

## 5. Health status

This chapter contains information on general health, mental health circulatory disease, cancer, respiratory disease, accidents and injuries, hospital admissions, mortality and immunisation.

The data come from a number of sources. Self-reported information on health from the Welsh Health Survey (1998) is included. It should be borne in mind that this information is based on a self-completed questionnaire from a sample of the Welsh population. The data have been weighted to account for the non-responders. The full results of the latest Welsh Health Survey are due to be released over the next two years and it will be important to track any changes which have occurred since 1998.

Data from the General Practice Morbidity Database (GPMD) are used. The GPMD is the best source of primary care data available in Wales and contains anonymised data from 38 general practices covering approximately 12 per cent of the Welsh population. Most of the practices are located in the more densely populated areas of Wales, that is south and north east Wales. Coverage varies from zero in Powys, Bridgend, Monmouthshire and Blaenau Gwent to 36 per cent of the population in Swansea. The age/sex distribution of the GPMD population is similar to that of the Welsh population.<sup>55</sup> Work is currently underway to modernise and extend the collection of GP morbidity data and it is hoped that the new system will be up and running soon.

Data from the Welsh Cancer Intelligence and Surveillance Unit (WCISU) on cancer incidence are included and mortality data from the ONS are used.

The Patient Episode Database for Wales (PEDW), administered by Health Solutions Wales, was used to provide information on hospital admissions. Information on accidents and injuries was sourced from the All Wales Injuries Surveillance System (AWISS) and STATS19. AWISS collects data on attendances at accident and emergency departments across Wales. STATS19 is a database held by the Police and is used for recording injuries occurring in road traffic accidents.

## 5.1 General health

Limiting long-term illness (LLTI) is a self-reported measure of long-term illness, health problems or disability that limit the person's daily activities or employment options. LLTI includes problems associated with old age.

**Figure 5.1.1**

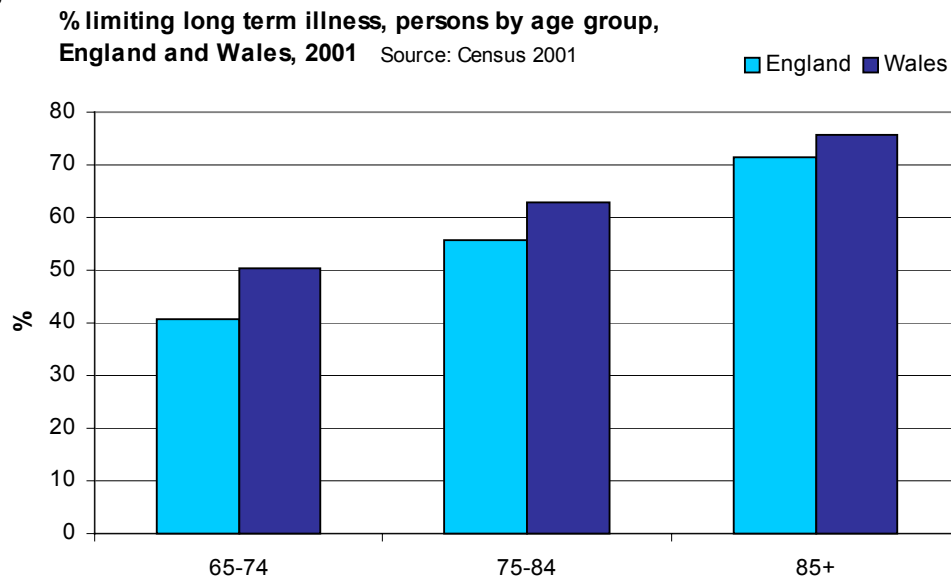
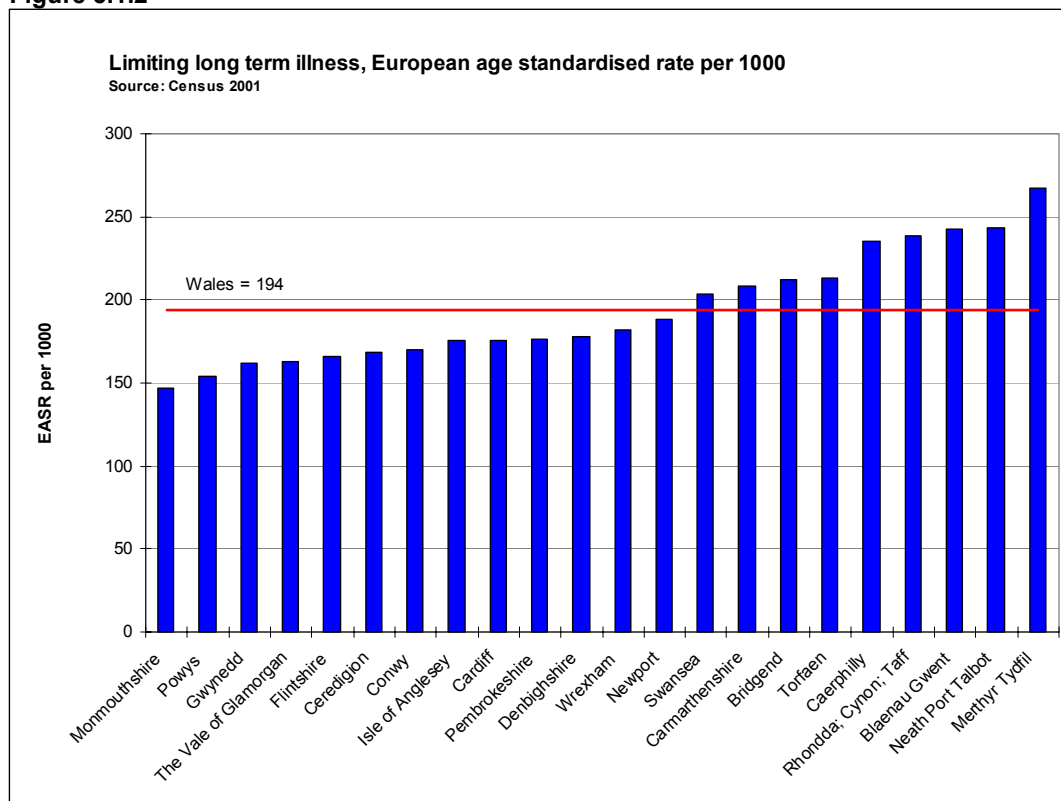


Figure 5.1.1 shows the percentage of persons with LLTI by age group for England and Wales. The chart illustrates that in each age group the proportion of the population with LLTI is higher in Wales than in England. As expected, the chart also shows that the proportion of individuals with LLTI increases with age.

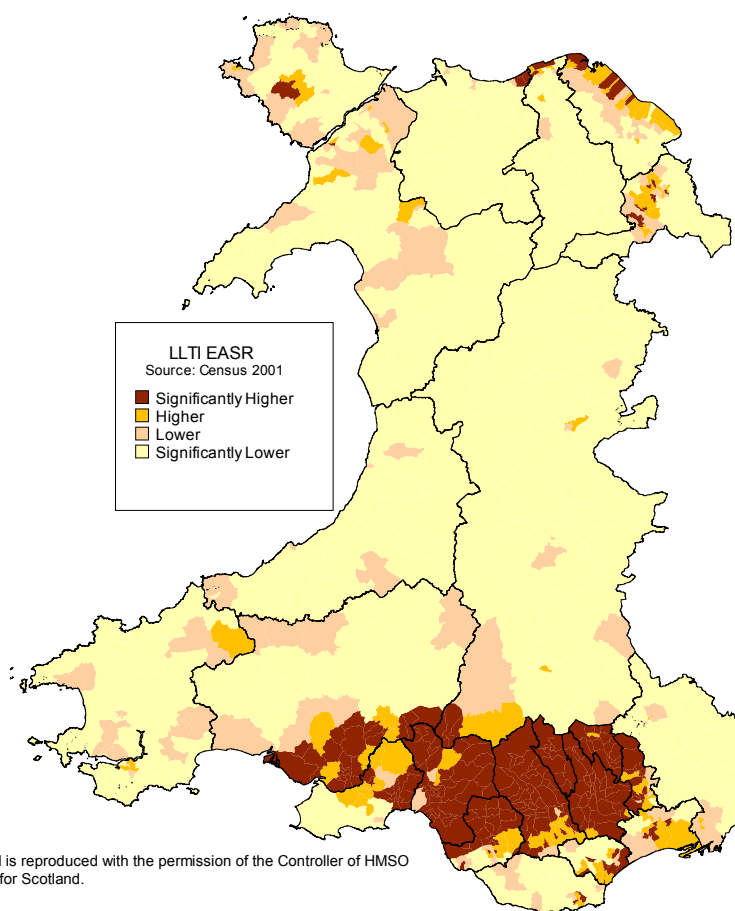
Data in figure 5.1.2 are represented as a European age standardised rate (EASR), which allows valid comparisons between different populations, by removing the confounding factor of age and standardising to the European age structure.

**Figure 5.1.2**



The chart shows the EASR per 1,000 for LLTI for local authorities in Wales. Local authorities in the south Wales valleys have the highest LLTI rates in Wales. Significantly lower rates are found in more rural areas of Wales and also in Cardiff. However, as figure 5.1.3 shows, there is often considerable variation within as well as between local authorities.

**Figure 5.1.3 Limiting long term illness rate, persons aged 65+, Welsh electoral divisions, 2001**



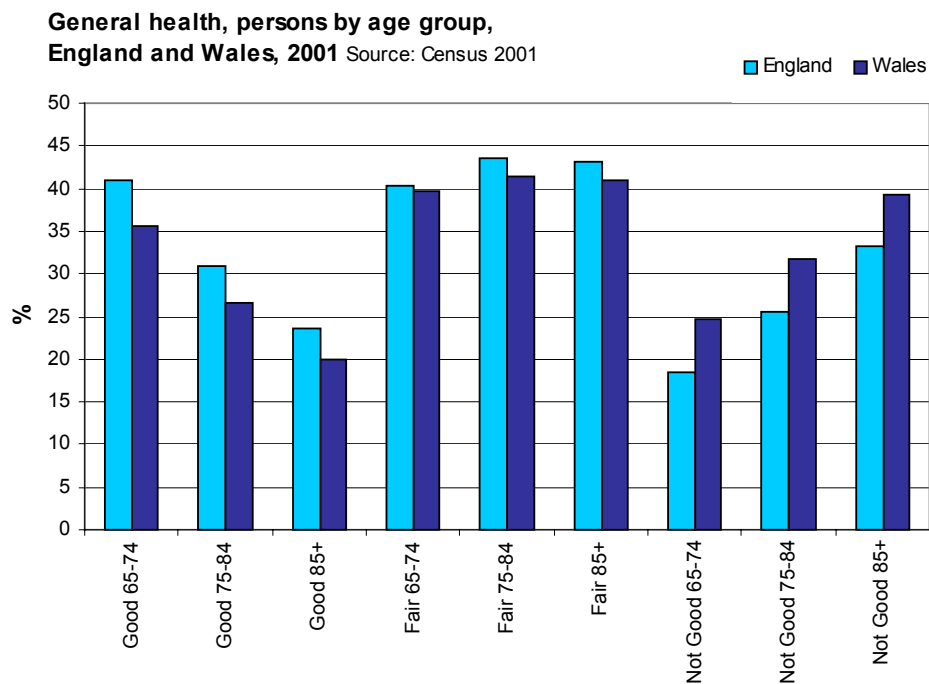
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Figure 5.1.3 shows LLTI at electoral division level by indicating how the EASR for each electoral division compares with the Welsh average. The advantage of showing this information at small area level is that differences *within* as well as *between* local authority areas can be illustrated. For example, Cardiff and Conwy both have LLTI rates which are below the Welsh average (see figure 5.1.2), but include electoral divisions where the rate is significantly higher than Wales.

The 2001 Census included a new question on health. Respondents were asked to rate their health as either 'good', 'fairly good' or 'not good' over the past year. Figure 5.1.4 shows general health by age group for residents living in households in England and Wales. It is clear that across all age groups English residents were more likely than their Welsh counterparts to rate their health as 'good'. The reverse was true for poor health, with Welsh residents more likely to indicate 'not good health'. Older persons resident in England were slightly more likely than those in Wales to rate their health as 'fair'. The overall pattern confirms that, in general, people in Wales tend to perceive their health to be poorer than those in England.

It is interesting to note that the percentage of persons stating that that their health is 'not good' is around half the number reporting LLTI in each age group. It may therefore be concluded that despite having an LLTI, many older people still do not consider their health to be 'not good'. This may indicate that older persons see LLTI as part of the ageing process. This pattern concurs with research by Gooberman-Hill *et al* who suggest that questions asking about general ill health tend to gain fewer positive responses compared to disability questions amongst those aged 65 and over.<sup>56</sup>

**Figure 5.1.4**



**Figure 5.1.5**

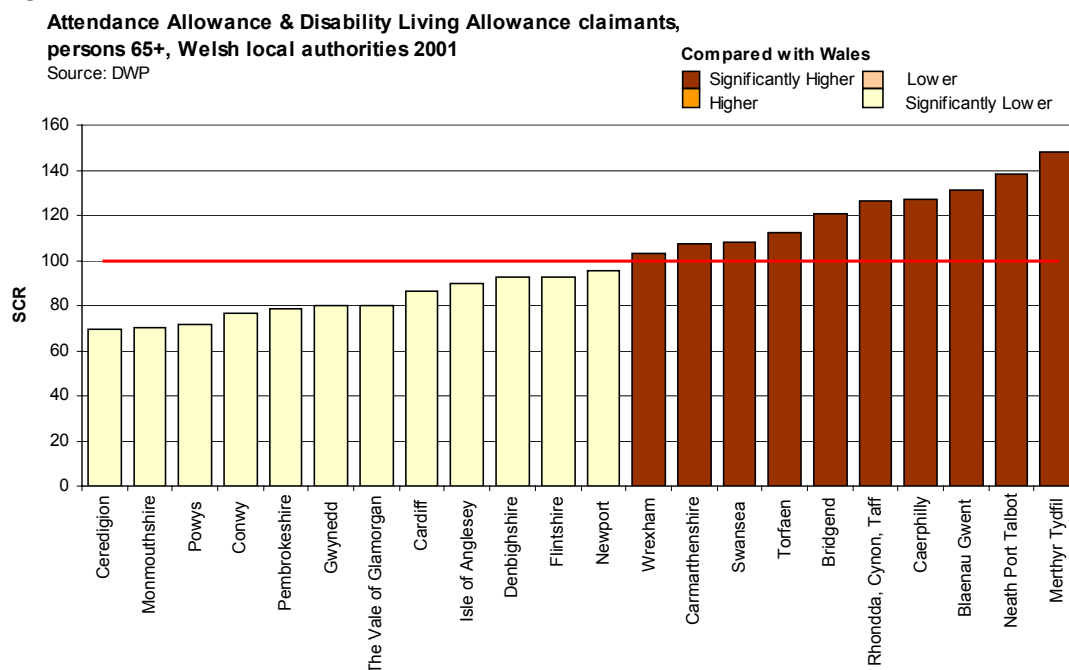


Figure 5.1.5 shows the standardised claimant ratio (SCR) for Attendance Allowance (AA) and Disability Living Allowance (DLA) by local authorities in Wales for those aged 65 and over. The SCR is a way of showing the data that takes the age structure of the population into account. DLA is paid to people who are disabled and who, as a result, have personal care needs, mobility needs, or both. To qualify for DLA a person must be under 65 at the time of applying for benefit, although claimants may continue to receive DLA after that age. AA can be claimed by people who are aged 65 and over who need help with personal care because of their illness or disability. Normally the help must have been needed for at least six months. There are two rates: higher rate for day and night: lower rate for the day or night only.

