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Director of Public Health Annual Report: Chart Book



Hywel Dda Health Board



Published July 2011

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1 Introduction

This Hywel Dda Health Board chart book has been produced by the Public Health Wales Observatory as an appendix to the Director of Public Health Annual Report.

It updates and adds to the chart book produced by the Director of Public Health for Abertawe Bro Morgannwg University Health Board (UHB) for his Interim Annual Report. A decision was made by the Wales Directors of Public Health to use these indicators to inform their annual reports.

The Abertawe Bro Morgannwg UHB chart book indicators originated from a number of sources:

- Public Health Wales Observatory
- Vaccine Preventable Disease Programme (Public Health Wales)
- Screening Division (Public Health Wales)
- Welsh Cancer Intelligence and Surveillance Unit (Public Health Wales)

This updated chart book draws together information from the above resources and adds new information sourced from:

The Public Health Wales Observatory:

- Director of Public Health Annual Report: supporting indicators, 2011
- [Demography Profile, 2009](#)
- [Lifestyle Profile, 2010](#)
- Inequalities in mortality in Hywel Dda Health Board: interim release to support Directors of Public Health annual reports

From other sources:

- Welsh Health Survey, Welsh Assembly Government (repackaged by the Public Health Wales Observatory)
- Public Health Wales, Vaccine Preventable Disease Programme
- Screening Division (Public Health Wales)
- Welsh Cancer Surveillance and Intelligence Unit (Public Health Wales)

The indicators have been presented under the following chapter headings: demography; determinants of health; use of services and health status. A summary of key points is included at the beginning of each chapter.

Maps included in this document show data by fifths of equal range within the health board area.

Included in Appendix A are web links for the original source reports and further information to support the used in this chart book.

A glossary of some of the terms used in this chart book is included in Appendix B.

Appendix C comprises of a series of local authority area maps showing the MSOA boundaries for the health board area.

2 Demography

2.1 Demography: key points

Population structure

Hywel Dda Health Board covers three local authority areas: Carmarthenshire; Ceredigion and Pembrokeshire. The population of Hywel Dda Health Board is estimated to have been 375 thousand in 2009. Close to 50 per cent of the Hywel Dda Health Board population live in the Carmarthenshire local authority area. The age structure of the population is different to Wales with lower proportions of persons aged 0-4 and 20-44, and higher proportions of persons aged 50 and over.

At local authority level, the proportion of persons aged under 18 in Carmarthenshire and Pembrokeshire is similar to Wales. There is a lower proportion of persons aged under 18 in Ceredigion. At middle super output area level (MSOA), higher proportions of persons aged under 18 are found in the Llwynhendy, Bynea and Pemberton areas of Llanelli, as well as parts of Haverfordwest, Pembroke and Pembroke Dock in Pembrokeshire. The areas with the lowest proportions are Aberystwyth and areas to the east of the town centre in Ceredigion.

Among the older age groups the proportion aged 75 and over is higher than Wales. Within the health board, all local authority areas have proportions higher than Wales, with the highest in Ceredigion. At the MSOA level, the highest proportions are found in the Tenby; Penally and Caldey Island area of Pembrokeshire, southern parts of the Carmarthen town and Llangunnor in Carmarthenshire, and Aberporth; Pen-parc and Cardigan in Ceredigion. The pattern is similar in those aged 85 and over.

Population projections

The latest projections indicate that if current trends continue, the number of persons aged 65 and over resident in Hywel Dda Health Board will increase by 67 per cent between 2008 and 2033. The proportion aged 75 and over is projected to increase from around 10 per cent at local authority level to around 16 to 18 per cent over this period, the sharpest increases being in Ceredigion and Pembrokeshire. The percentage aged 85 and over is projected to more than double from around three per cent to six to seven per cent by 2033.

The increase in the number of older people is likely to be associated with a rise in chronic conditions whose prevalence is strongly age-related such as circulatory and respiratory diseases and cancers. Meeting the needs of these individuals will be a key challenge for the health board. In the current economic climate, the relative (and absolute) increase in economically dependent and, in some cases, care-dependent populations will pose particular challenges to communities.

Birth rate

The General Fertility Rate (GFR) for Hywel Dda Health Board is slightly lower than the rate for Wales. Within the health board, the rate is notably lower in Ceredigion which has the lowest local authority area rate in Wales. At the MSOA level, there is also considerable variation. Rates are particularly low in north Aberystwyth. Low rates are also found in Lampeter; both Aberystwyth and Lampeter having large student populations. The areas with the highest rates are in the Capel; Lleidi; Llwynhendy; Bynea; Pemberton; Seaside; Tyshia; Machynys; Felinfoel; Dafen and Morfa areas of Llanelli and the northern parts of Carmarthen town in Carmarthenshire, and Haverfordwest; Carew; Lamphey; Manorbier and Milton in Pembrokeshire.

All-cause mortality

The European age-standardised all-cause mortality rate takes into account the age structure of the population, allowing valid comparisons to be made between areas. The rate for Hywel Dda Health Board is lower than Wales. Within the health board, Ceredigion has the lowest local authority rate in Wales whereas the rate for Carmarthenshire is slightly above the rate for Wales. At the MSOA level, variation is considerable with rates ranging from 459 to 838 per 100,000 population. The lowest rates are found in the areas of Lampeter, Llanfihangel Ystrad, Llanybi, Llanwenog, Llanarth, Llandysiliogogo, Penybryn, New Quay, Bow St, Ceulanamaesmawr, Tirymynach, Trefeurig and Borth in Ceredigion. The highest rates are found in the Capel and Lledi areas of Llanelli in Carmarthenshire. Among persons aged under 75 years the pattern is similar to the rate for all persons, with the exception of the Capel and Lledi areas in Carmarthenshire where the rate is much closer to average and not amongst the highest for the health board. The health board exhibits a decreasing trend in mortality in persons under 75 years from 2000 to 2009 and with rates below the all Wales pattern.

