Chapter 2: Health in Wales and the United Kingdom

This section uses statistics from a range of sources to compare health outcomes in Wales with the remainder of the United Kingdom.

Population trends
Annual population growth rates for the countries of the UK show that rates between 1991 and 1998 are less than from 1981 to 1991 for Wales and England but not for Scotland and Northern Ireland.

Table 2.1: Annual growth rates (percentages)

	1981-1991	1991-1998
Wales	2.8	1.4
England	3.0	2.7
Scotland	-1.4	0.3
Northern Ireland	4.1	5.1

Source: Registrar General for Scotland (2000)

Based on 1998 figures, the proportion of the population aged 0-4 years is lowest in Wales, whilst the proportion aged 80 and over is highest.

Health trends
Although health need is the baseline, complete, current measures of this are problematic to compile. Mortality data are often used as surrogates for comparative purposes, as the data provide a comprehensive coverage and are considered to be relatively accurate and up-to-date. However, such data can be misleading in terms of the full extent of ill-health: conditions such as back pain, rheumatism and arthritis account for most of limiting long-term illness but are not commonly recorded as causes of death. This discussion will explore both mortality and morbidity data.

Key indicators of health are mortality rates for both full populations and for infants and life expectancy figures. These are shown in Table 2.2.

Table 2.2: Key demographic and health indicators

Age-standardised mortality rate (per million population)				
Year	**Wales**	**England**	**Scotland**	**Northern Ireland**
1971	11175	10278	11444	11607
1981	9846	9298	10849	10567
1991	8074	7941	9254	8564
1998	7366	7128	8533	7438
1999*	7532	7062	8618	7672
Infant mortality rate (per 1000 live births)				
Year	**Wales**	**England**	**Scotland**	**Northern Ireland**
1971	18.4	17.5	19.9	22.7

1981	12.6	10.9	11.3	13.2
1991	6.6	7.3	7.1	7.4
1998	5.6	5.6	5.6	5.6
1999*	6.1	5.7	5.0	6.4
Expectation of life, in years, at birth: males				
Year	**Wales**	**England**	**Scotland**	**Northern Ireland**
1981	70.4	71.1	69.1	69.2
1991	73.2	73.4	71.4	72.6
1998*	74.5	74.9	72.6	74.3
Expectation of life, in years, at birth: females				
Year	**Wales**	**England**	**Scotland**	**Northern Ireland**
1981	76.4	77.0	75.3	75.5
1991	78.9	79.0	77.1	78.4
1998*	79.5	80.0	78.1	79.5

Source: ONS (2001a)
* provisional figures

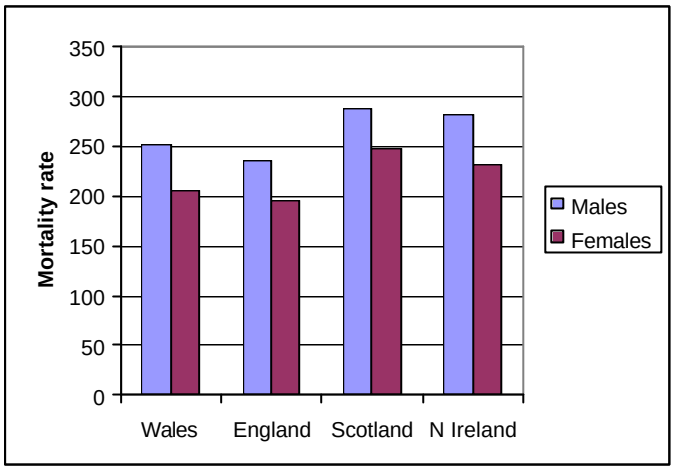
Recent trends in major health indicators show substantial improvements, although provisional figures for 1999 do not always seem to show a continuance. It must be noted that a change over one year cannot be considered a trend. Infant mortality rates for Wales are higher than those for England and Scotland; the age-standardised mortality rates are also higher than those in England. Life expectancy for both males and females is lower in Wales than in England.

Low birth weight (under 2500g) is a useful marker for subsequent morbidity. Encouragingly, rates (the proportion of low birth weights as a percentage of all live births) for Wales are consistently lower than those for England (rates are not routinely reported by Scotland). In 1983, the figure for England was 7.0 compared with 6.8 for Wales. In 1999, England recorded 7.6 to 7.4 for Wales (ONS, 2000a). Variations within Wales are explored later, in Chapter 5. In 1993, all but one of the health regions in England had lower rates for sudden infant death than Wales but, by 1998, the rates for Wales had dropped by 52%. Figures for 1999 show an increase although this is consistent with other regions (ONS 2000c).