The SCR for Wales is 100. SCR's above 100 indicate higher than expected levels of claims whilst those below 100 indicate lower than expected levels. The chart shows that rates of receipt of these benefits were significantly higher than Wales throughout the south Wales valleys, Swansea, Carmarthenshire and Wrexham.

**Figure 5.1.6 Attendance Allowance & Disability Living Allowance claimants, persons aged 65+, Welsh electoral divisions, 2001** Source: DWP

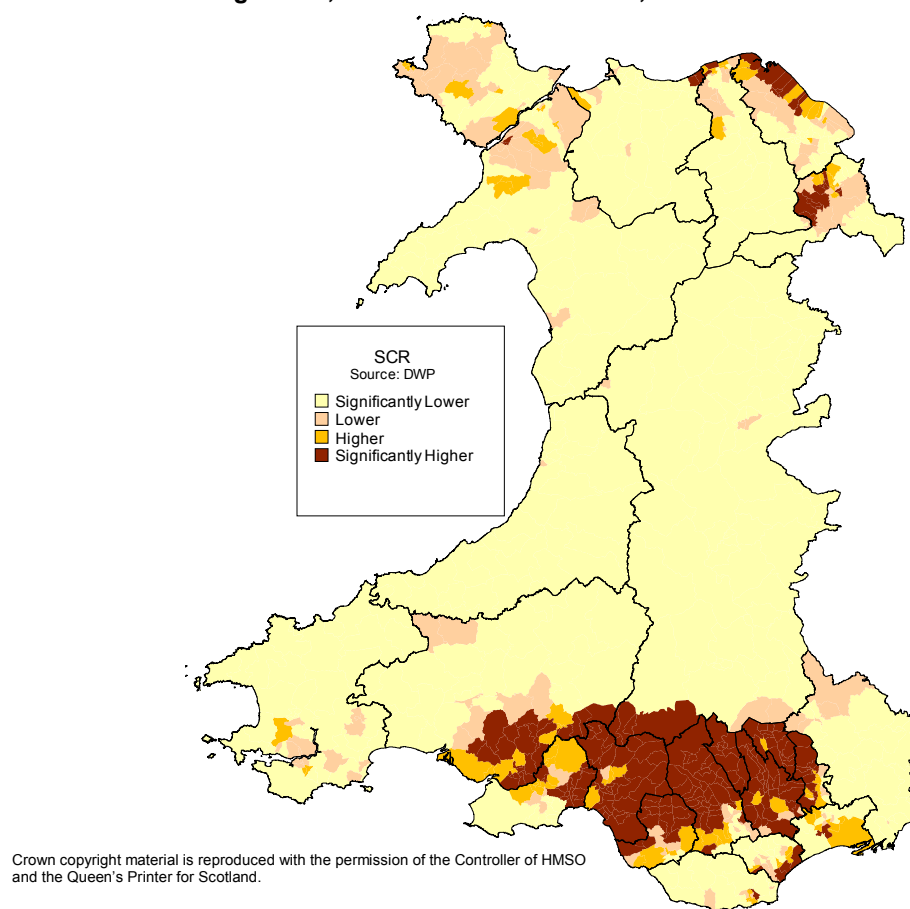


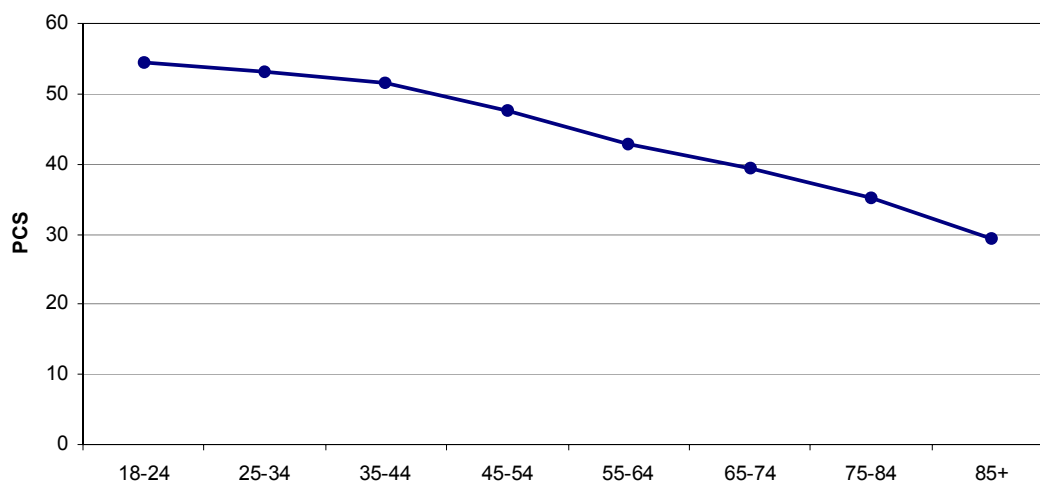
Figure 5.1.6 shows an SCR for DLA and AA at ediv level. These data, as well as being age standardised, have been smoothed using the full Bayesian technique. This technique smooths the data allowing the true underlying patterns to emerge, which may have been hidden by random fluctuations associated with small area data.

The map illustrates that there is a significantly higher claimant ratio throughout the south Wales valleys, parts of Swansea, Carmarthenshire, Cardiff and Newport. There are also significantly higher ratios along the north Wales coast and in parts of Wrexham.

**Figure 5.1.7**

**Physical Component Summary, persons by age group, Wales, 1998**

Source: Welsh Health Survey 1998



The Welsh Health Survey included a standard set of 36 health status questions known as the SF-36. The responses to these questions can be combined to produce summary measures of physical and mental health – the Physical Component Summary (PCS) and the Mental Component Summary (MCS). Figure 5.1.7 shows PCS by age group. A higher PCS indicates better physical health. Unlike the MCS (see figure 5.2.1), average PCS falls considerably with age. A healthy lifestyle may help people maintain good physical health well into old age.

**Figure 5.1.8**

**Physical Component Summary, persons 65+,**

**Welsh local authorities, 1998** Source: Welsh Health Survey 1998

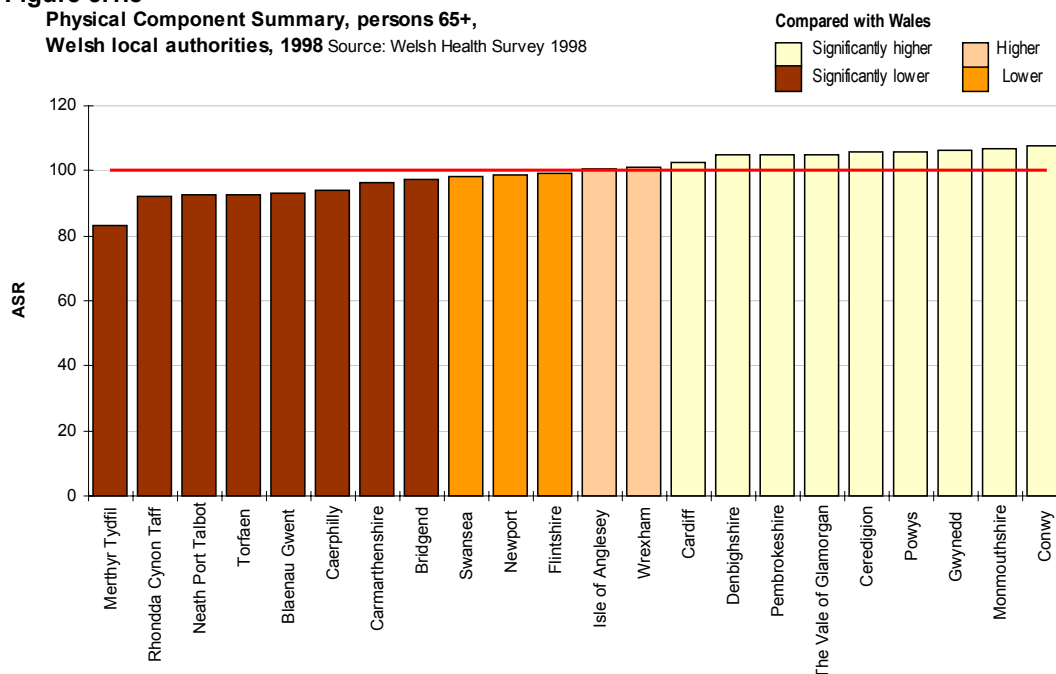
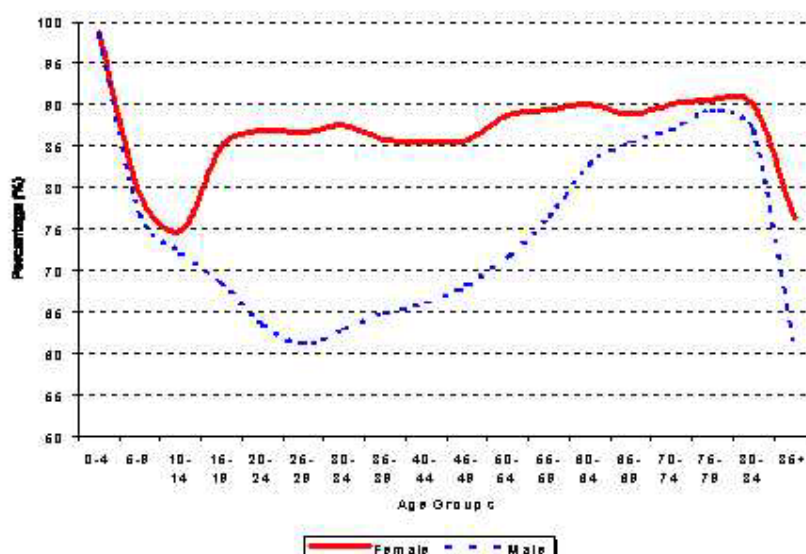




Figure 5.1.8 shows the PCS as an age standardised ratio (ASR) for Welsh local authorities. Significantly better PCS scores occur in Conwy, Monmouthshire, Gwynedd, Powys, Ceredigion, the Vale of Glamorgan, Pembrokeshire, Denbighshire and Cardiff. Significantly lower scores can be found in Merthyr Tydfil, Rhondda Cynon Taff, Neath Port Talbot, Torfaen, Blaenau Gwent, Caerphilly, Carmarthenshire and Bridgend.

GPMD data are reported as rates per person years at risk (PYaR). This is a way of calculating accurate prevalence rates when subjects have been observed for varying degrees of time, as is the case with the GPMD population. Figure 5.1.9 shows the percentage of patients attending their practice by age group and sex. The percentage of females attending their GP remains fairly constant due in part to screening procedures and oral contraceptive use. By contrast, the percentage of males attending falls considerably below that of females between the ages of 16 and 65 years with the greatest difference in the 25 to 29 age group. These differences become much smaller in the older age groups. The sharp decline as both genders reach 80+ is the result of higher death rates and the increased need for continuing care,<sup>55</sup> with residential care homes, nursing homes and long stay hospitals providing care for this age group.