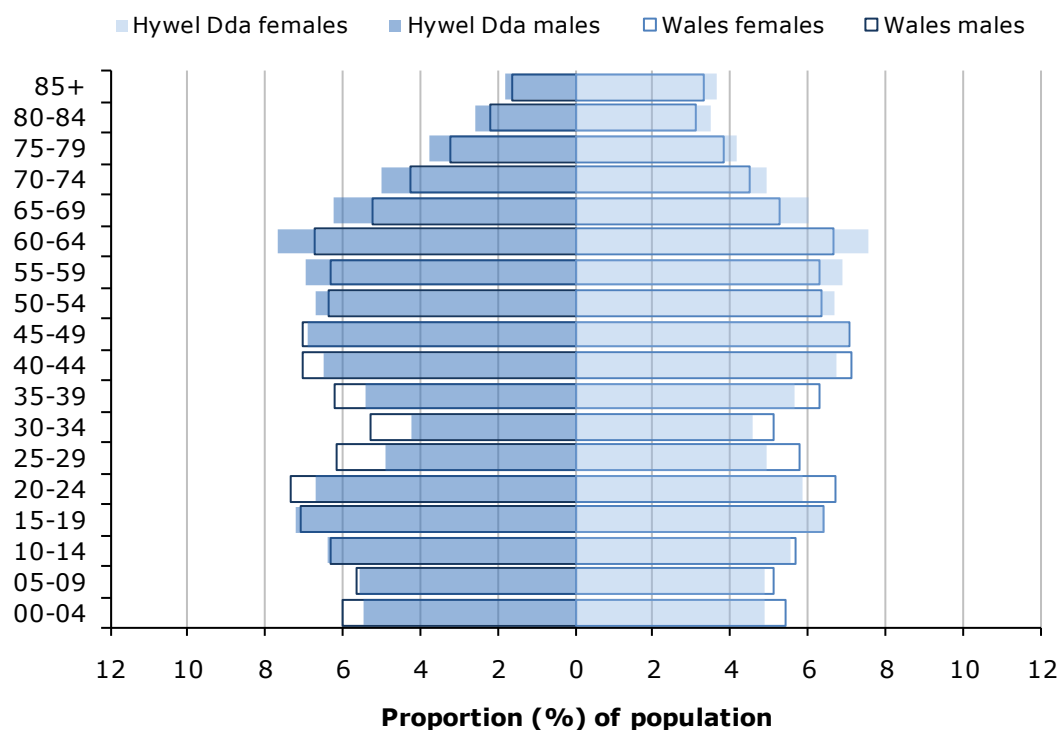
2.2 Population

2.2.1 Population by age and sex

Wales and Hywel Dda Health Board

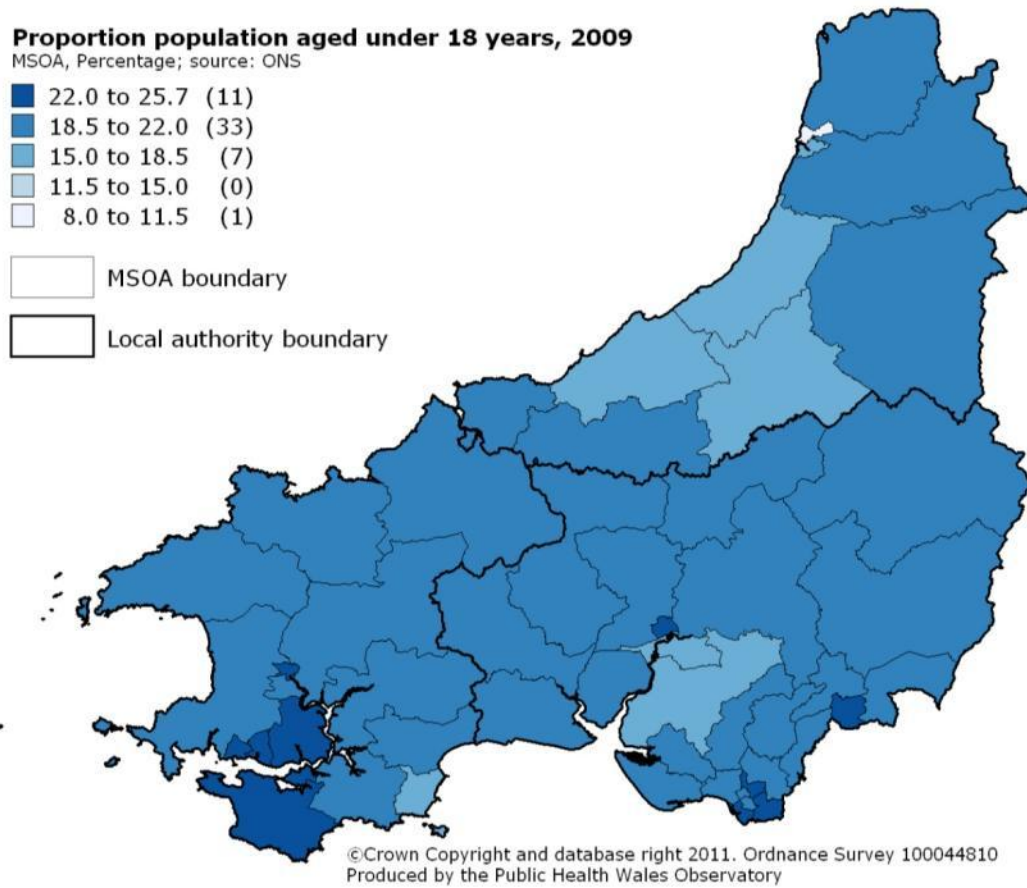
Proportion of population by age and sex Hywel Dda Health Board: 2009

Produced by the Public Health Wales Observatory
using data from 2009 mid year population estimates, Office for National Statistics