Causes of mortality

Detailed mortality statistics are available in the UK on causes of death by age, sex and area. Age-adjusted mortality rates for common causes of death are illustrated below. Figure 2.1 is a comparison of ischaemic heart disease within the UK. For both males and females, rates for Wales are above those for England but below the levels of Scotland and Northern Ireland.

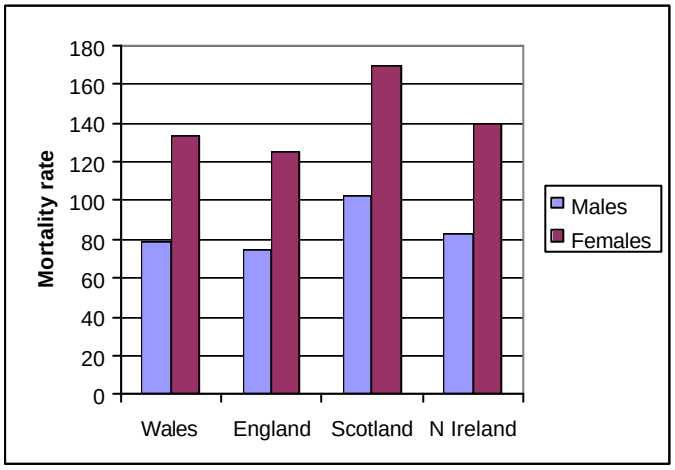
Figure 2.1: Age-adjusted mortality rates for ischaemic heart disease (1998)



Source: ONS (2001b)
Note: age-adjusted mortality rates per 100,000 population

A similar comparison for cerebrovascular disease can be made using Figure 2.2. Here, rates for females in all four countries are well above those for males. Again, relative rates show Wales to have higher mortality than England but lower than Scotland and Northern Ireland.

Figure 2.2 Age-adjusted mortality rates for cerebrovascular disease (1998)



Source: ONS (2001b)
Note: age-adjusted mortality rates per 100,000 population

There are related conditions where the figures for Wales are a particular concern. Table 2.3 shows standardised mortality ratios for cerebral infarctions in Wales, where the rates for females are the highest in the UK. SMRs for hypertensive disease are highest for Wales (Table 2.4) and this is also true for hypertensive heart disease. Chronic rheumatic heart disease mortality for females in Wales has an SMR of 154 for 1998, compared with under 100 elsewhere.

Table 2.3: SMRs for cerebral infarctions (1998)

	Males	Females
Wales	113	123
England	97	97
Scotland	123	108
Northern Ireland	97	107

Source: ONS (2000d)

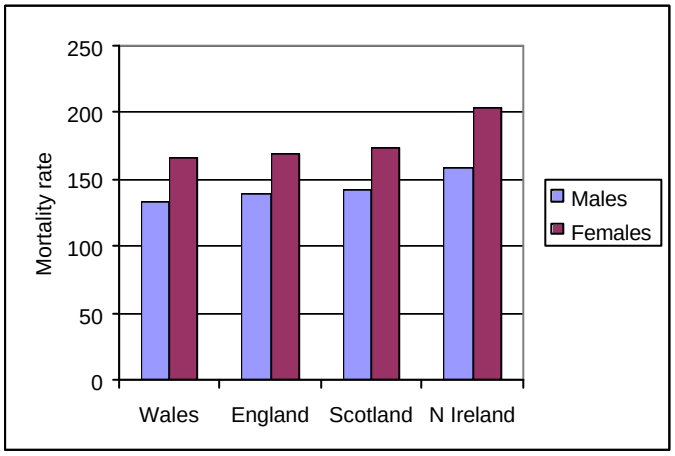
Table 2.4: SMRs for hypertensive disease (1998)

	Males	Females
Wales	126	132
England	99	97
Scotland	91	100
Northern Ireland	105	127

Source: ONS (2000d)

Respiratory disease rates (excluding cancers) are in Figure 2.3 below. Perhaps surprisingly, the 1998 rates for Wales are the lowest of the four countries, for both males and females.

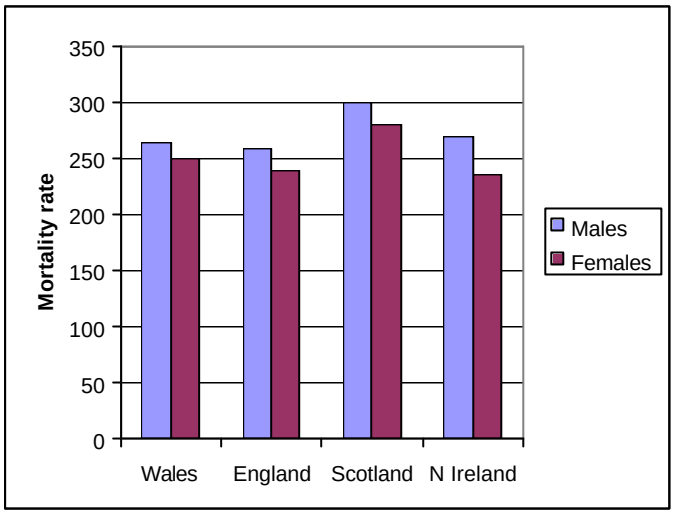
Figure 2.3: Age-adjusted mortality rates for respiratory disease (1998)