**Figure 5.1.9 Percentage patients seen, males and females by age group, Wales 1998<sup>†</sup>** Source: GPMD, 1999



It is important to note that although there is a decrease in the proportion of patients aged 80 years and over attending general

<sup>†</sup> **Note:** The chart has been copied from the GPMD website where, unfortunately, the age groups on the x axis have been labelled incorrectly. They should read: 0-4, 5-9, 10-14, 15-19 etc.

practice, those people who do attend or are seen by general practice have the highest consultation rates.<sup>55</sup>

**Figure 5.1.10 Patients on repeat prescriptions, prevalence for males and females by age group, Wales 1998** Source: GPMD 1999

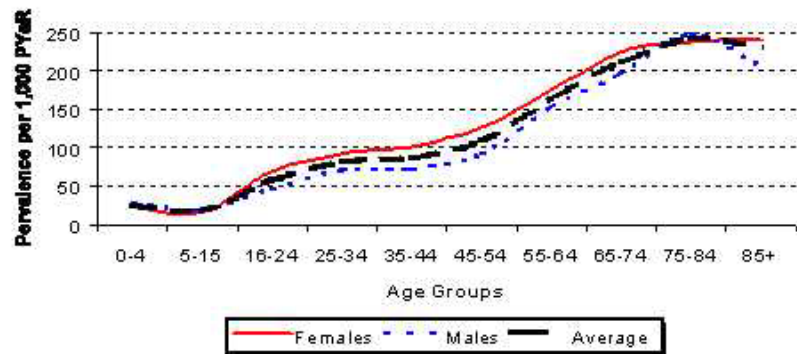
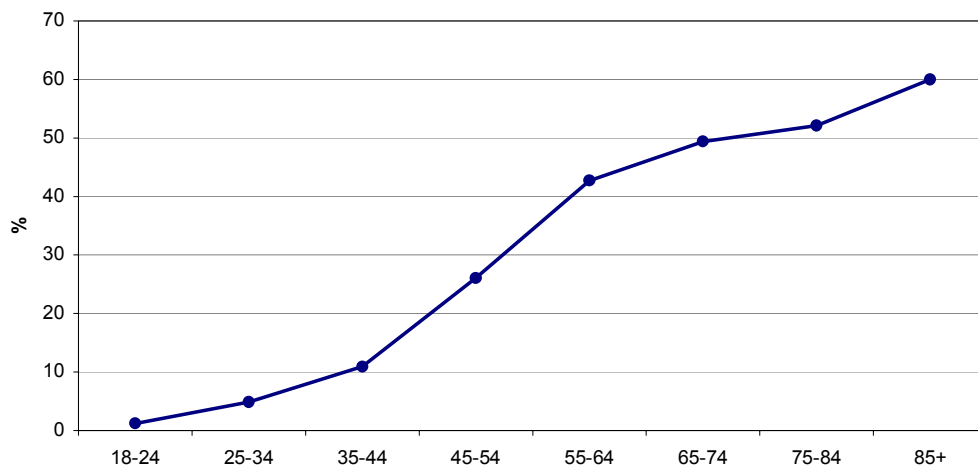


Figure 5.1.10 illustrates the high prevalence of repeat prescriptions amongst older persons. Repeat prescriptions tend to be given for chronic conditions, almost a quarter of older patients have a repeat prescription.<sup>55</sup>

**Figure 5.1.11 % with arthritis, persons by age group, Wales, 1998**  
Source: Welsh Health Survey 1998



The term arthritis covers a number of painful and debilitating conditions. Research has shown that in, overweight or obese people, weight loss is an important factor in helping to alleviate symptoms for some types of arthritis.<sup>16, 57</sup> Figure 5.1.11 shows the percentage of persons reporting that they were suffering from arthritis by age group. There is a sharp increase in the percentage during middle age that flattens off in old age. More than half of persons aged 75 years and over reported that they had arthritis.

**Figure 5.1.12**

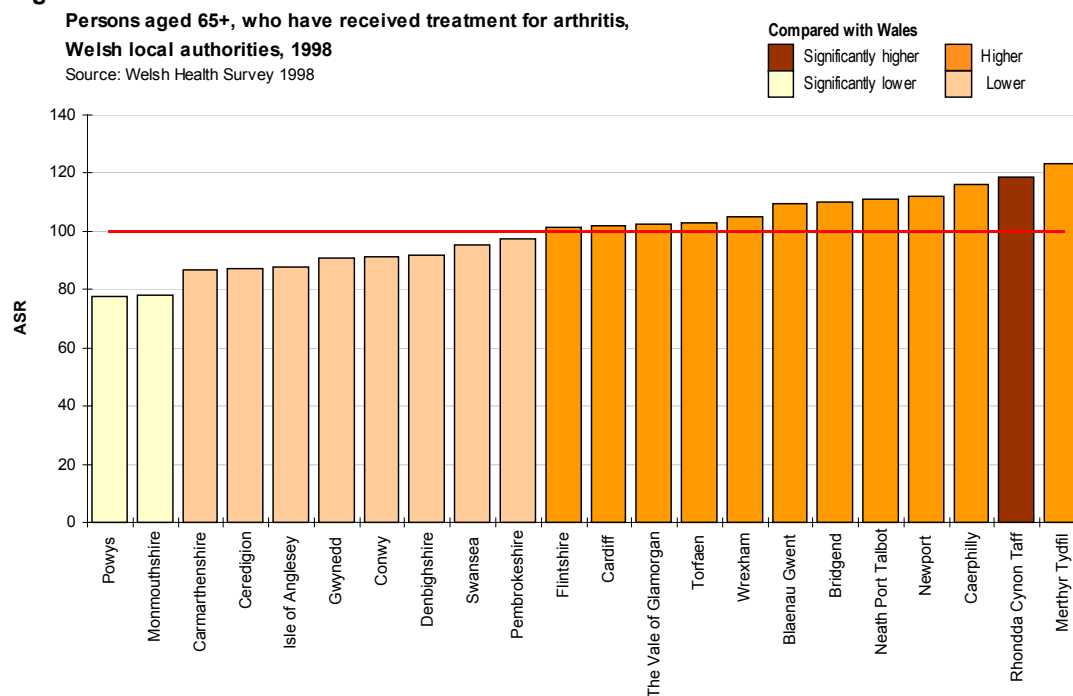


Figure 5.1.12 shows the arthritis data at local authority level for persons aged 65 years and over. The data are presented as an age standardised ratio in order to take account of any variation in the age structure between areas.

The chart shows that only Rhondda Cynon Taff has a significantly higher ratio of arthritis sufferers than Wales, whilst Powys and Monmouthshire have a significantly lower ratio. It should be noted that the relatively small numbers of older persons included in the survey make it less likely that differences will be significant.

## 5.2 Mental health

The overall prevalence of mental health or anxiety conditions (for three months or more) reported in the 1998 Welsh Health Survey was 12 per cent for males and 17 per cent for females aged 65 years and over.

Table 5.2.1 shows self-reported prevalence of mental health conditions, as measured by the Welsh Health Survey in 1995 and 1998, by age group and sex. It is clear that reported prevalence has increased in all adult age groups for both males and females.

**Table 5.2.1 Mental health conditions by age group and sex, Wales, 1995 and 1998**

Source: Welsh Health Survey, 1995, 1998

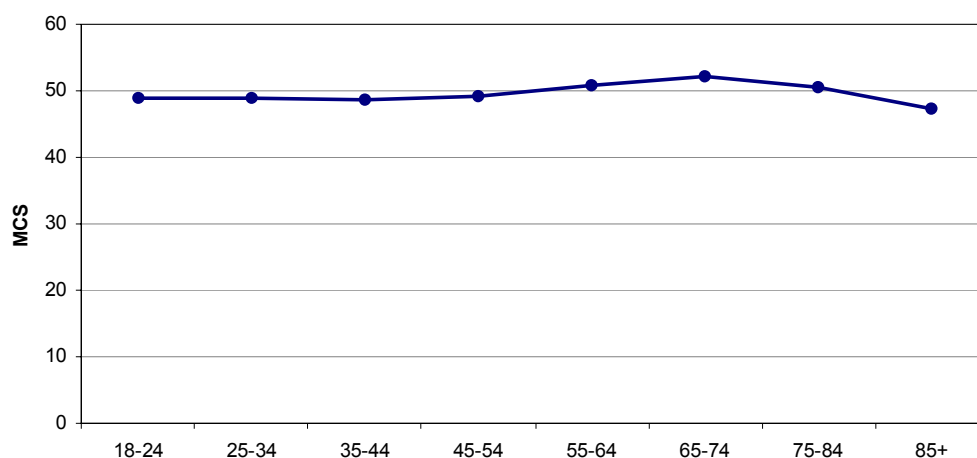
	1995		Percentage 1998	
	Male	Female	Male	Female
18-64	9.2	13.2	11.3	15.3
65-74	8.8	13.0	11.7	15.2
75+	8.7	12.6	11.6	18.0

As mentioned in section 5.1, the Welsh Health Survey included the SF-36 questions that allow the measurement of overall physical and mental health in individuals. Figure 5.2.1 shows the Mental Component Summary (MCS) score by age group. Higher scores indicate better mental health. The chart shows that the average MCS increases slightly with age, peaking in the 65-74 year age group, after which there is a decline.

**Figure 5.2.1**

**Mental Component Summary, persons by age group, Wales, 1998**

Source: Welsh Health Survey 1998



**Figure 5.2.2**

**Mental Component Summary, persons aged 65+,  
Welsh local authorities, 1998**

Source: Welsh Health Survey 1998

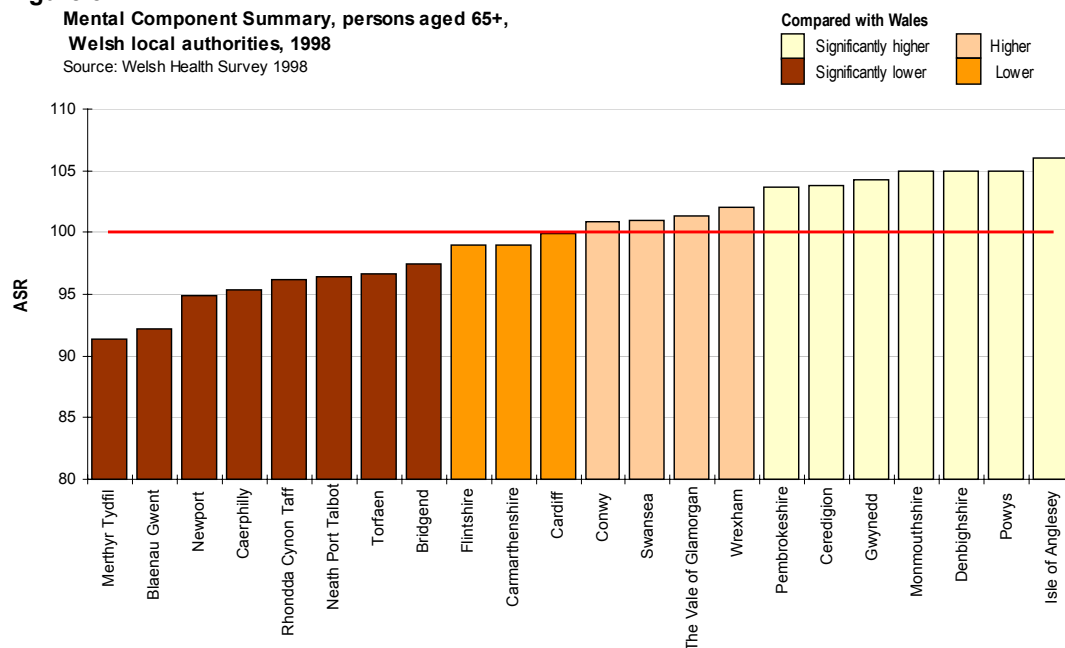


Figure 5.2.2 shows the data for persons aged 65 and over as an age standardised ratio. The chart shows that mental health scores were significantly higher in Isle of Anglesey, Powys, Denbighshire, Monmouthshire, Gwynedd, Ceredigion and Pembrokeshire. Significantly lower scores were found in Merthyr Tydfil, Blaenau Gwent, Newport, Caerphilly, Rhondda Cynon Taff, Neath Port Talbot, Torfaen and Bridgend.

**Figure 5.2.3**

**Dementia, prevalence in males and females by age group, Wales, 2000**

Source: GPMD, 2001

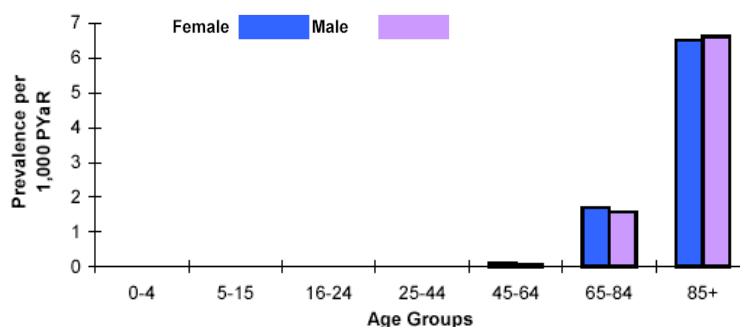


Figure 5.2.3 shows the prevalence of dementia. The chart shows that prevalence is extremely low amongst the young and middle aged. However, it increases quite dramatically amongst older persons, especially the 85+ age group.

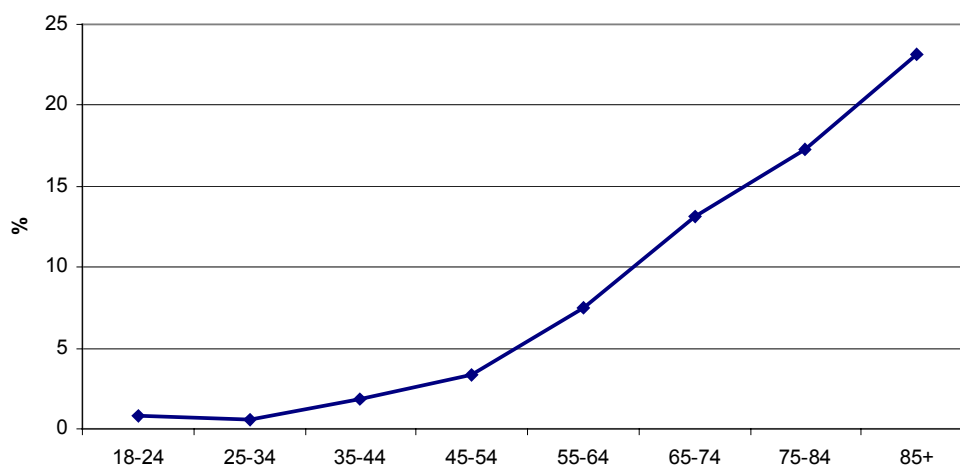
## 5.3 Circulatory disease

Circulatory disease is a major cause of morbidity among older persons. Figure 5.3.1 shows how the self-reported prevalence of heart disease increases sharply with age in Wales.