2.2.2 Population aged under 18

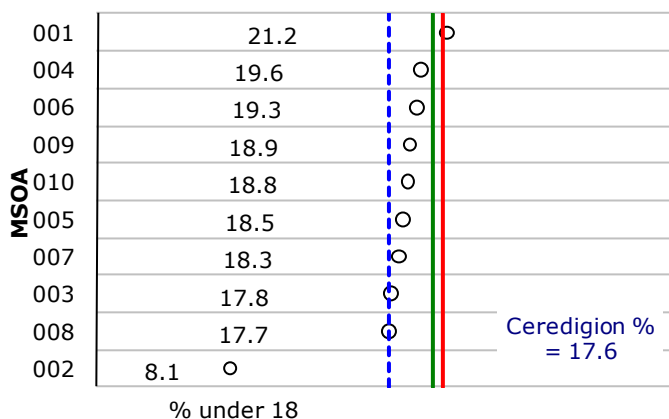
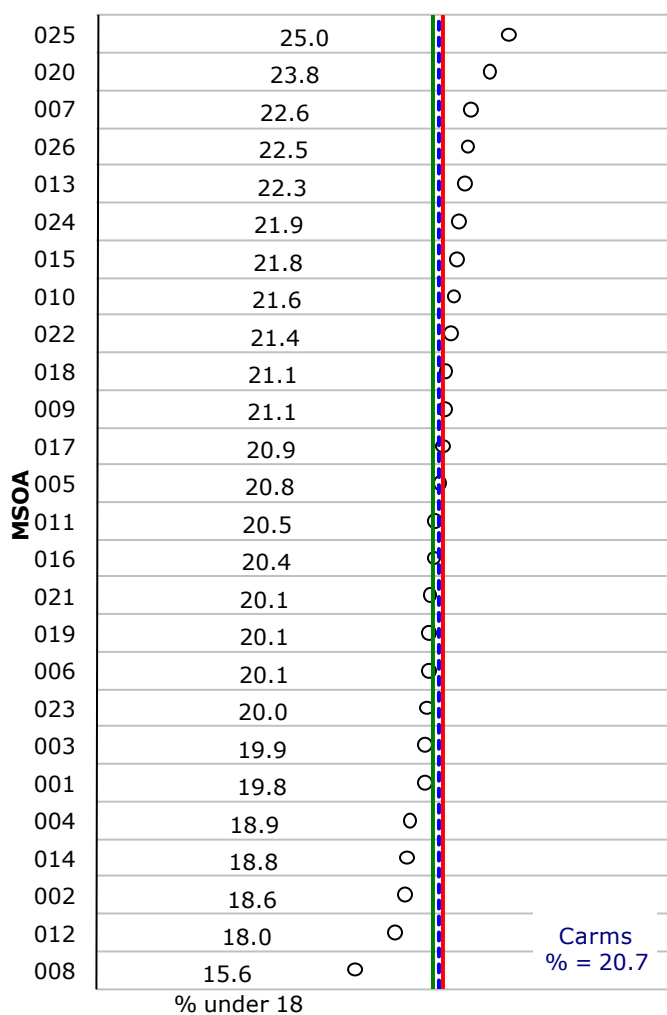
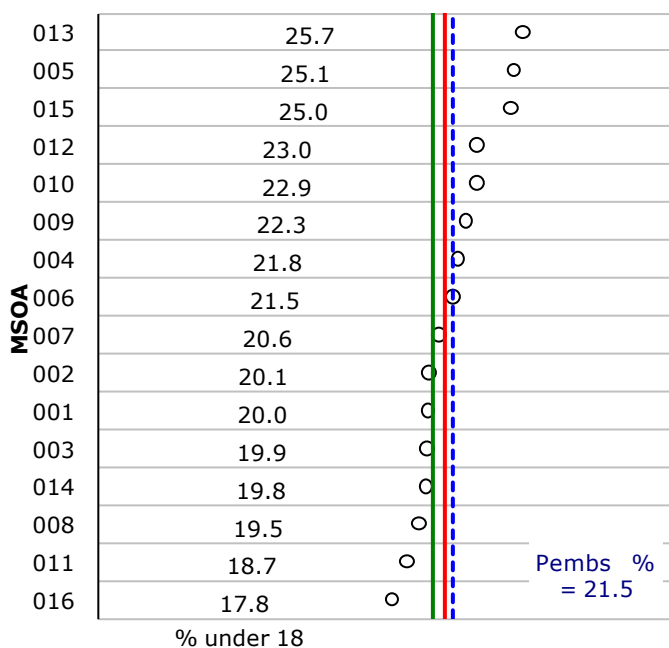
Middle super output areas



Percentage of population aged under 18 in Hywel Dda Health Board area, 2009

Produced by Public Health Wales Observatory, using data from ONS (MYE)

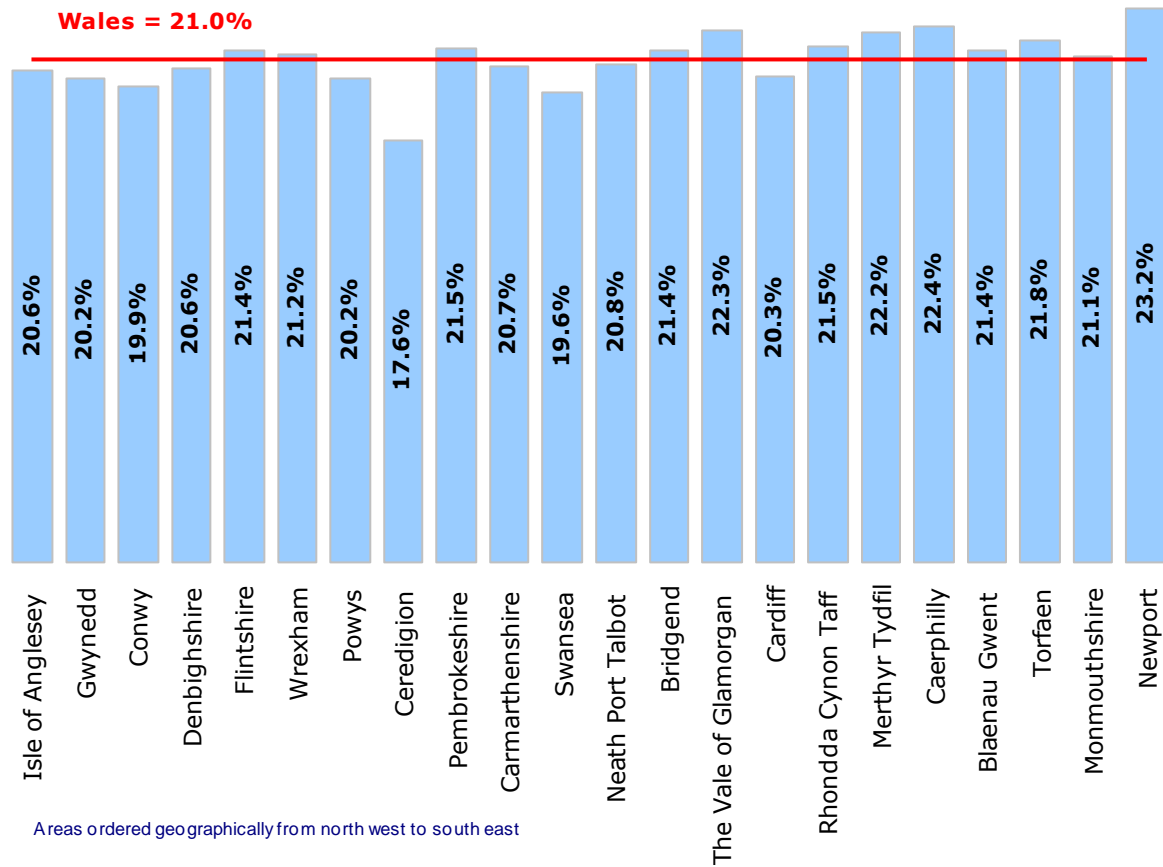
○ MSOA — Health Board (20.3%) — Wales (21.0%) - - - Local Authority

