

Multiple sclerosis in England 1996 to 2004

Mortality trends

Unit of Health Care Epidemiology,
Oxford University, and
South East England Public Health Observatory
2006



Multiple sclerosis in England 1996 to 2004.

Mortality trends

**Authors: Michael Goldacre, Marie Duncan, Paula Cook-Mozaffari,
Matthew Davidson, Henry McGuinness, Daniel Meddings**

**Published by: Unit of Health-Care Epidemiology, Oxford University, and
South-East England Public Health Observatory, 2006**

This document provides a profile of trends in mortality for multiple sclerosis in England. The period covered is January 1 1996 to December 31 2004. The data are analysed from mortality files supplied to the South East England Public Health Observatories (SEPHO) by the Office for National Statistics (ONS). Mortality rates were calculated for the condition certified as the underlying cause of death and for the disease certified as any mention on the death certificates. Age-specific mortality rates in 5-year age-groups were used to calculate age-standardised mortality rates with 95% confidence intervals for each time period. Age-truncated rates, with age-standardisation within them, are presented. We calculated the average annual percentage change from 1996-2004 in mortality rates for mentions, using data for each individual calendar year, by fitting linear regression models to the logarithms of the death rates. Age-standardised rates for each individual calendar year were calculated by applying the age-specific rates in each five-year age-group in each calendar year to the European standard population.

The Table shows age- and sex-specific, and male-female-combined all-ages, mortality rates per million resident population. The Graph shows age-standardised mortality rates for mortality rates based on underlying cause and for mortality rates based on mentions, for males and females separately.

Some technical notes:

- Dataset used: UHCE-built multi-year file for England, England_sepho.deaths.reg96-04unf300.v2, using the SEPHO mortality files for individual calendar years supplied by the ONS
- Deaths were coded to ICD9 340 for the years 1996-2000 and to ICD10 G35 for 2001-2004
- Diagnosis position: underlying cause, and 'all mentions'
- Period covered: deaths by date of occurrence from 1.1.1996 to 31.12.2004. Deaths in the final year for which data are available, namely 2004, may be slightly low due to late registration of some deaths
- Age/sex restriction: all ages, males and females separately
- Restrictions in record selection: none
- Place of residence at time of death: England

We are very grateful for computing support from Myfanwy Griffith and Leicester Gill. Work funded by the NHS National Centre for Research Capacity Development. Henry McGuinness and Daniel Meddings are funded by the South East England Public Health Observatory. Ethical approval: REC references 04/Q2006/175 and 04/Q2006/176.

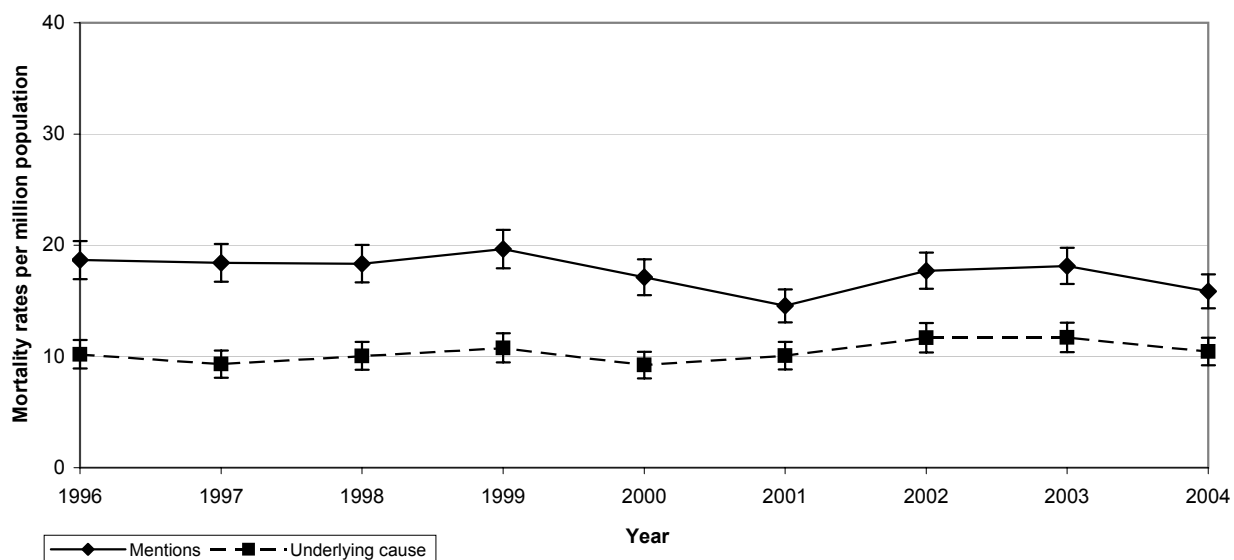
Copyright © 2006 UHCE, Oxford University