**Figure 5.3.1**

**% ever treated for heart disease\*, persons by age group, Wales 1998**

Source: Welsh Health Survey 1998



\* Not including hypertension

**Figure 5.3.2** **Coronary heart disease, prevalence in males and females by age group, Wales 2000**

Source: GPMD 2001

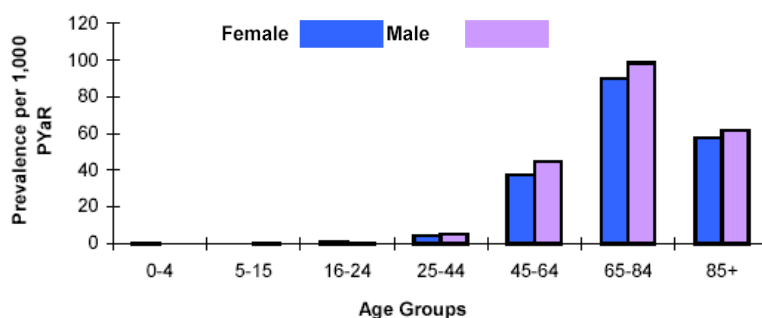


Figure 5.3.2 shows the prevalence of coronary heart disease (CHD) by age. As with figure 5.3.1, the chart illustrates that there are increases in prevalence with age. This is especially apparent in the 65-84 age group. Since 1996, practice reported prevalence of CHD, as reported by the GPMD, has ranged between 27 and 35 per cent.<sup>58</sup>

**Figure 5.3.3**

**% ever treated for stroke, persons by age group, Wales, 1998**

Source: Welsh Health Survey 1998

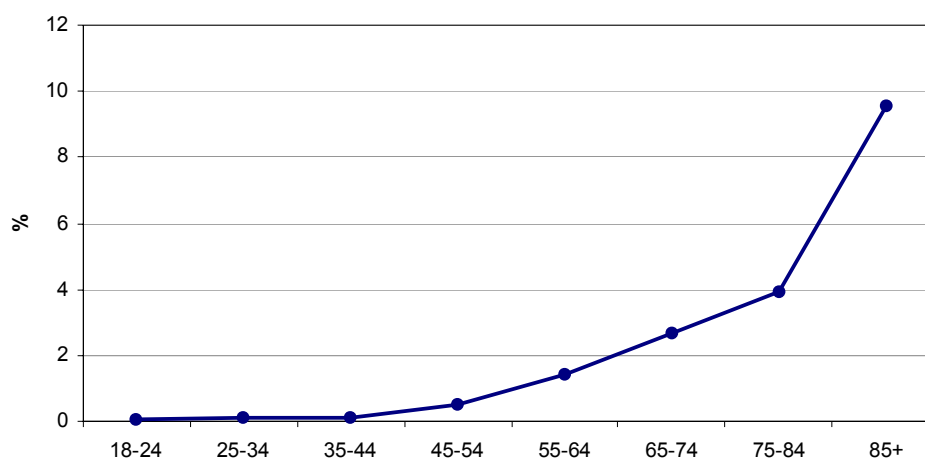


Figure 5.3.3 shows self-reported prevalence of stroke by age group in Wales. Prevalence can be seen to be much higher in persons aged 85+ than in younger age groups.

**Figure 5.3.4**

**Stroke, prevalence in males and females by age group, Wales 2000**

Source: GPMD, 2001

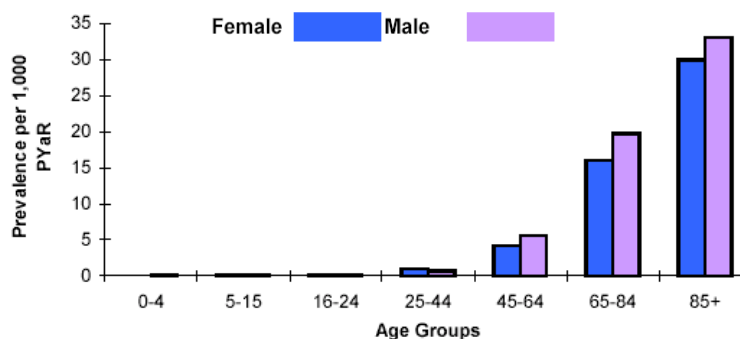


Figure 5.3.4 also shows how the prevalence of stroke increases sharply with age. Reported prevalence of stroke as measured by the GPMD has shown a steady decrease.<sup>58</sup>

**Figure 5.3.5 High blood pressure, prevalence in males and females by age group, Wales 2000** Source: GPMD 2001

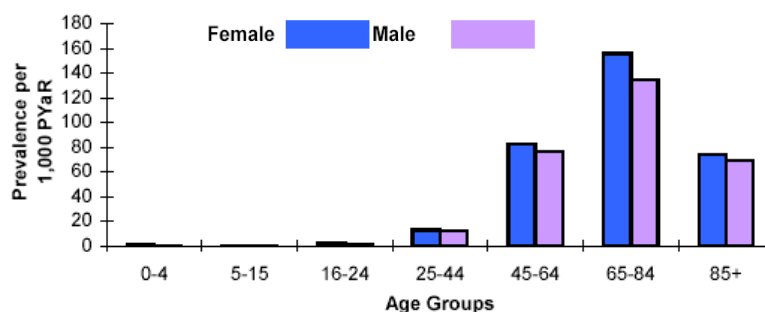


Figure 5.3.5 shows the prevalence of high blood pressure (hypertension) for the year 2000 by age group and gender. The chart shows a distinct increase with age. Reported prevalence of hypertension, as measured by the GPMD, has fluctuated between 1996 and 2000.<sup>58</sup>

**Figure 5.3.6**

**% with diabetes, persons by age group, Wales, 1998**

Source: Welsh Health Survey 1998

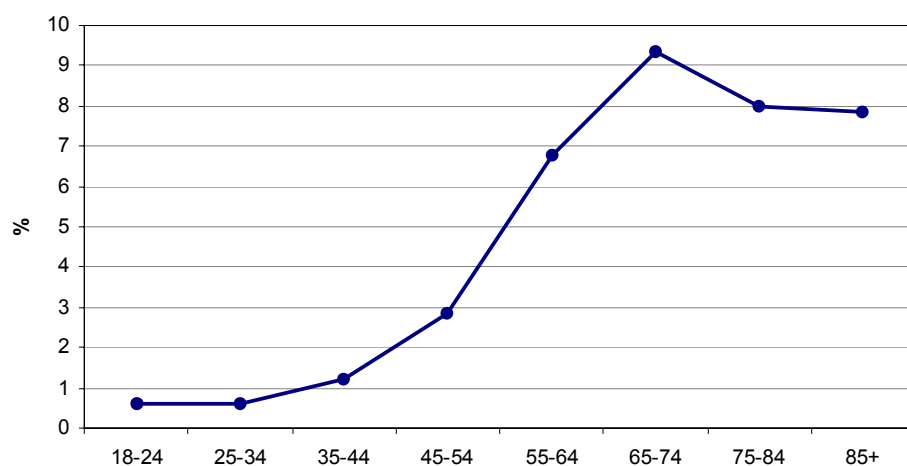


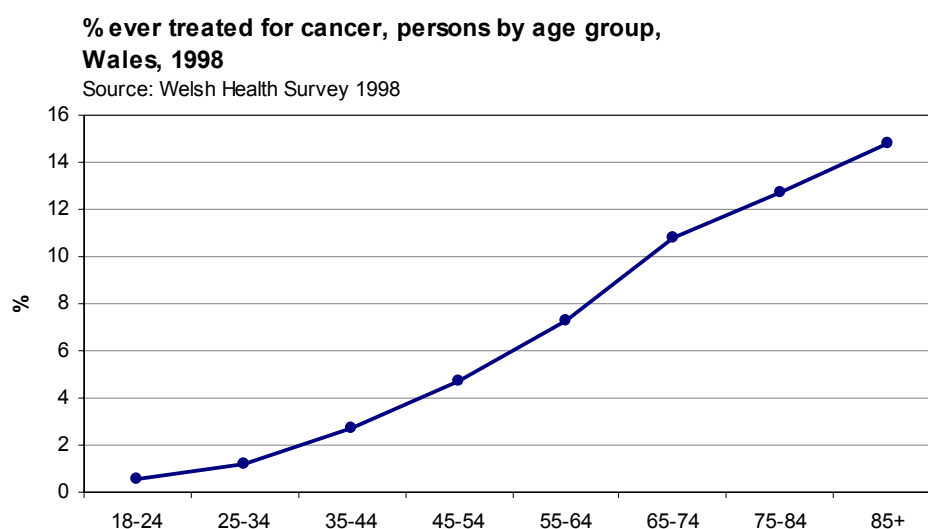
Figure 5.3.6 shows the self-reported prevalence of diabetes by age group in Wales. Prevalence increases sharply between middle and old age. This increase is due to Type II (non-insulin dependent) diabetes. Type II diabetes is associated with poor diet, lack of exercise and overweight / obesity. Complications of diabetes include, heart disease, stroke, kidney failure, peripheral vascular disease and loss of sight. Data from the GPMD show a steady increase in the prevalence of diabetes for all ages between 1996 and 2000.



## 5.4 Cancer

Figure 5.4.1 shows the self-reported prevalence of cancer by age group in Wales. A steady increase with age is evident.

**Figure 5.4.1**



The following figures show cancer incidence data from the Welsh Cancer Intelligence and Surveillance Unit which were accessed using Healthshow. Incidence rates refer to the number of new cases of disease occurring in the community over a specified amount of time. EASRs are used which allow valid comparisons to be made between areas.

Figure 5.4.2 shows the breast cancer incidence rate amongst females aged 65 and over between 1999 and 2001. The chart shows that, compared to Wales, there are significantly higher rates in Gwynedd, Blaenau Gwent, Conwy, Powys, Rhondda Cynon Taff and Pembrokeshire. Lower rates are found in the Vale of Glamorgan, Cardiff, Torfaen, Ceredigion and Carmarthenshire. This is consistent with findings from an American study that found that socio-economic inequalities in breast cancer had narrowed over time, even appearing to reverse in the late 1990s.<sup>59</sup>

**Figure 5.4.2**

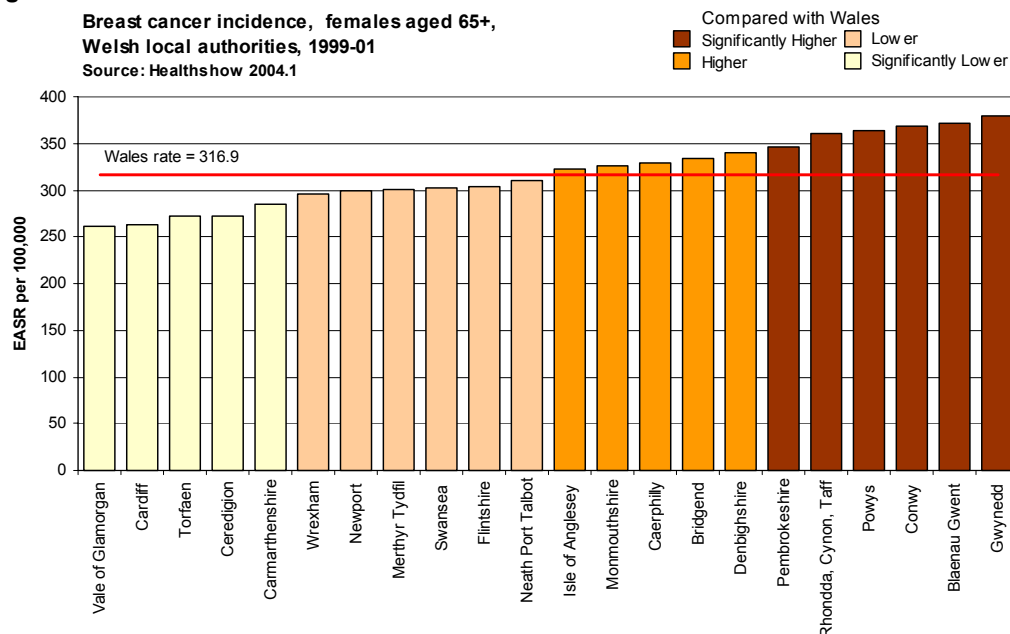
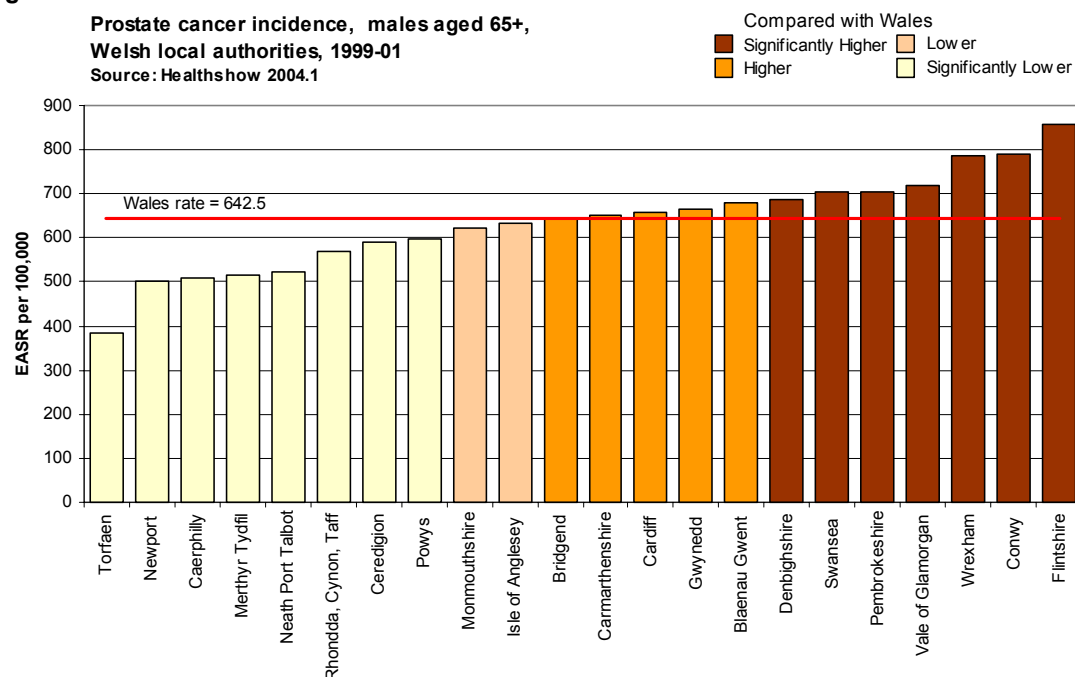


Figure 5.4.3 shows the prostate cancer incidence rate. The chart illustrates that Flintshire, Conwy, Wrexham, the Vale of Glamorgan, Pembrokeshire, Swansea and Denbighshire had significantly higher incidence rates compared with Wales. Significantly lower rates occurred in Torfaen, Newport, Caerphilly, Merthyr Tydfil, Neath Port Talbot, Rhondda Cynon Taff, Ceredigion and Powys. Much of the rise in the incidence of prostate cancer seen over the past decade may be due to increased awareness of the condition.