Ceredigion**Carmarthenshire****Pembrokeshire**

Local authorities

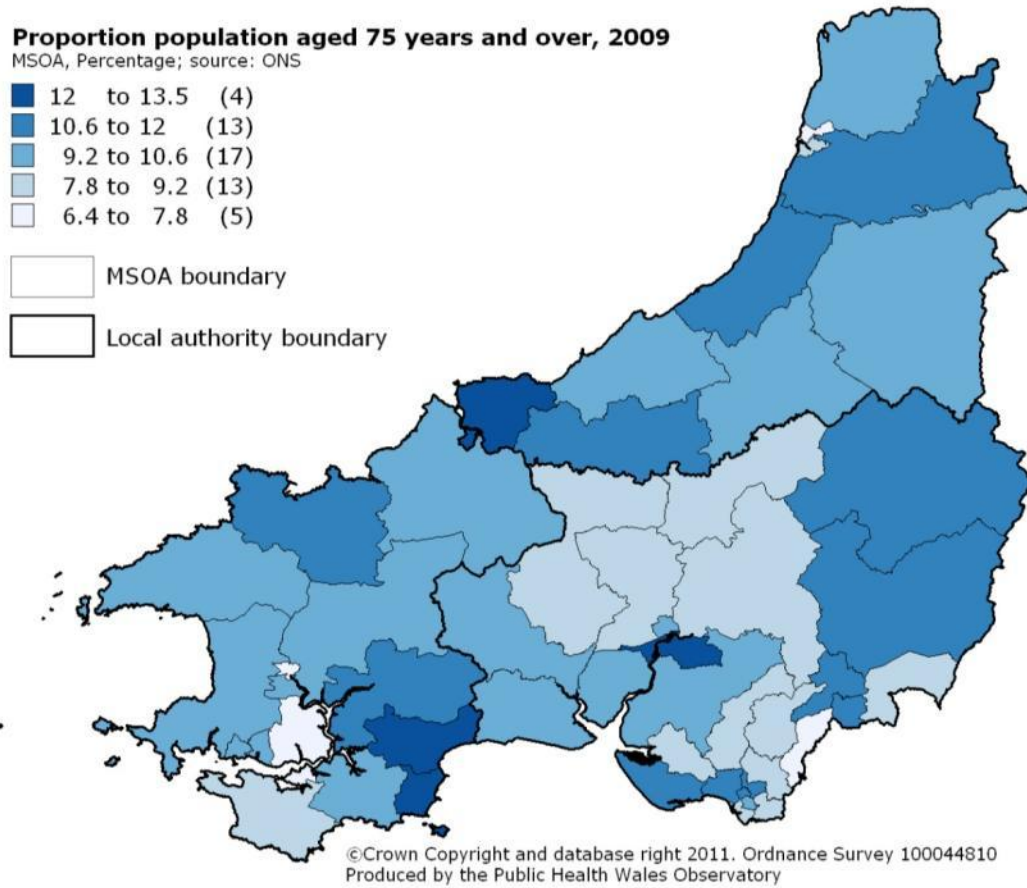
Percentage of population aged under 18 by local authority, 2009

Produced by Public Health Wales Observatory, using data from ONS (MYE)



