	79.7	± 0.3
<b>At age 65</b>												
I	19.3	± 2.4	19.9	± 2.2	18.5	± 1.4	18.7	± 1.0	20.8	± 1.0	20.8	± 1.2
II	17.1	± 0.6	17.7	± 0.5	18.0	± 0.5	18.7	± 0.4	19.5	± 0.4	19.9	± 0.5
IIIN	17.7	± 0.8	17.6	± 0.5	18.0	± 0.5	18.3	± 0.4	18.9	± 0.4	19.6	± 0.5
IIIM	16.3	± 0.7	16.9	± 0.5	16.8	± 0.4	16.8	± 0.4	17.9	± 0.4	17.9	± 0.5
IV	16.8	± 0.6	16.7	± 0.5	17.4	± 0.4	16.9	± 0.4	17.1	± 0.4	17.4	± 0.5
V	16.4	± 0.9	16.3	± 0.8	16.1	± 0.6	16.0	± 0.6	16.4	± 0.6	16.3	± 0.8
All women	16.2	± 0.2	16.7	± 0.2	16.9	± 0.2	17.2	± 0.2	18.0	± 0.2	18.4	± 0.2

Source: ONS Longitudinal Study

CI Confidence interval

**Table 4 Change in life expectancy at birth and at age 65 by social class, women, England and Wales**

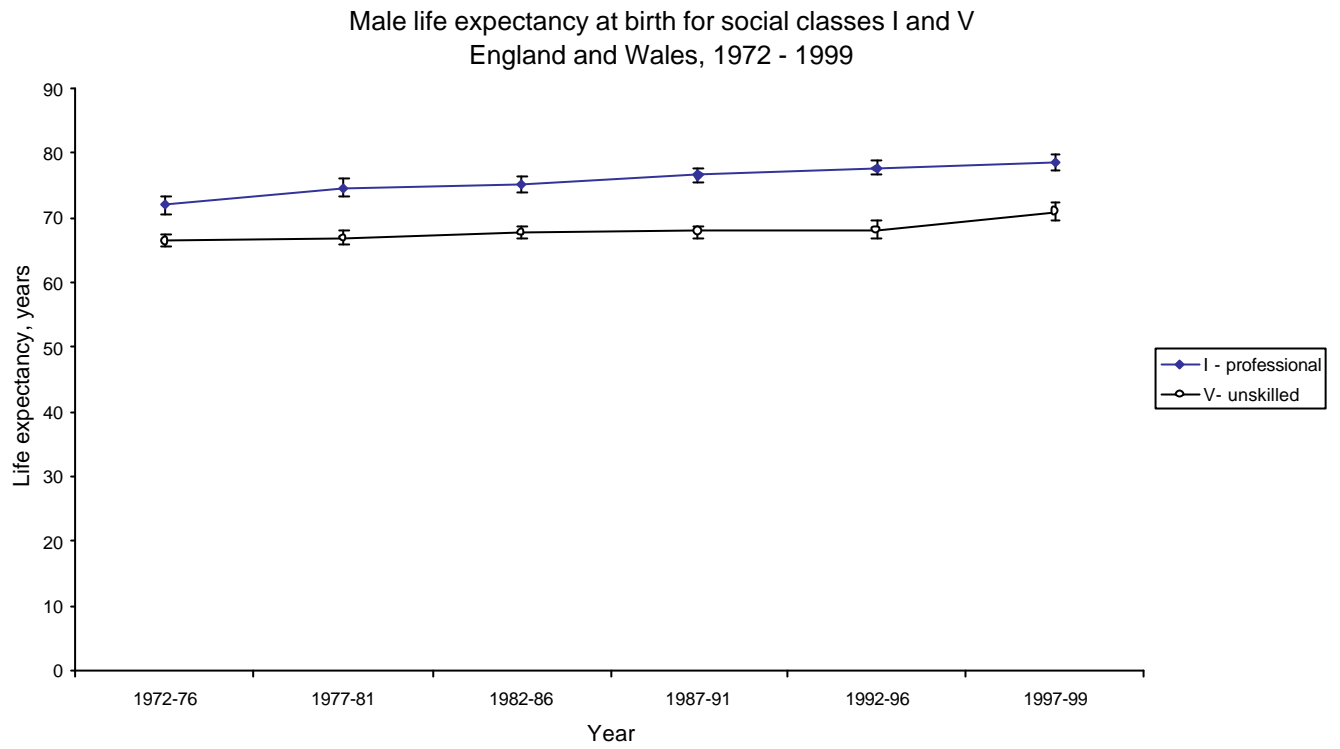
Years

Social Class	Difference between 1972-76 and 97-99	Difference between 1992-96 and 97-99
<b>At birth</b>		
I	3.6	(0.6)
II	4.5	0.4
IIIN	3.2	0.8
IIIM	4.1	0.4
IV	3.5	0.8
V	3.2	0.1
All women	4.6	0.4
<b>At age 65</b>		
I	1.5	0.0
II	2.8	0.4
IIIN	1.9	0.7
IIIM	1.6	0.0
IV	0.6	0.3
V	(0.1)	(0.1)
All women	2.2	0.4

Source: ONS Longitudinal Study

Numbers in parentheses indicate a decrease in life expectancy over the comparison period.

**Figure 1**



**Figure 2**