**Figure 5.4.3**



**Figure 5.4.4**

**Lung cancer incidence, persons aged 65+,  
Welsh local authorities 1999-01**

Source: Healthshow 2004.1

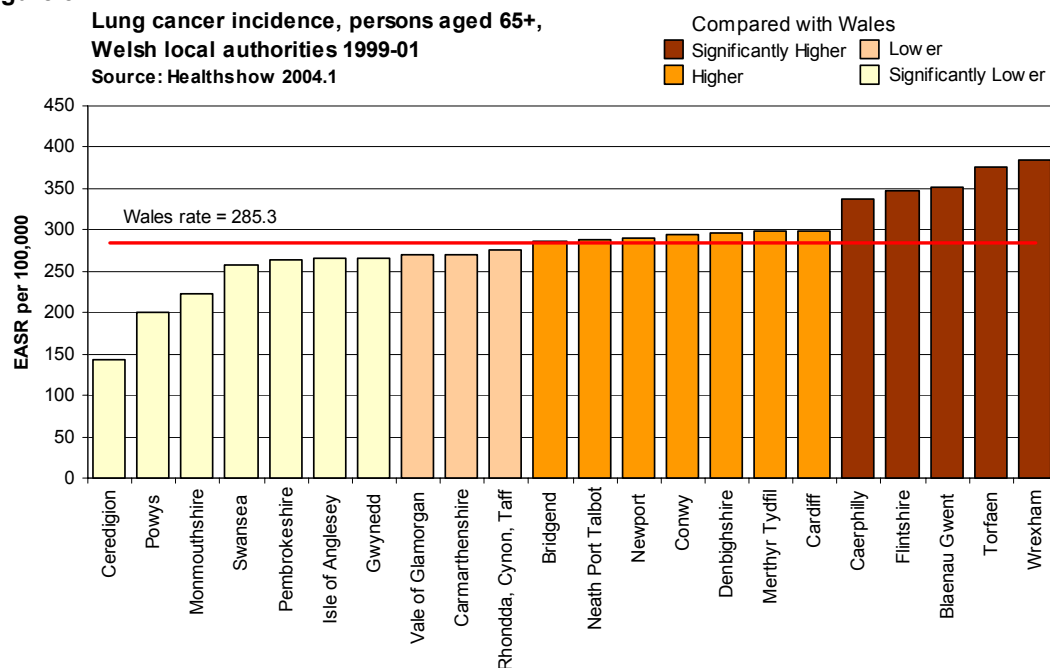


Figure 5.4.4 shows the lung cancer incidence rate amongst those aged 65 and over. Lung cancer is primarily caused by smoking and is most common in socio-economically deprived areas.<sup>6</sup> Compared with Wales, significantly higher rates can be found in Wrexham, Torfaen, Blaenau Gwent, Flintshire and Caerphilly. Significantly lower rates can be found in Ceredigion, Powys, Monmouthshire, Swansea, Pembrokeshire, the Isle of Anglesey and Gwynedd.

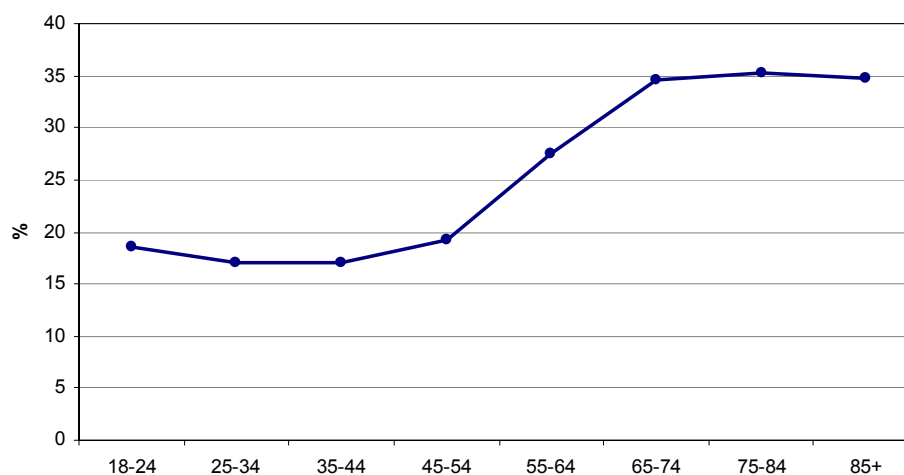
## 5.5 Respiratory disease

Figure 5.5.1 shows the self-reported prevalence of respiratory diseases\* by age group in Wales. The data show a sharp increase between the ages of 45 and 65 years, after which prevalence appears to plateau.

**Figure 5.5.1**

**% with respiratory disease, persons by age group, Wales, 1998**

Source: Welsh Health Survey 1998



**Figure 5.5.2**

**Prevalence of chronic obstructive pulmonary disease (COPD), males and females by age group, Wales 2000**

Source: GPMD, 2001

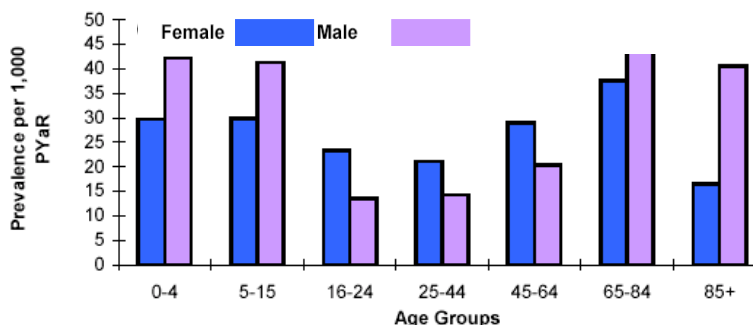


Figure 5.5.2 shows the prevalence of chronic obstructive pulmonary disease (COPD) reported by the GPMD. The chart shows that prevalence is highest among the young and older age groups. Overall the GPMD has reported an overall decrease in the prevalence of COPD between 1996 and 2000, for all ages.<sup>58</sup>

\* The WHS (1998) asked about the following respiratory diseases currently treated by a doctor: asthma, cystic fibrosis, emphysema, pleurisy, tuberculosis, chronic bronchitis, or 'another chest or breathing problem'.

## 5.6 Accidents and injuries

Figure 5.6.1 shows the percentage of people reporting that they had suffered an accident or injury requiring hospital treatment in the previous three months (prior to them completing the Welsh Health Survey questionnaire). The chart shows a U-shaped distribution with higher percentages among younger and older persons with lower percentages in middle-aged people. The circumstances in which accidents and injuries occur in the young and the old, obviously, are different.

**Figure 5.6.1**

**% requiring hospital treatment for accident injury or poisoning in the last 3 months, persons by age group, Wales, 1998**

Source: Welsh Health Survey 1998

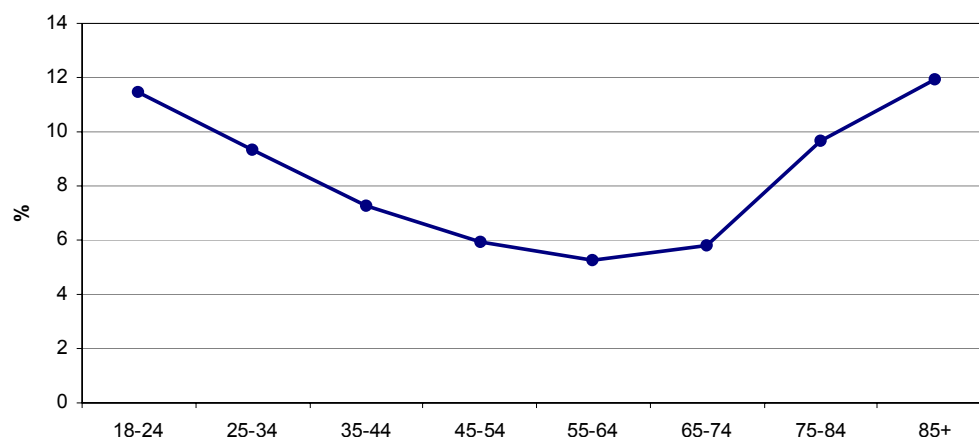
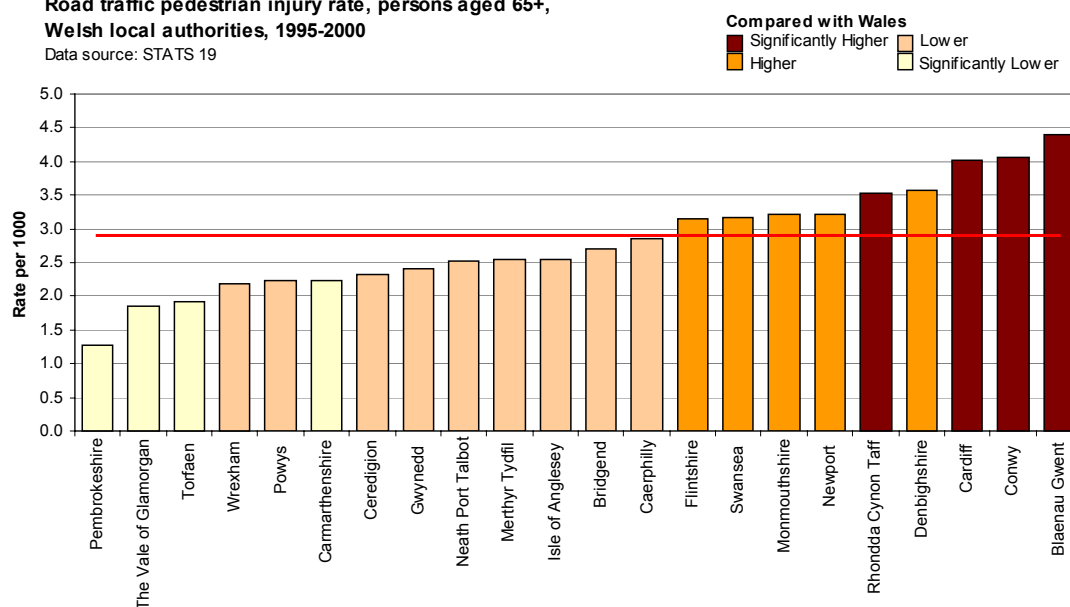


Figure 5.6.2 illustrates the rate of road traffic accident (RTA) pedestrian injuries across Wales. In RTAs involving older persons, fatalities are usually pedestrians.<sup>60</sup> The chart shows that, compared with Wales, between 1995 and 2000 Blaenau Gwent, Conwy, Cardiff and Rhondda, Cynon, Taff had significantly higher rates of pedestrian injuries, whilst significantly lower rates occurred in Pembrokeshire, the Vale of Glamorgan, Torfaen and Carmarthenshire.

**Figure 5.6.2**

**Road traffic pedestrian injury rate, persons aged 65+,  
Welsh local authorities, 1995-2000**

Data source: STATS 19



**Figure 5.6.3**

**Road traffic pedestrian injury rate by fifth of deprivation, persons aged 65+,  
Wales: 1995-2000**

Source: STATS 19

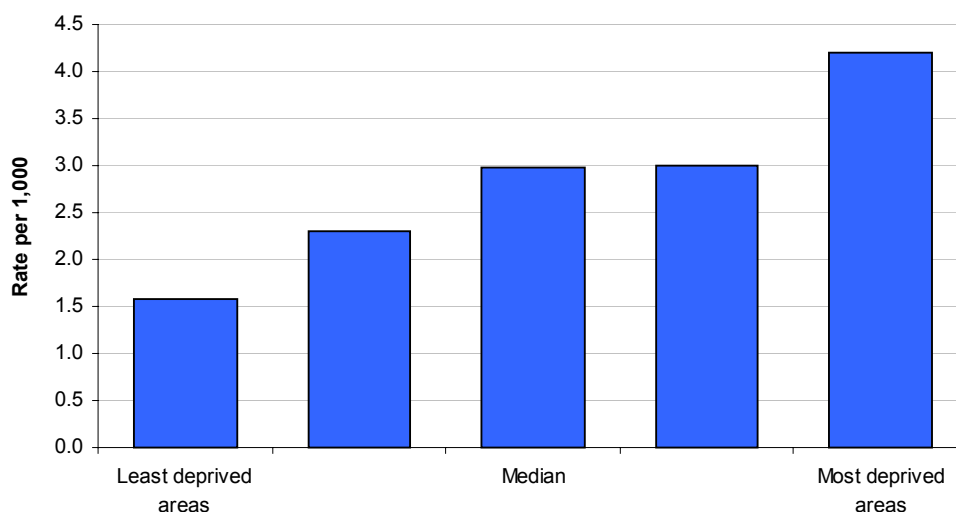
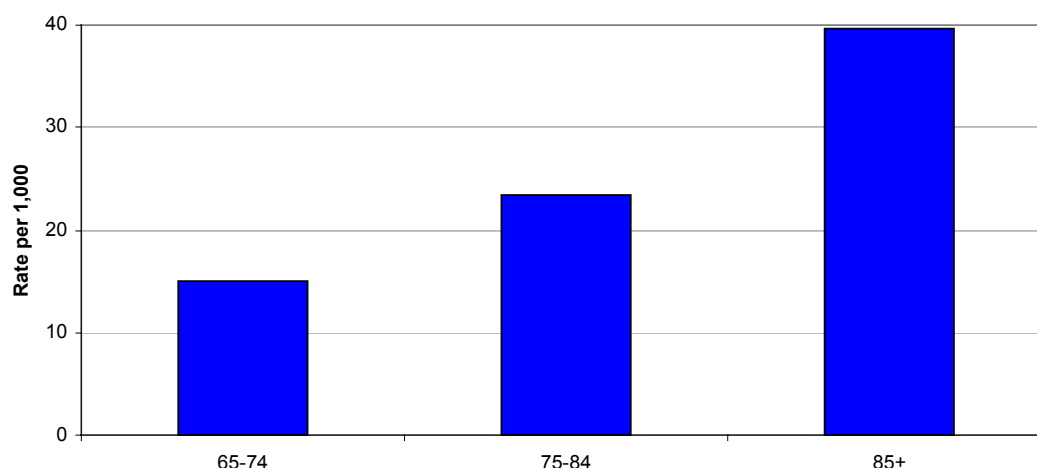


Figure 5.6.3 illustrates the relationship between RTA pedestrian injuries and socio-economic deprivation. Here deprivation is measured using the Townsend index<sup>28</sup>. The chart shows significantly higher rates amongst residents of the most deprived areas. One of the most important factors relating to pedestrian injuries is their exposure to traffic.<sup>61</sup> The majority of RTA fatalities amongst older persons involve pedestrians.<sup>60</sup> It is likely that the most deprived groups will suffer from RTA pedestrian injuries since they are less likely to be a car owner.<sup>61</sup> In addition, street

environments in urban deprived areas are often poorly designed for separating pedestrians from motor vehicle traffic. Older people are also more likely to suffer injury whilst travelling on public transport as they are less able to cope with sudden manoeuvres such as heavy braking.<sup>60</sup>

**Figure 5.6.4**

**A&E attendances for fractures, rate per 1000, persons by age group, Wales\*, 1999-2001<sup>#</sup>** Source: AWISS



\* The data do not include all areas of Wales. See below and appendix 1 for details

<sup>#</sup> Data are included for January 1999 through to June 2001. Therefore injury data for 2001 have been multiplied by two to enable the calculation of a three year average rate

Figure 5.6.4 shows accident & emergency (A&E) attendances for fractures between January 1999 and June 2001. The source of the data is the All Wales Injuries Surveillance System (AWISS). Not all A&E units in Wales participate in AWISS. Therefore the analysis has been restricted to those areas that are served exclusively by A&E units that have joined the system (see Appendix 1 for further details).