2.2.3 Population aged 75 and over

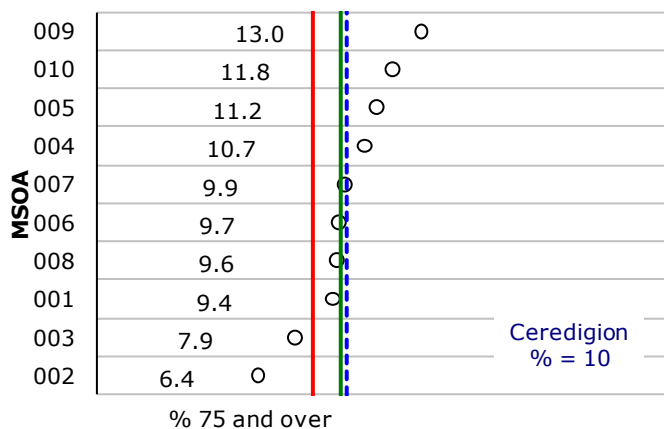
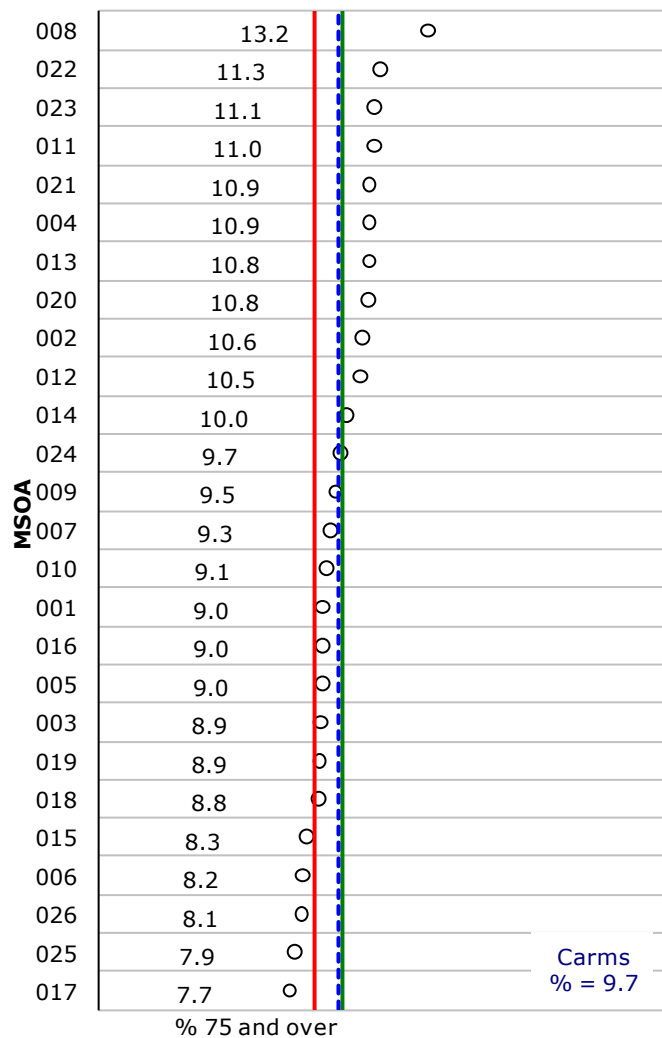
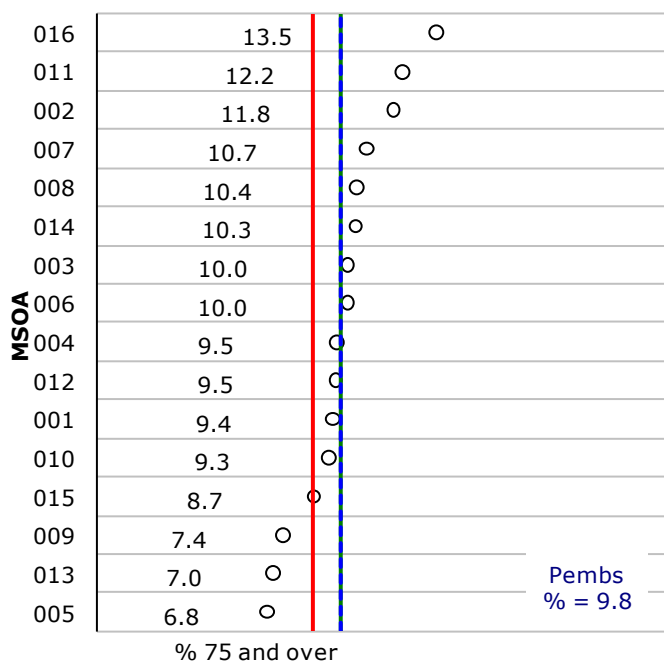
Middle super output areas



Percentage of population aged 75 and over in Hywel Dda Health Board area, 2009

Produced by Public Health Wales Observatory, using data from ONS (MYE)

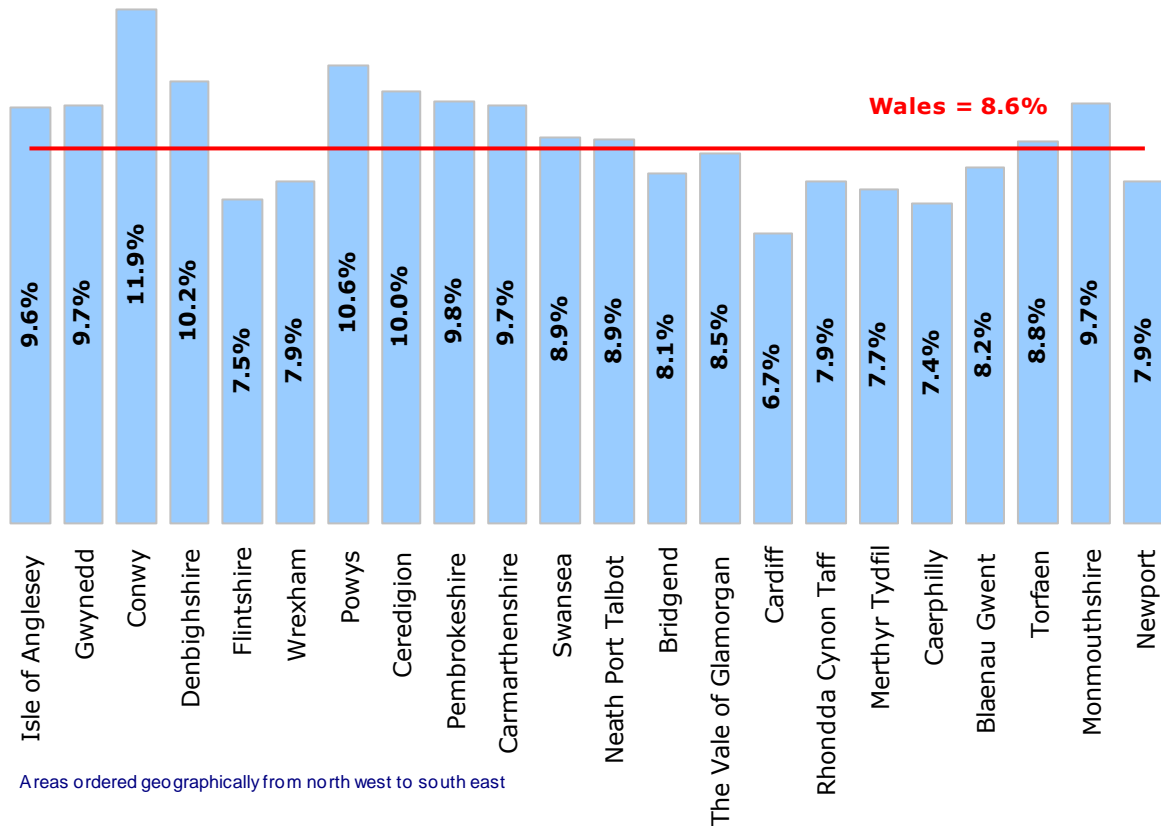
○ MSOA — Health Board (9.8%) — Wales (8.6%) - - - Local Authority