Source: ONS (2001b)
Note: age-adjusted mortality rates per 100,000 population

Comparative figures for mortality from cancers in 1998 (Figure 2.4) show a slightly different picture, with rates for females in Wales being above those for England and Northern Ireland. The rates are particularly high in Wales for cancers of the digestive organs, female breast and genito-urinary classes but lower than Scotland for respiratory cancers.

Figure 2.4: Age-adjusted mortality rates for cancers (1998)



Source: ONS (2001b)
Note: age-adjusted mortality rates per 100,000 population

Diseases of the nervous system and sense organs (ICD 320-389) yield high rates in Wales, although not for the sub-categories of Parkinson's Disease, multiple sclerosis or epilepsy.

Table 2.5: SMRs for diseases of the nervous system and sense organs (1998)

	Males	Females
Wales	106	113
England	100	100
Scotland	97	98
Northern Ireland	96	84

Source: ONS (2000d)

These findings are paralleled by figures for diabetes (Table 2.6), where the 1980 figures are shown in brackets. Clearly, the 1998 figures for Northern Ireland are curious and require confirmation. These apart, the increase for males in Wales is much greater than those elsewhere.

Table 2.6: SMRs for diabetes 1998 (1980)

	Males	Females
Wales	121 (95)	118 (121)
England	99 (98)	100 (96)
Scotland	112 (120)	103 (117)
Northern Ireland	33 (105)	38 (121)

Source: ONS (2000d); OPCS (1983)

Excess mortality for Wales can also be noted for bronchitis, emphysema and asthma, and pneumoconiosis. SMRs for 1997 for bronchitis and emphysema were 130 (males) and 142 (females) compared with 98 for both conditions in England (ONS, 1999).

Cancer

In the ten years from 1985 to 1994, age-standardised rates for cancers have increased by 0.4% per annum for men and by just under 0.3% p.a. for women. It should be noted that the national breast screening programme for women was introduced during this time, which will have led to an increase in breast cancer diagnoses.

In males, there has been a significant increase in prostate cancer and a significant decrease in cancers of the trachea, bronchus and lung. In women, the anticipated increase in the diagnosis of breast cancer is noted, with a significant decrease in cervical cancer (where there is also a national screening programme in effect to detect pre-cancerous conditions). Comparative figures for incidence of the more common cancers follow. It can be seen that, figures for Wales are poorer than those for England but, for several sites, better than those for Scotland.

Table 2.7: Cancer incidence (1996-7)

	Stomach		Colorectal		Lung		Breast	Prostate
	m	f	m	f	m	f	f	m
Wales[b]	18.1	6.7	38.3	24.7	51.1	24.0	90.1	37.7
England [b]	14.2	4.8	33.8	22.8	57.6	22.8	77.3	32.9
Scotland[a]	14.4	6.7	46.2	30.4	70.7	38.1	78.0	46.9
N Ireland[a]	14.7	7.0	45.0	30.3	49.6	22.4	75.8	37.8

Source: Quinn *et al* (2001)

Note: rates are per 100,000 standardised to the world-standard population.
[a] 1996 incidence
[b] 1997 incidence

Incidence is highest for Wales for leukaemia (10.4 for males and 6.4 for females) compared with the UK rates of 8.3 and 5.6 respectively.

Regional variations

Table 2.1 showed variations in life expectancy at national level in the UK. Variation also exists at regional and Local Authority levels. A recent analysis by Griffiths and Fitzpatrick (2001) found a ten year differential between the highest life expectancy for males in Chiltern (78.4 years) compared with Glasgow City (68.4 years). This equates to the difference in male life expectancy between Social Classes I and V (1992-96), which was 9.5 years. Their investigation of Local Authorities with life expectancies at birth (1995-97) at or below the UK figure 10 years earlier (*ie* 1986) identifies Merthyr Tydfil among the 16 authorities listed for males, and Merthyr Tydfil, Blaenau Gwent and Caerphilly in the 25 authorities listed for females. Figures for life expectancy at UA level within Wales are given in Chapter 5.