Multiple sclerosis in England

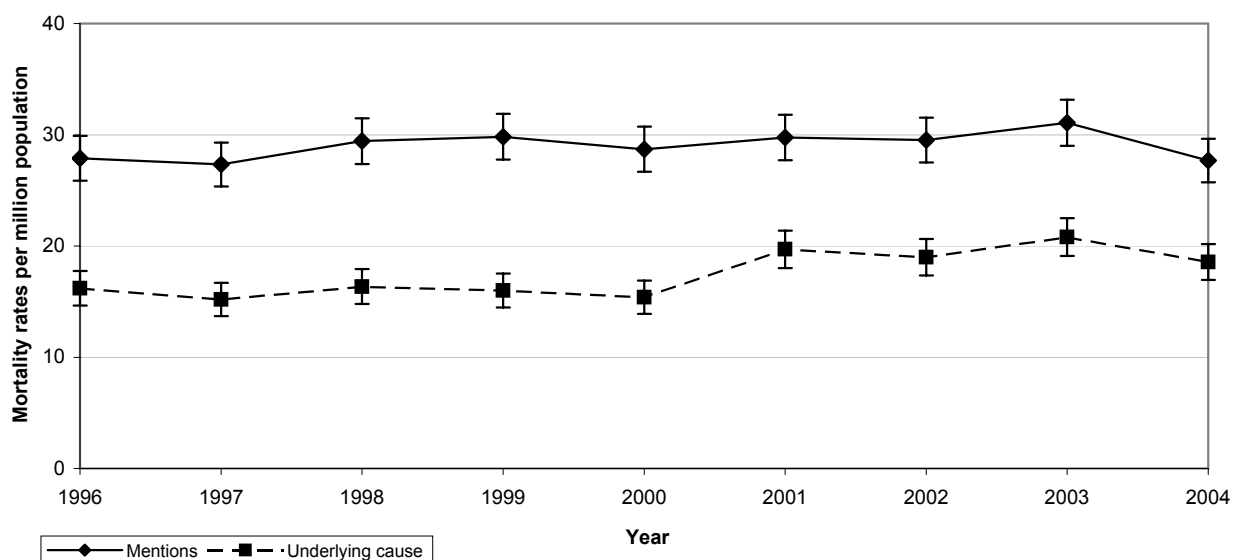
Number of deaths, age-standardised mortality rates 1996-2004 for underlying cause and for mentions; average annual change in rates for mentions, and 95% confidence intervals on the change in mentions

Age group	n	Rates per million			(95% CI)	
		Underlying cause 1996-04	Mentions 1996-04	Average annual % change		
Men						
0-34	91	0.6	0.8	-11.3	-17.3	-4.8
35-44	339	8.0	10.7	-5.2	-8.7	-1.5
45-54	812	19.2	28.4	-3.2	-6.1	-0.1
55-64	1072	27.4	46.4	0.3	-3.3	4.1
65-74	1094	31.4	62.6	-1.7	-4.3	1.0
75+	700	26.9	56.5	0.2	-2.8	3.3
all age	4108	10.4	17.6	-1.8	-3.7	0.2
Women						
0-34	121	0.9	1.1	-4.8	-12.4	3.4
35-44	542	14.0	19.0	-2.2	-6.3	2.0
45-54	1541	40.4	59.6	2.0	-0.7	4.7
55-64	1806	51.3	85.3	2.2	0.9	3.6
65-74	1954	57.0	109.8	-1.4	-2.6	-0.2
75+	1790	49.2	100.0	0.9	-1.0	2.8
all age	7754	19.7	32.7	0.6	-0.4	1.6
Total	11862	15.0	25.1	-0.3	-1.4	0.8

Multiple sclerosis in England: age-standardised mortality rates 1996-2004, males



Multiple sclerosis in England: age-standardised mortality rates 1996-2004, females



Multiple sclerosis in England: age-standardised mortality rates 1996-2004, males and females