Ceredigion**Carmarthenshire****Pembrokeshire**

Local authorities

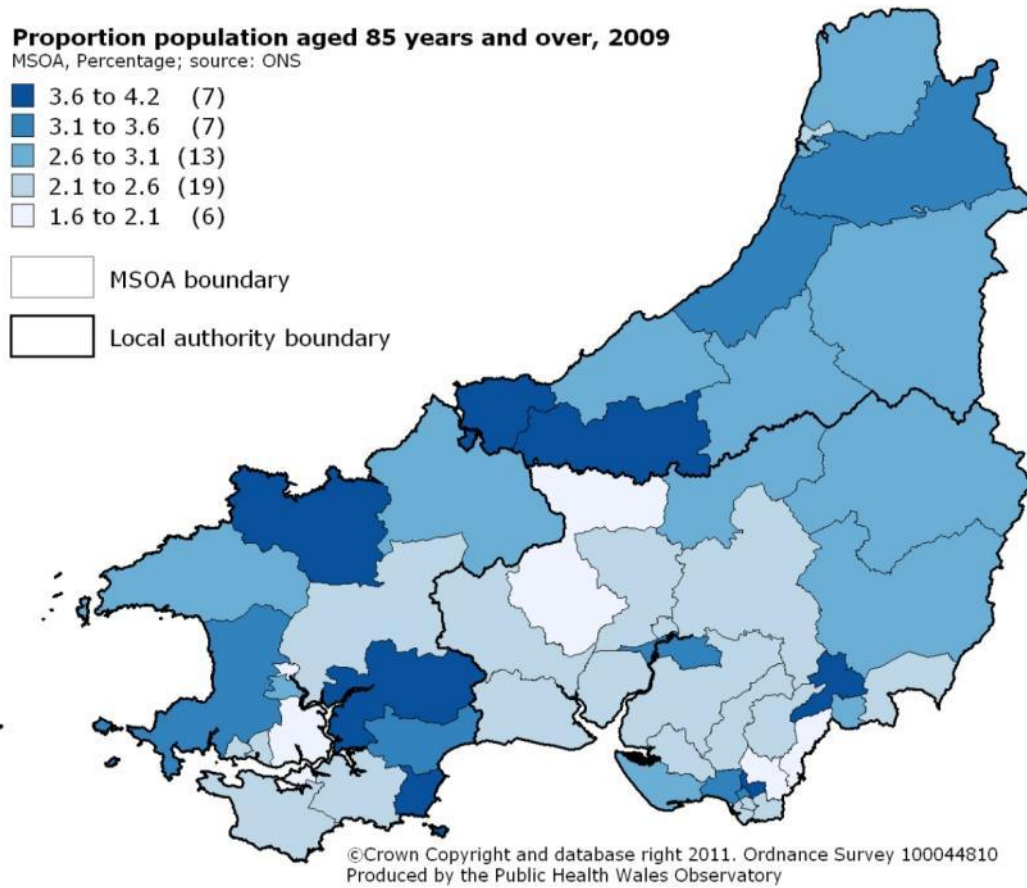
Percentage of population aged 75 and over by local authority, 2009

Produced by Public Health Wales Observatory, using data from ONS (MYE)



2.2.4 Population aged 85 and over

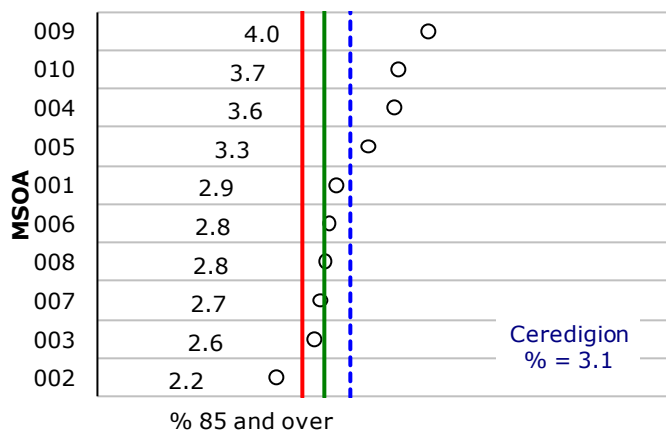
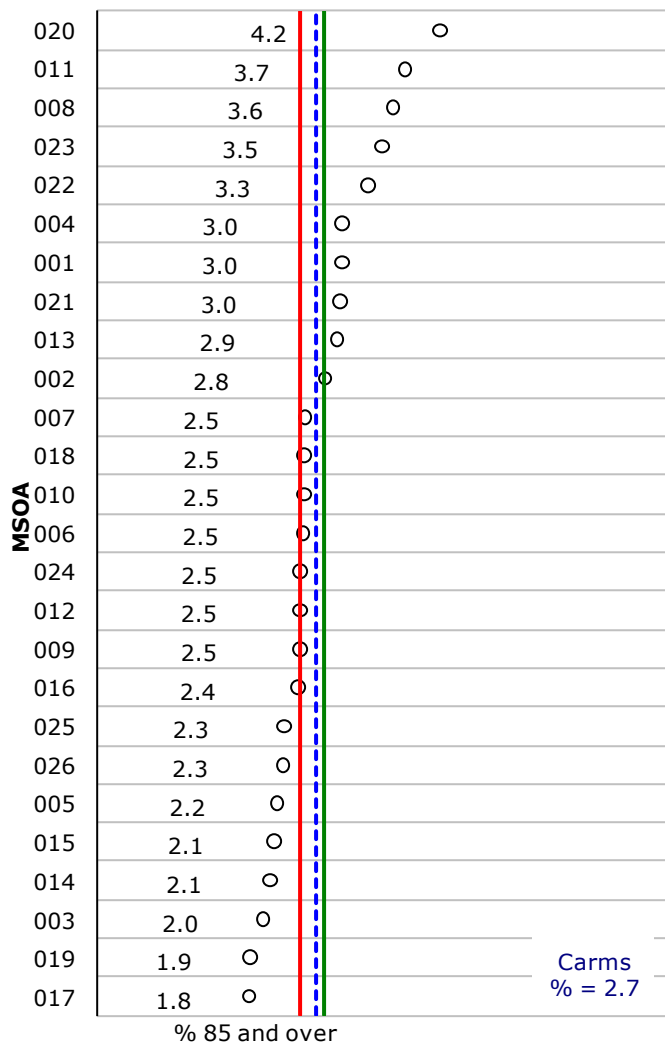
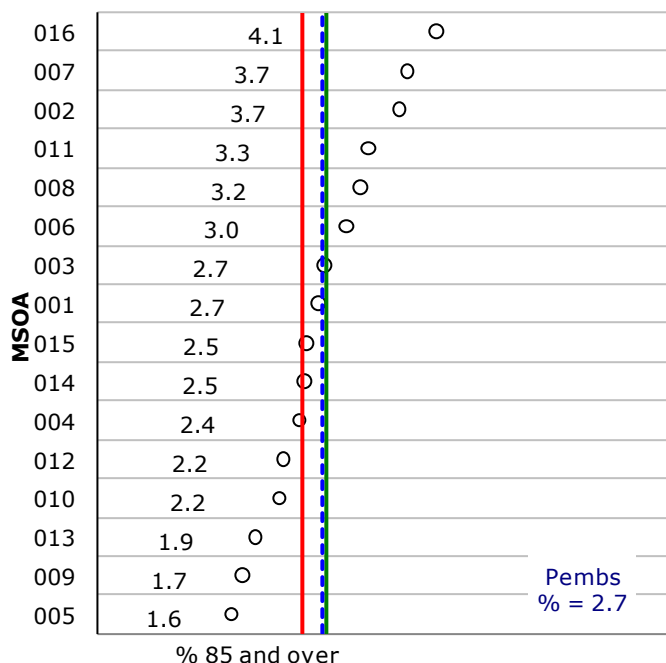
Middle super output areas