The chart shows that the fracture rate increases sharply with age. Fractures amongst older persons, occurring as a result of falls, are common in A&E departments. Despite this, little has been done in the past to address the underlying cause; rather, efforts tend to have been concentrated on the injury.<sup>62</sup> The new set of Welsh Assembly Government (WAG) health gain targets includes the reduction of hip fractures in persons aged 75 years and over by 10 per cent between 2002 and 2012.<sup>63</sup> In addition, WAG has commended the work of the Osteoporosis and Fracture Prevention Society who have published an osteoporosis and fracture prevention strategy for Wales.<sup>64</sup> This includes recommendations aimed at improving access to diagnosis and treatment for osteoporosis.

## 5.7 Hospitalisation

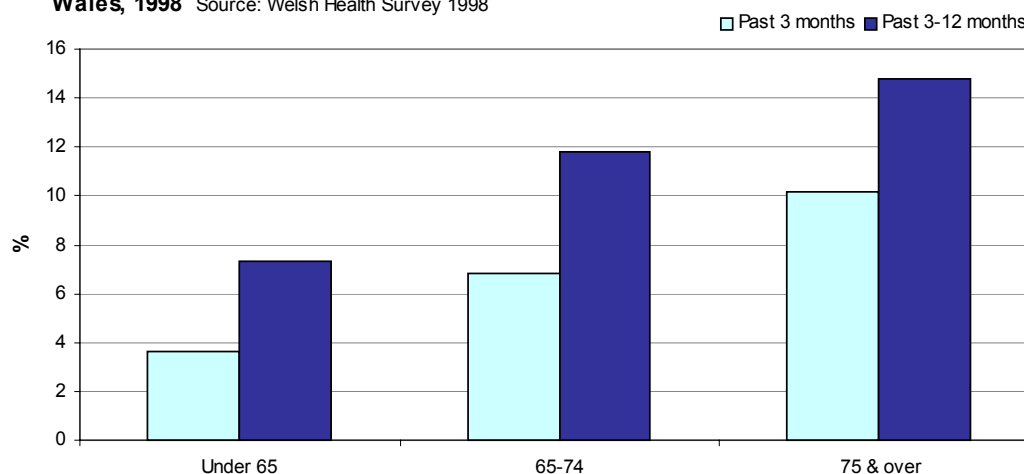
Chapter 2.1 shows that life expectancy at birth has continued to increase in recent years. However, it should be noted that although healthy life expectancy is increasing, it is not increasing quite as much as life expectancy,<sup>9</sup> with the result that although people are living longer, more years are likely to be spent in poorer health or with a limiting long term illness.<sup>3, 65</sup> This is important because older people are the heaviest users of health and healthcare services, with healthcare utilisation increasing with age<sup>9</sup>.

Data from the Welsh Health Survey<sup>48</sup> indicate that greater proportions of older people reported to have used hospital services within the last twelve months compared with younger adults. Figure 5.7.1 shows the proportion of adults aged 18 years and over attending hospital as an inpatient. The age-related gradient is clear.

**Figure 5.7.1**

**% adults aged 18+ staying in hospital as an inpatient, by age group,**

**Wales, 1998** Source: Welsh Health Survey 1998



The Patient Episode Database for Wales (PEDW) contains information on all inpatient and day case activity undertaken in NHS Wales plus data on Welsh residents treated in English Trusts.<sup>66</sup> It should be noted that data presented in this section relate to the number of hospital spells, not the number of individuals, and one individual may be admitted to hospital on more than one occasion, and have many consultant episodes during a hospital spell. The analysis presented within this section refers to spells for people who were discharged from or died whilst in hospital during the time period. Variations in hospital utilisation rates between local authorities in Wales are highlighted. However, there are many factors influencing hospital utilisation and variations have been



identified both between and within many other western industrial countries.<sup>67</sup> In theory these variations should be due to variations in need, however it is important to recognise that variation in service provision, propensity to seek treatment, data quality and completeness may also account for such differences, and whilst PEDW is subject to many validity checks, these may not reveal all the variation in coding between hospitals.<sup>67</sup> Additionally, within older age groups, variations in the provision of domiciliary social services may also reduce the need for acute hospital admissions.<sup>68</sup>

**Figure 5.7.2**

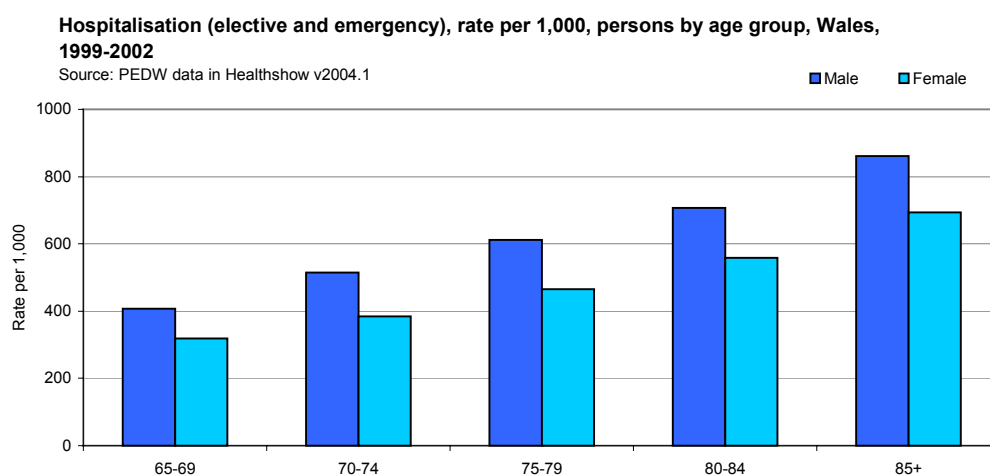


Figure 5.7.2 illustrates that for every age group over 65 years the hospitalisation rate is higher amongst men compared with women. The hospitalisation rate can also be seen to increase with age.

Table 5.7.1 shows elective and emergency hospital admissions by their respective international statistical classification of disease and related health problems, tenth revision (ICD 10) chapter and ten-year age groups during 2002. The analysis presented within this table is based upon date of admission, and therefore may differ compared to data presented elsewhere within this section which is based on hospital discharges. Across all age groups neoplasms (cancer), circulatory disease (which include heart disease and strokes) and 'symptoms signs, not elsewhere classified' account for the largest percentages of admissions. Admissions for cancer account for just over a quarter and a fifth of the total in 60-69 and 70-79 year olds respectively. However, in persons aged 80 years and over the figure is 11 percent. Research has shown that there is under-diagnosis and treatment of cancer among the oldest old.<sup>69</sup> Reduced levels of intervention are not wholly explained by appropriate adjustment for comorbidity or frailty.<sup>70</sup>

**Table 5.7.1 % Hospital admissions by ICD10 chapter (elective and emergency admissions), persons by age group (60+), Wales, 2002**

Source: WAG <sup>71</sup>

	60-69		70-79		80+	
	number	%	number	%	number	%
Certain infectious and parasitic diseases	494	0.5	651	0.5	899	0.9
Neoplasms (cancer)	29,405	28.0	26,508	21.8	10,367	10.9
Diseases of the blood and immune mechanism	1,280	1.2	1,756	1.4	1,523	1.6
Endocrine, nutritional and metabolic diseases	1,330	1.3	1,569	1.3	1,246	1.3
Mental and behavioural disorders	1,072	1.0	1,582	1.3	1,947	2.0
Diseases of the nervous system	1,907	1.8	2,438	2.0	2,450	2.6
Diseases of the eye and adnexa	4,527	4.3	9,257	7.6	8,810	9.2
Diseases of the ear and mastoid process	380	0.4	263	0.2	158	0.2
Diseases of the circulatory system	12,709	12.1	16,228	13.4	13,902	14.6
Diseases of the respiratory system	5,880	5.6	8,436	6.9	7,862	8.2
Diseases of the digestive system	7,377	7.0	8,135	6.7	6,908	7.2
Diseases of the skin and subcutaneous tissue	1,769	1.7	1,901	1.6	1,773	1.9
Diseases of the musculoskeletal system	6,826	6.5	6,541	5.4	3,724	3.9
Disease of the genitourinary system	8,116	7.7	8,336	6.9	5,360	5.6
Malformation and chromosomal abnormality	81	0.1	57	0.0	23	0.0
Symptoms and signs, not elsewhere classified	9,504	9.1	11,157	9.2	10,171	10.7
Injury, poisoning, and other external causes	4,126	3.9	5,528	4.5	7,905	8.3
External causes of morbidity and mortality	12	0.0	20	0.0	83	0.1
Health factors and contact with health services	4,517	4.3	6,018	5.0	4,811	5.0
Other causes and diagnosis unknown	3,570	3.4	5,135	4.2	5,550	5.8
<b>TOTAL</b>	<b>104,882</b>	<b>100</b>	<b>121,517</b>	<b>100</b>	<b>95,472</b>	<b>100</b>

**Figure 5.7.3**

**All cause (elective and emergency) hospitalisation rate, persons aged 65+, Welsh local authorities, 1999-2002** Source: Healthshow v2004.1

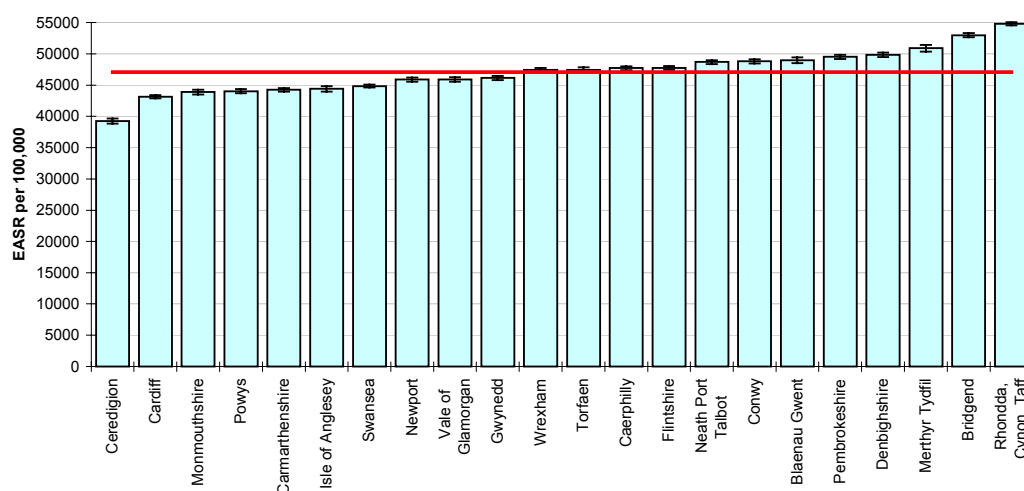
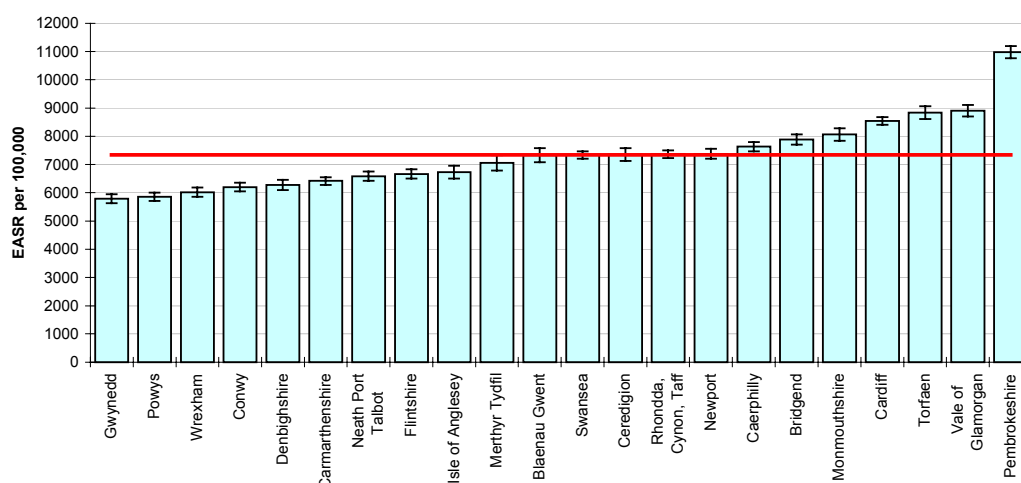


Figure 5.7.3 shows the EASR for elective and emergency hospitalisations in adults aged 65 years of age and over. The rates are also compared to the Welsh average. In general terms, lower hospitalisation rates can be found in Ceredigion whilst higher rates can be found in Merthyr Tydfil, Bridgend and Rhondda, Cynon, Taff. The confidence intervals indicate that rates in these local authority areas are significantly different from the Welsh average.