Self-reported limiting longstanding illness is shown in Table 2.8 below and demonstrates a substantial excess in Wales:

Table 2.8: Percentages of limiting longstanding illness (unstandardised)

	Males	Females
Wales	24	30
England	19	21
North West	21	22
South East	16	17
Scotland	17	21

Source: ONS (2000b)

Evidence relating to a number of major sources of morbidity is routinely collected by sampling General Practitioners. A series of statistics is given in Box 2. These show conditions by region and by age-groups of particular interest. Figures for heart disease, for both males and females, are higher in Wales than in England and are comparable with the worst regions in England. Hypertension figures are highest for Wales. Additionally, figures for raised blood pressure also indicate that Wales has a relatively high prevalence.

Reported asthma in children under five in Wales is not exceptional but, for the age groups 5-15 and 16-24, it exceeds the prevalence figures in all other regions. The rates are again high for older age groups, although this is likely to be connected with the generally high level of respiratory disease.

The prevalence of insulin-treated diabetes is higher for males in Wales (6.1 per 1000 compared with 5.1 per 1000 in England) but not for females, where prevalence in Wales (4.6 per 1000) is exceeded by the Northern and Yorkshire region, and the Anglia and Oxford region (both 4.8). With reference to non-insulin-treated diabetes, the figures for Wales (males 10.2 and females 7.5) are slightly higher than those for England. Some individual regions have figures which exceed those for Wales. Male depression rates are also high for Wales.

This chapter has compared statistics for major health conditions in Wales with the other countries of the United Kingdom and highlighted particular conditions where rates in Wales are notably high. However, overall statistics at a national level mask variations in health outcomes at more local scales. These variations are explored in detail in Chapter 5.

Box 2: Regional variations in morbidity

Prevalence of treated coronary heart disease per 1000 patients

	Male					Female				
	45-54	55-64	65-74	75-84	All	45-54	55-64	65-74	75-84	All
Wales	**29.4**	**109.4**	**195.7**	**235.6**	**39.6**	**15.9**	**59.4**	**114.4**	**175.0**	**23.7**
England	26.9	89.1	168.1	211.9	34.3	11.9	45.4	106.3	159.2	20.6
North & Yorks	33.4	107.7	195.9	242.5	40.7	17.2	68.1	136.0	191.0	27.2
South Thames	22.0	73.3	147.1	193.6	29.7	10.5	33.6	82.0	141.3	16.7
West Midlands	25.6	85.7	161.7	199.6	32.9	12.0	42.6	103.6	145.8	19.7
North West	36.2	116.6	193.2	221.9	41.3	16.7	63.2	125.7	179.9	25.6

(all = age standardised)

Prevalence of hypertension per 1000 patients

	Male					Female				
	45-54	55-64	65-74	75-84	All	45-54	55-64	65-74	75-84	All
Wales	**31.6**	**57.4**	**86.3**	**89.1**	**22.2**	**32.8**	**67.9**	**109.3**	**127.5**	**25.7**
England	20.1	41.7	69.3	80.7	16.4	21.5	50.5	90.1	115.5	20.0
South Thames	16.4	35.5	62.2	71.9	14.5	20.1	45.5	78.2	106.3	18.2
North West	21.9	46.5	68.3	87.2	17.7	22.0	51.1	88.5	116.9	20.3

Prevalence of treated depression or anxiety per 1000 patients

	Male					Female				
	45-54	55-64	75-84	85+	All	45-54	55-64	75-84	85+	All
Wales	**56.8**	**64.3**	**85.1**	**94.4**	**36.9**	**128.7**	**136.6**	**178.2**	**183.9**	**83.3**
England	57.8	62.7	76.4	85.9	36.2	127.5	131.9	158.9	158.1	81.8
North & Yorks	67.1	75.8	91.8	76.8	42.2	140.7	149.8	163.1	178.8	91.1
South Thames	50.7	53.4	66.4	82.0	31.4	119.2	112.0	141.4	147.8	72.4
West Midlands	50.8	61.0	68.8	62.2	32.0	123.6	125.6	159.7	139.4	78.1
North West	73.3	78.1	83.4	93.9	44.4	144.7	157.5	186.4	195.6	94.9

Prevalence of treated asthma per 1000 patients

	Male					Female				
	0-4	5-15	16-24	65-74	All	0-4	5-15	16-24	65-74	All
Wales	**80.9**	**129.5**	**78.7**	**78.7**	**72.3**	**54.7**	**97.7**	**92.7**	**82.7**	**72.5**
England	95.2	122.4	70.0	68.1	66.4	59.9	97.2	66.8	73.9	68.2
North& Yorks	98.6	125.6	63.1	62.5	65.1	62.0	91.9	76.6	67.4	66.8
South Thames	88.7	114.9	72.2	59.2	62.1	58.6	90.8	79.4	69.5	65.2
West Midlands	90.0	122.5	65.6	68.9	63.6	49.9	98.8	72.5	68.8	64.5
North West	92.6	121.1	72.7	76.1	68.4	59.1	95.9	74.0	82.8	68.2

Source: ONS (1998)