Percentage of population aged 85 and over in Hywel Dda Health Board area, 2009

Produced by Public Health Wales Observatory, using data from ONS (MYE)

○ MSOA — Health Board (2.8%) — Wales (2.5%) - - - Local Authority

Ceredigion**Carmarthenshire****Pembrokeshire**

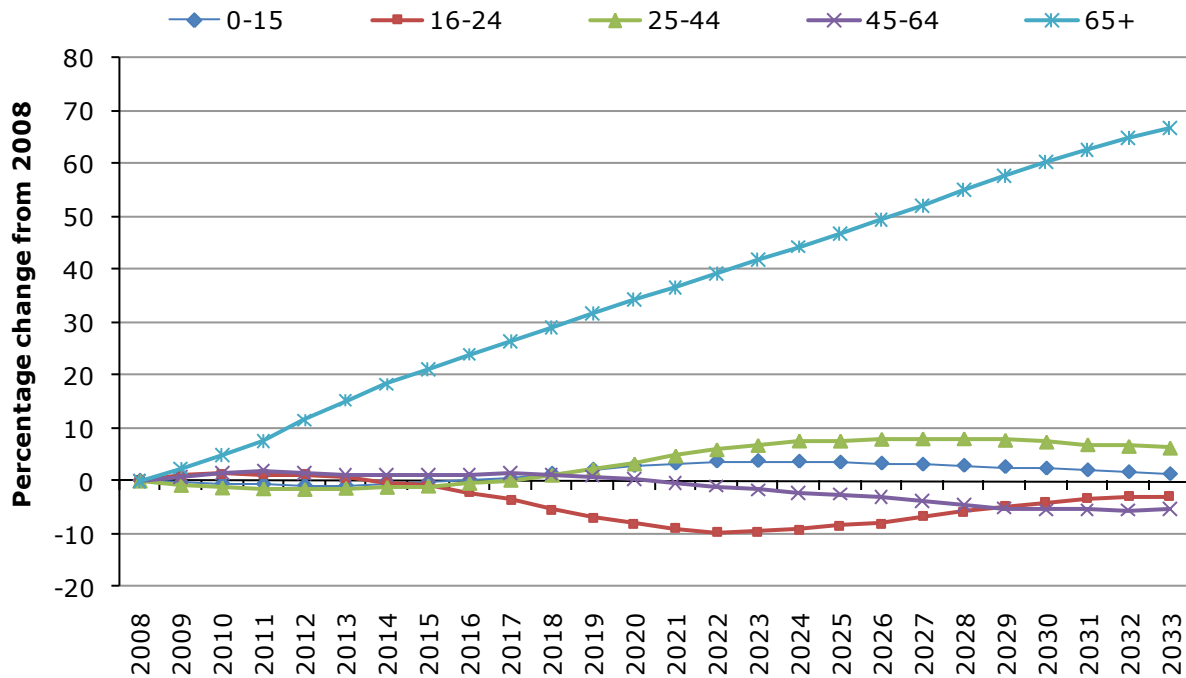
2.3 Population projections

2.3.1 Population projections by age group

Hywel Dda Health Board

2008-based population projections for Hywel Dda Health Board, persons: 2008 to 2033

Produced by the Public Health Wales Observatory, using data from the Welsh Assembly Government