Between January 1999 and December 2002, among persons aged 65 and over, there were approximately 145 thousand hospitalisations due to cancer in Wales. Most of these were attributable to cancers of the colon, lung and rectum and in females, cancer of the breast. Figure 5.7.4 illustrates hospitalisation rates for cancer for people aged 65 years and over. Compared with the Welsh average, lower rates are evident in Gwynedd, Powys and Wrexham whilst higher rates are evident in Pembrokeshire. The confidence intervals suggest that these rates are significantly different to the Welsh average. It should be noted that this relates to hospital spells rather than individuals and an individual may have many hospital spells for cancer. The pattern of hospital discharges is therefore likely to differ compared to cancer registrations.

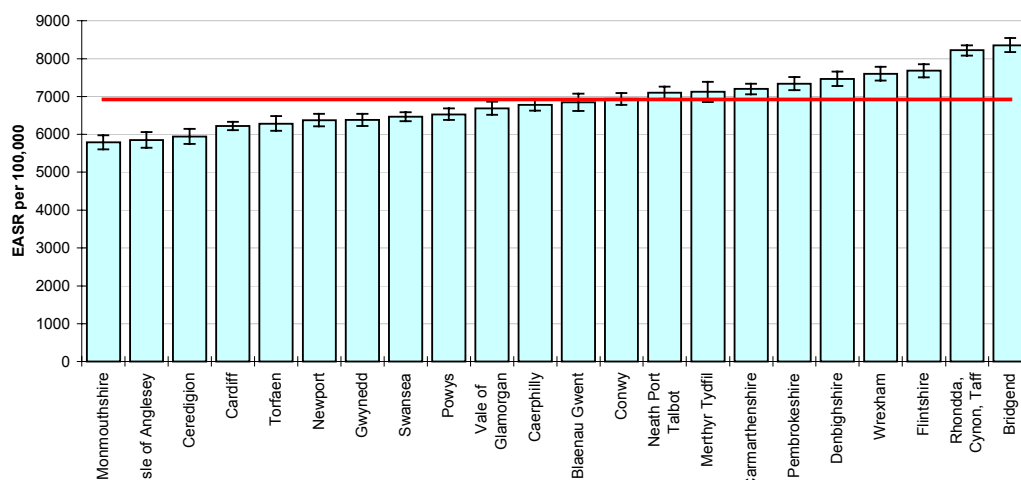
**Figure 5.7.4**

**Hospitalisation rate, cancer, persons aged 65+,  
Welsh local authorities 1999-2002** Source: Healthshow v2004.1



**Figure 5.7.5**

**Hospitalisation rate, circulatory disease, persons aged 65+, Welsh local authorities, 1999-2002** Source: Healthshow v2004.1

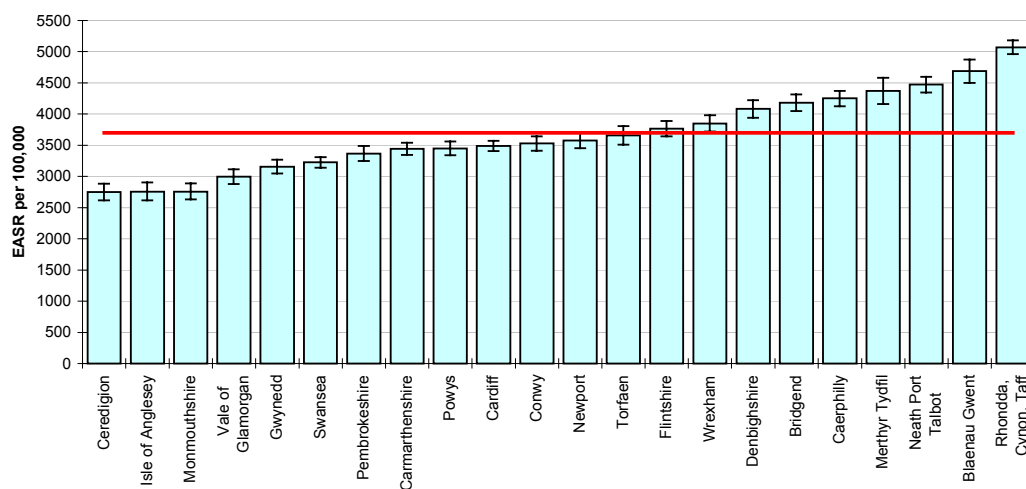


In 2002, circulatory disease accounted for approximately 13 per cent of admissions in persons aged over 60. Circulatory disease includes heart attacks and strokes. Hospitalisation rates for older people aged 65 years and over can be seen to vary from 5,791 per 100,000 population in Monmouthshire to 8,358 per 100,000 population in Bridgend (figure 5.7.5). As mentioned earlier, variation in hospitalisation rates is not necessarily indicative of variation in the prevalence of disease.

Between 1999 and 2002, among persons aged 65 and over, there were 80 thousand hospitalisations due to respiratory disease. Table 5.7.1 shows that the proportion of people admitted with respiratory disease in 2002 increased with age. Seasonal variations in hospitalisation rates for respiratory disease have been documented which place extra pressure on hospital beds. Figure 5.7.6 shows respiratory disease hospitalisation rates for people aged 65 years and over. Rates in Blaenau Gwent and Rhondda, Cynon Taff are higher than the Welsh average whilst rates in Ceredigion, the Isle of Anglesey and Monmouthshire are lower. The legacy of coal mining, steel production and other heavy industry, which once dominated employment in many parts of Wales, may account for some of the variation illustrated in figure 5.7.6.

**Figure 5.7.6**

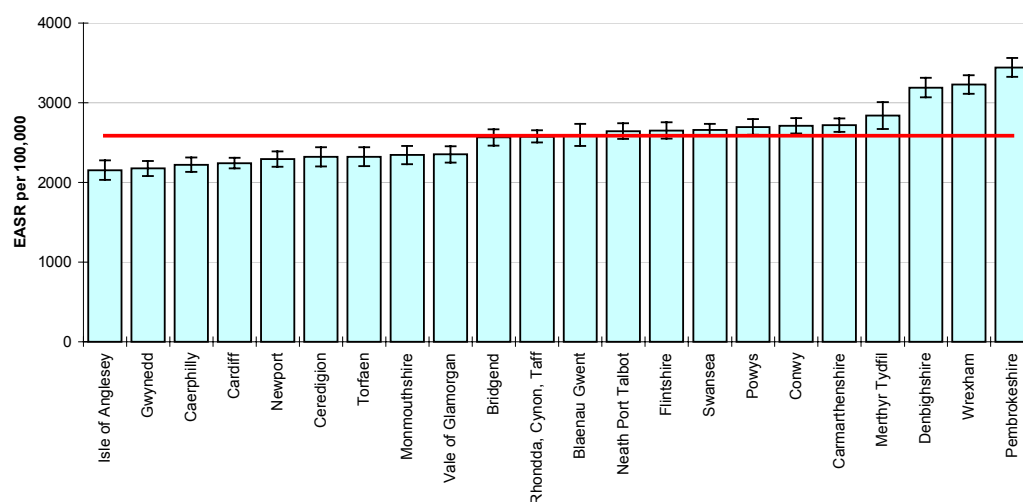
**Hospitalisation rates, respiratory disease, persons aged 65+,  
Welsh local authorities, 1999-2002** Source: Healthshow v2004.1



Between 1999 and 2002, among persons aged 65 and over, there were 58 thousand hospitalisations due to accidents and injuries. Table 5.7.1 shows that the proportion of people discharged with accidents and injuries increased with age, particularly in the 80 years and over age group. Figure 5.7.7 shows hospitalisation rates for accidents and injuries for people aged 65 years and over. The data do not appear to reveal any discernible pattern in terms of an association with for example deprivation or rurality.

**Figure 5.7.7**

**Hospitalisation rates, accidents and injuries, persons aged 65+,  
Welsh local authorities, 1999-2002** Source: Healthshow v2004.1



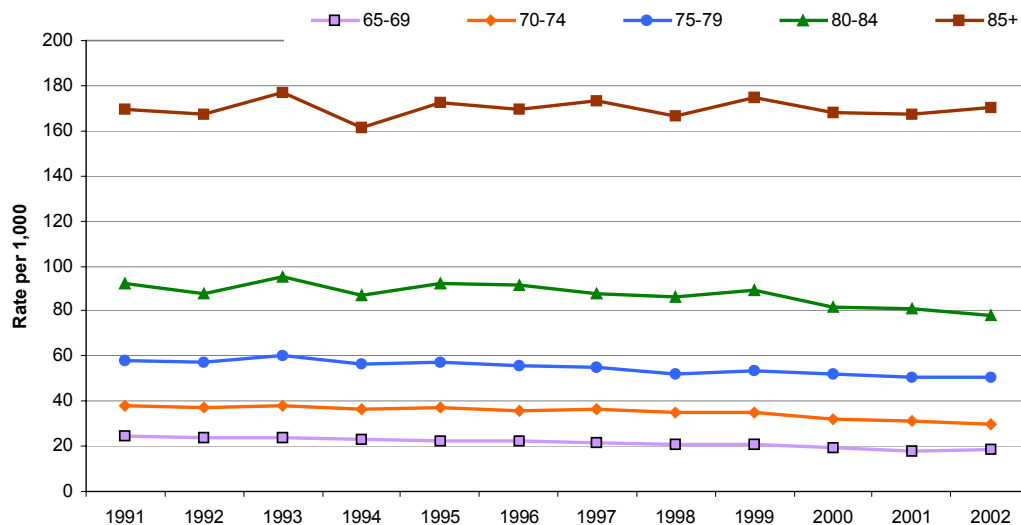
## 5.8 Mortality

Figure 5.8.1 shows trends in death rates among older age groups between 1991 and 2002. The chart shows higher death rates amongst older age groups, especially in persons aged 85 years and over. The chart shows that death rates among the 65-69, 70-74 and 75-79 year old age groups have fallen and this is reflected in the substantial increases in life expectancy for persons in these age groups.

**Figure 5.8.1**

**All cause mortality rate, persons 65+ by age group, Wales, 1991-2002**

Source: Healthshow 2004.1

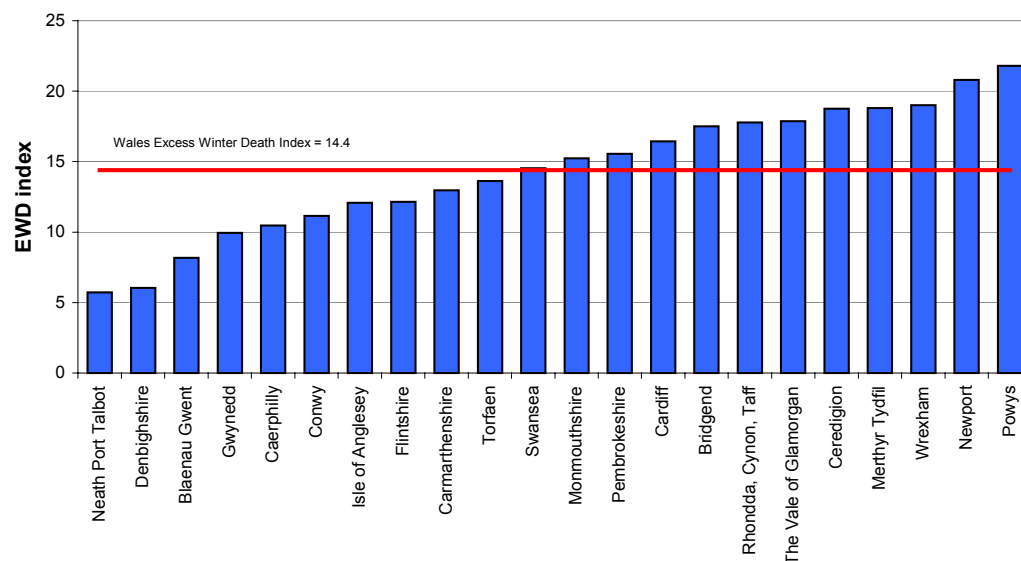


In the 85 years and over age group, no fall in the death rate is apparent. However, increased life expectancy means that the average age in this age group has increased over the period shown, but no adjustment has been made to the rate to account for this change.

Figure 5.8.2 shows the excess winter deaths index (EWD) for Welsh local authorities and Wales. EWD is calculated by subtracting the number of summer deaths (average of August to November and April to July) from the number of winter deaths (December to March) and then expressing that figure as a percentage of average summer deaths.<sup>72</sup> Three years data have been aggregated in order to account for variations which may occur in the climate from year to year. The overall pattern in Wales is of an increased EWD score with age. Within local authorities the pattern is not entirely consistent, but the general picture is the same.

**Figure 5.8.2**

**Excess Winter Deaths Index \*, persons aged 65+ years, Welsh local authorities,  
August 2000 to July 2003** Source: ONS



\* Excess Winter Death Index = difference between winter deaths (Dec-Mar) and summer deaths (average of deaths for Aug-Nov and Apr-Jul) expressed as a percentage

**Figure 5.8.3**

**All cause mortality rate, persons 65+, Welsh local authorities  
1998-2000** Source: Healthshow 2004.1

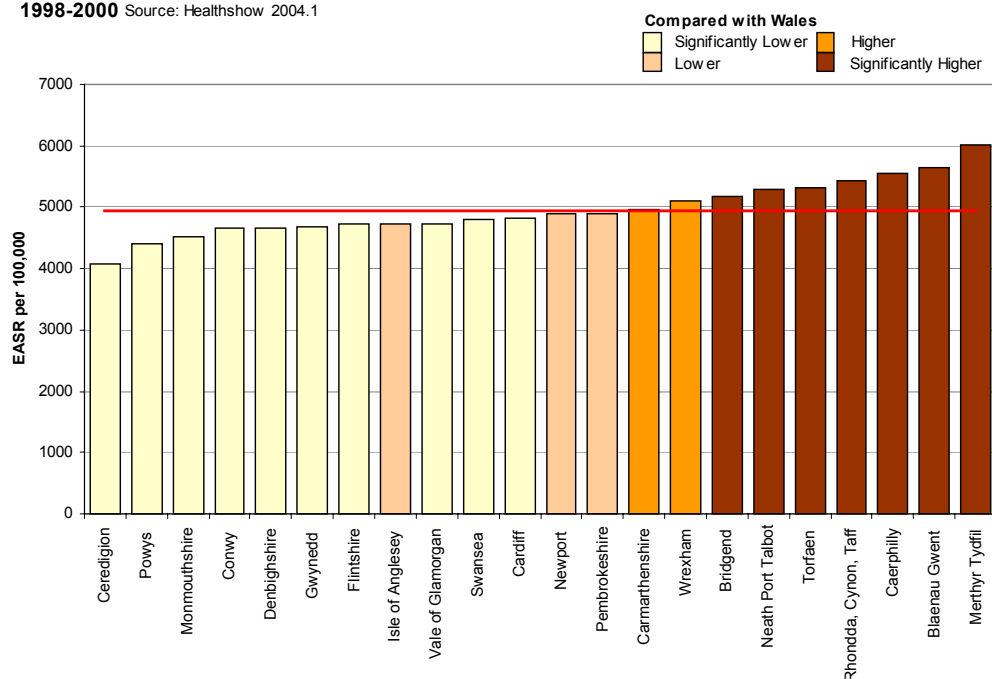


Figure 5.8.3 shows all cause mortality for local authorities, for the period 1998-2000, for individuals aged 65 years and over. The chart shows that death rates were significantly higher than Wales in Merthyr Tydfil, Caerphilly, Blaenau Gwent, Rhondda Cynon Taff,



Torfaen, Neath Port Talbot and Bridgend. Significantly lower rates occurred in Ceredigion, Powys, Monmouthshire, Conwy, Denbighshire, Gwynedd, Flintshire, the Vale of Glamorgan, Swansea and Cardiff.

**Figure 5.8.4**

**Circulatory disease mortality rate, persons 65+,  
Welsh local authorities, 1998-2000**

Source: Healthshow 2004.1

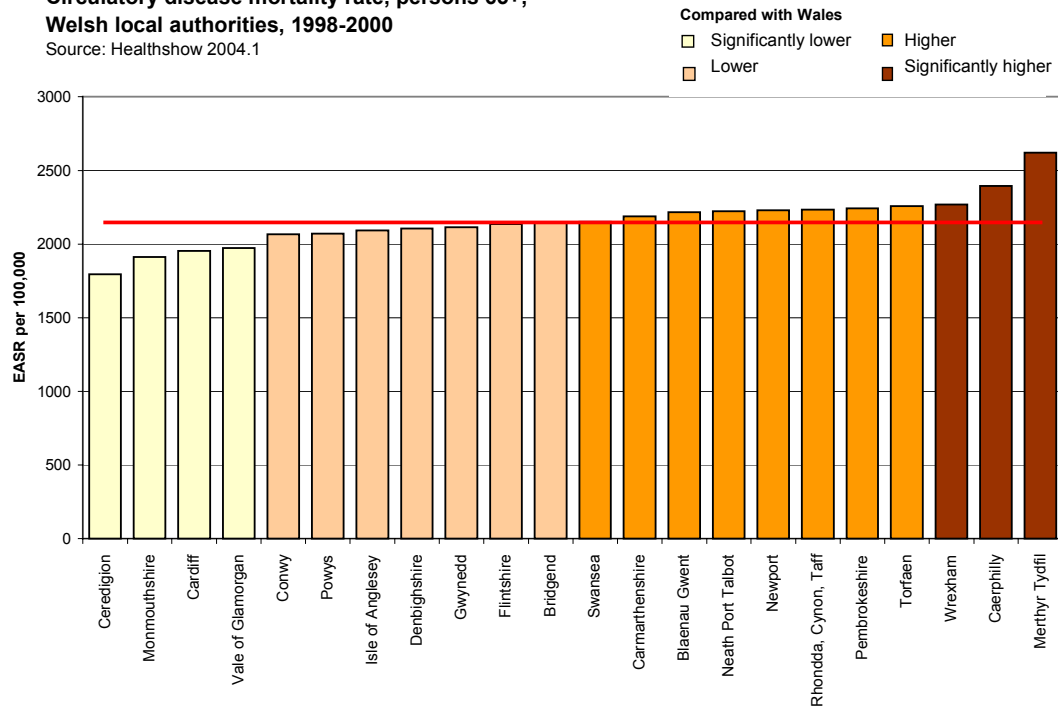


Figure 5.8.4 illustrates the death rate for circulatory disease amongst those aged 65+, by local authority. The chart shows significantly higher rates than Wales in Caerphilly, Merthyr Tydfil and Wrexham, whilst lower rates are apparent in Ceredigion, Monmouthshire, Cardiff and the Vale of Glamorgan.

**Figure 5.8.5**

**Respiratory disease mortality rate,  
persons 65+, Welsh local authorities, 1998-2000**

Source: Healthshow 2004.1

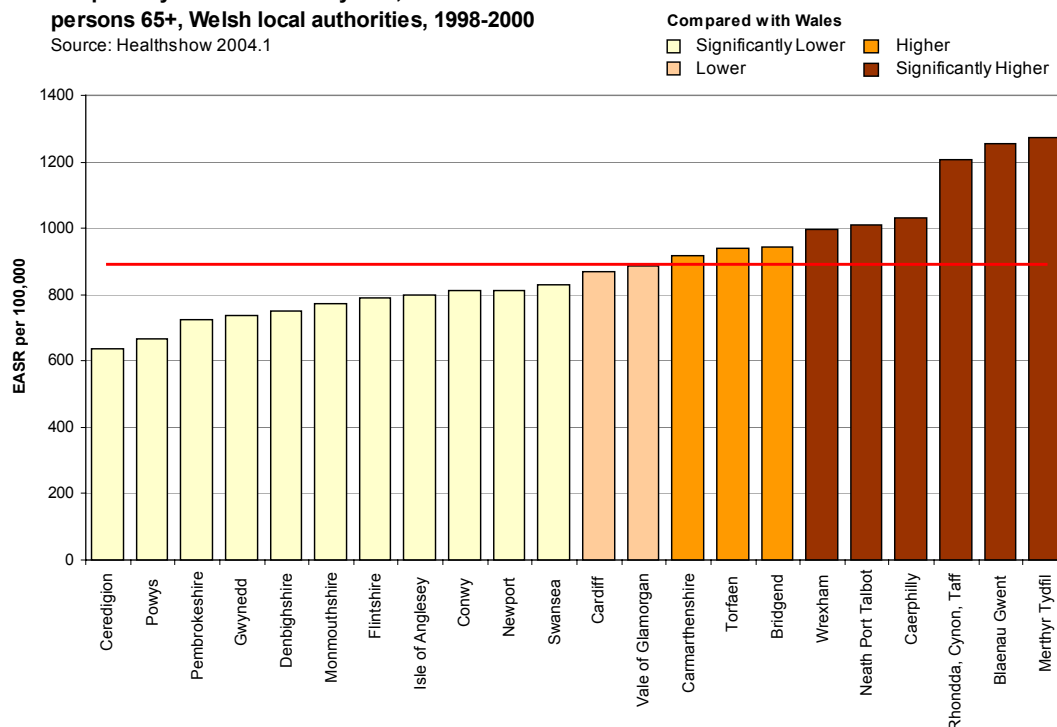


Figure 5.8.4 shows the death rate for respiratory disease, between 1998 and 2000, by local authority. The chart shows that Merthyr Tydfil, Blaenau Gwent, Rhondda Cynon Taff, Caerphilly, Neath Port Talbot and Wrexham have significantly higher rates than Wales, whilst significantly lower rates occurred in Ceredigion, Powys, Pembrokeshire, Gwynedd, Denbighshire, Monmouthshire, Flintshire, Isle of Anglesey, Conwy, Newport and Swansea.

**Figure 5.8.6**

**External injuries or poisoning mortality rate,  
persons 65+, Welsh local authorities, 1998-2000**

Source: Healthshow 2004.1

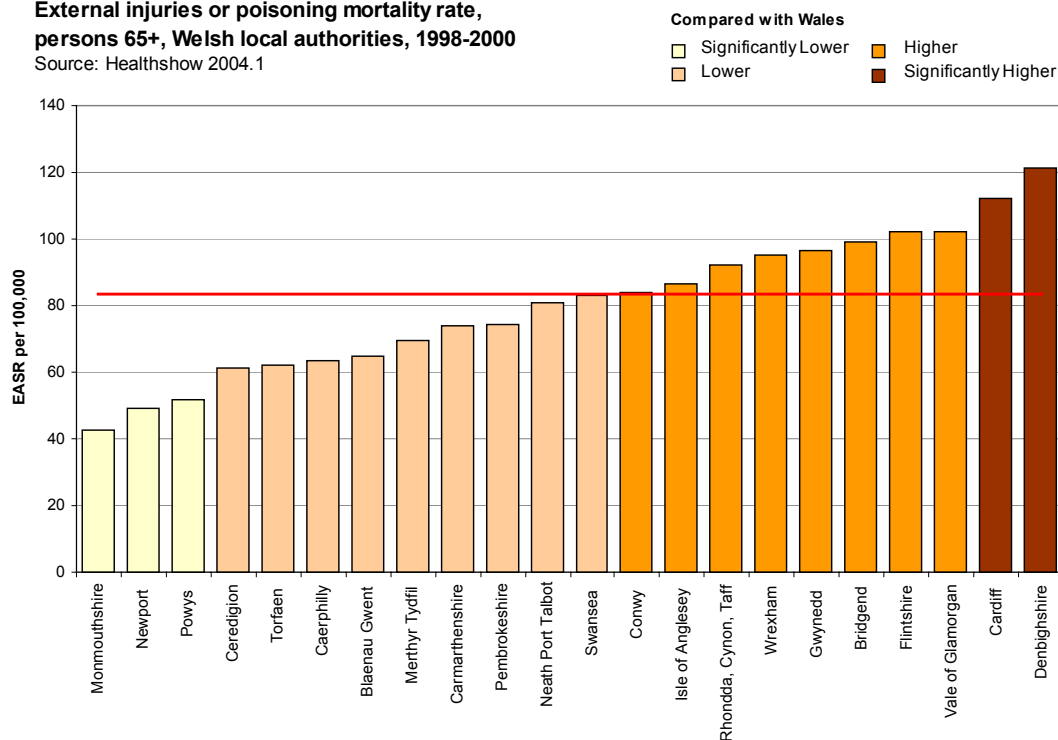


Figure 5.3.5 shows the death rate for injuries and poisoning by local authority for those aged 65 and over. The chart shows that, after adjustment for age, Denbighshire and Cardiff have significantly higher rates than the Welsh average whilst significantly lower rates can be found in Monmouthshire, Newport and Powys.

## 5.9 Immunisations: influenza

During the autumn and winter of 2003, 63 per cent of those aged 65 and over were immunised against influenza. This immunisation is offered to all people aged 65 years and over, those living in long-stay care homes, and those younger than 65 years thought to be at higher risk of complications or death after acquiring influenza.<sup>73</sup>

**Figure 5.9.1**

**% uptake of influenza immunisation, persons 65+,  
Welsh local authorities, (winter) 2003-04**

Source: NPHS

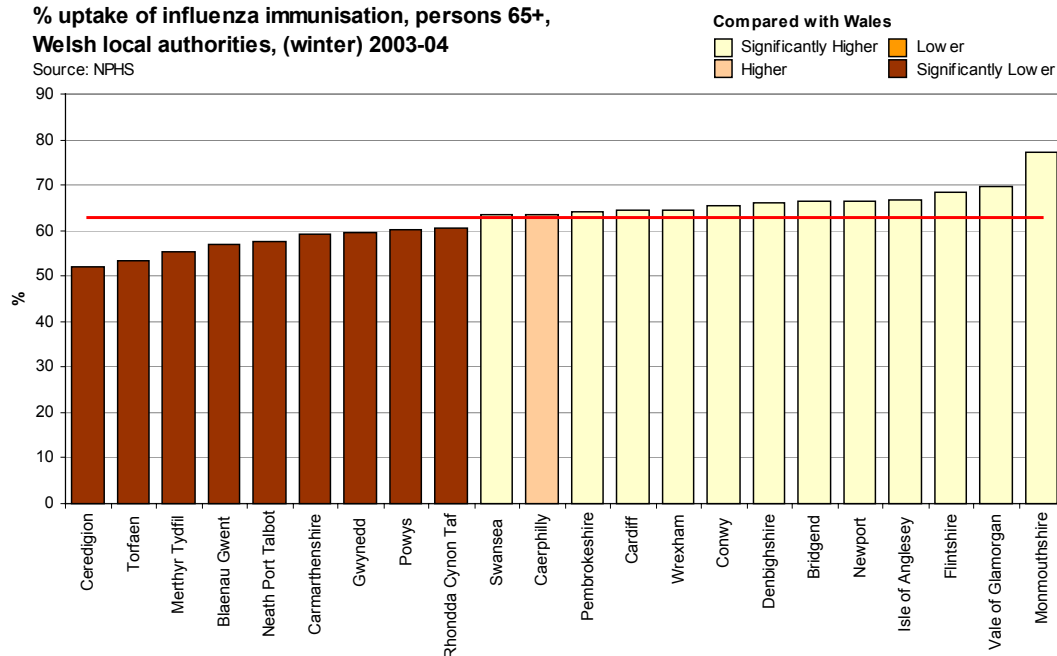


Figure 5.9.1 illustrates the percentage uptake of influenza immunisation amongst the 65+ age group for Welsh local authorities. The chart shows that areas such as Monmouthshire, the Vale of Glamorgan and Flintshire have higher uptake rates than Wales. The south Wales valleys (except Caerphilly), Ceredigion, Gwynedd, Powys and Carmarthenshire have lower uptake rates than Wales.

It is important to note that LHB comparisons should be interpreted with caution due to differences in responses between LHBs.

[Go to Chapter 6 – Conclusions](#)