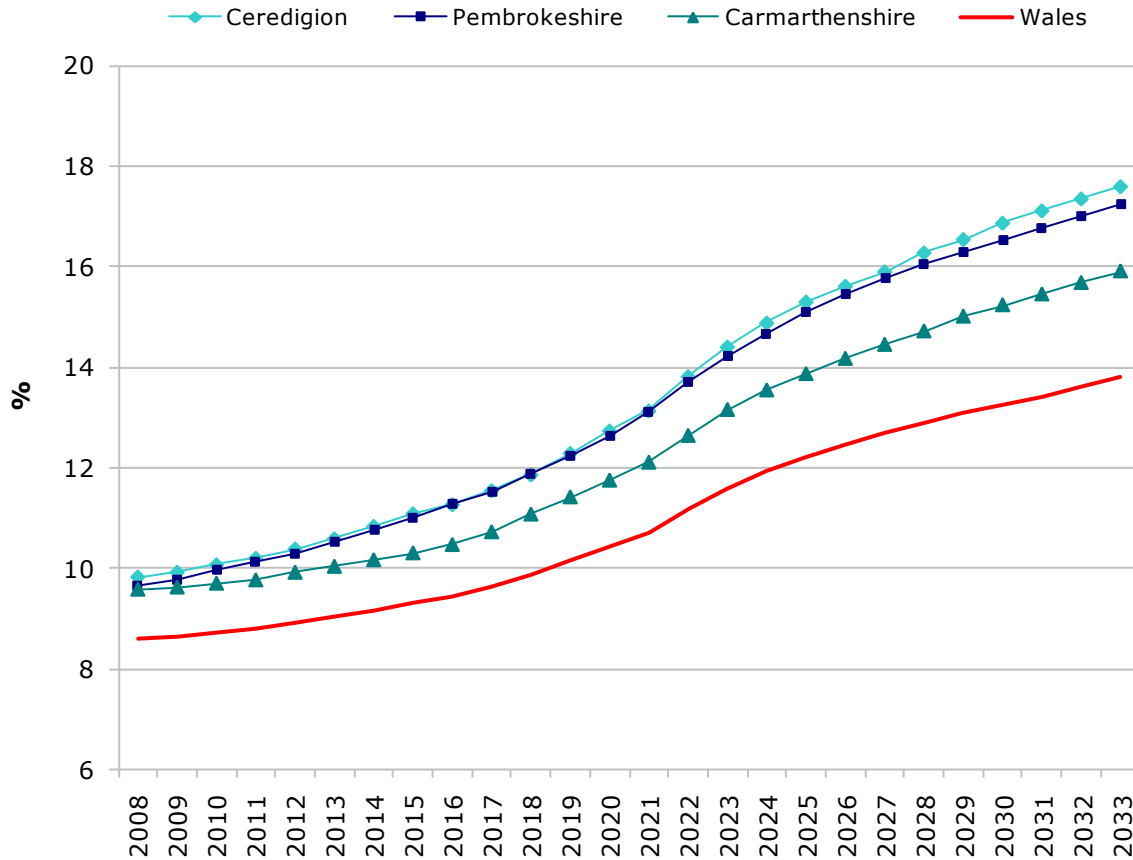


2.3.2 Population projections, persons aged 75 and over

Local authorities within Hywel Dda Health Board*

Projected population, 2008-2033, % aged 75 and over

Produced by Public Health Wales Observatory, using data from the Welsh Assembly Government



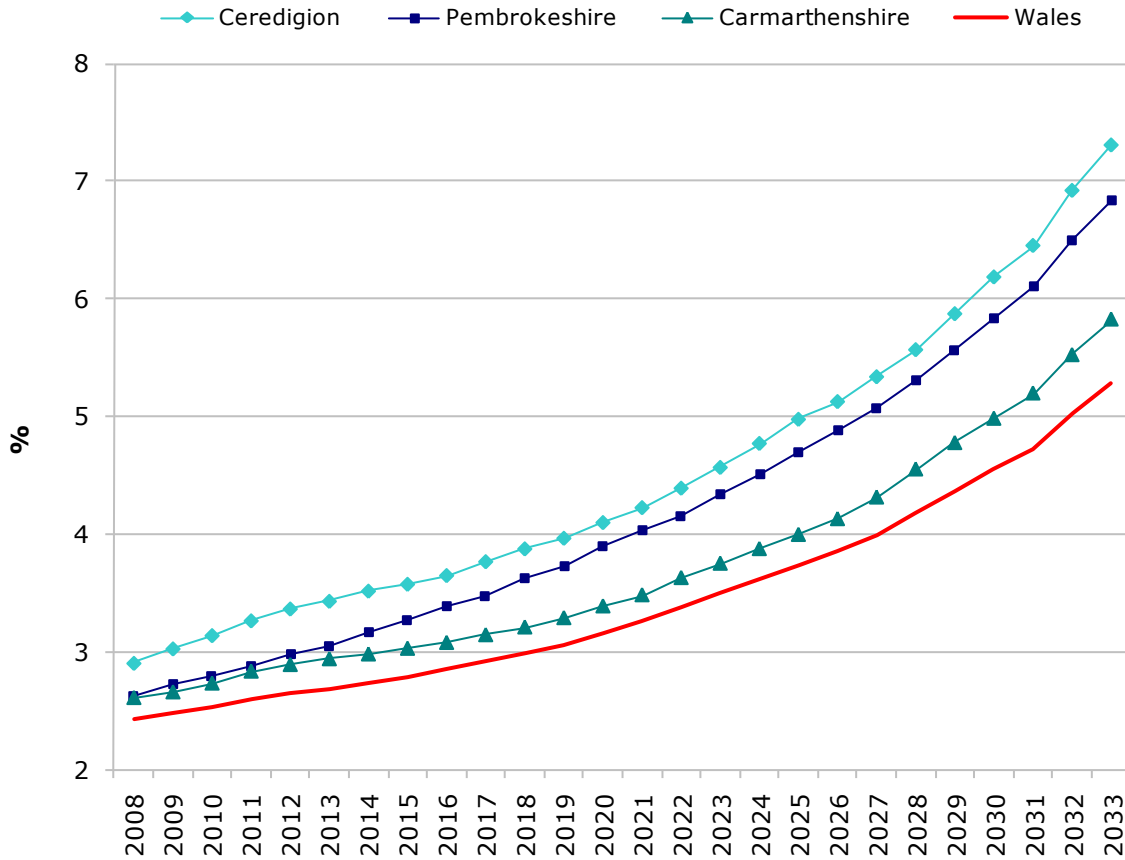
* Y-axis is truncated

2.3.3 Population projections, persons aged 85 and over

Local authorities within Hywel Dda Health Board*

Projected population, 2008-2033, % aged 85 and over

Produced by Public Health Wales Observatory, using data from the Welsh Assembly Government

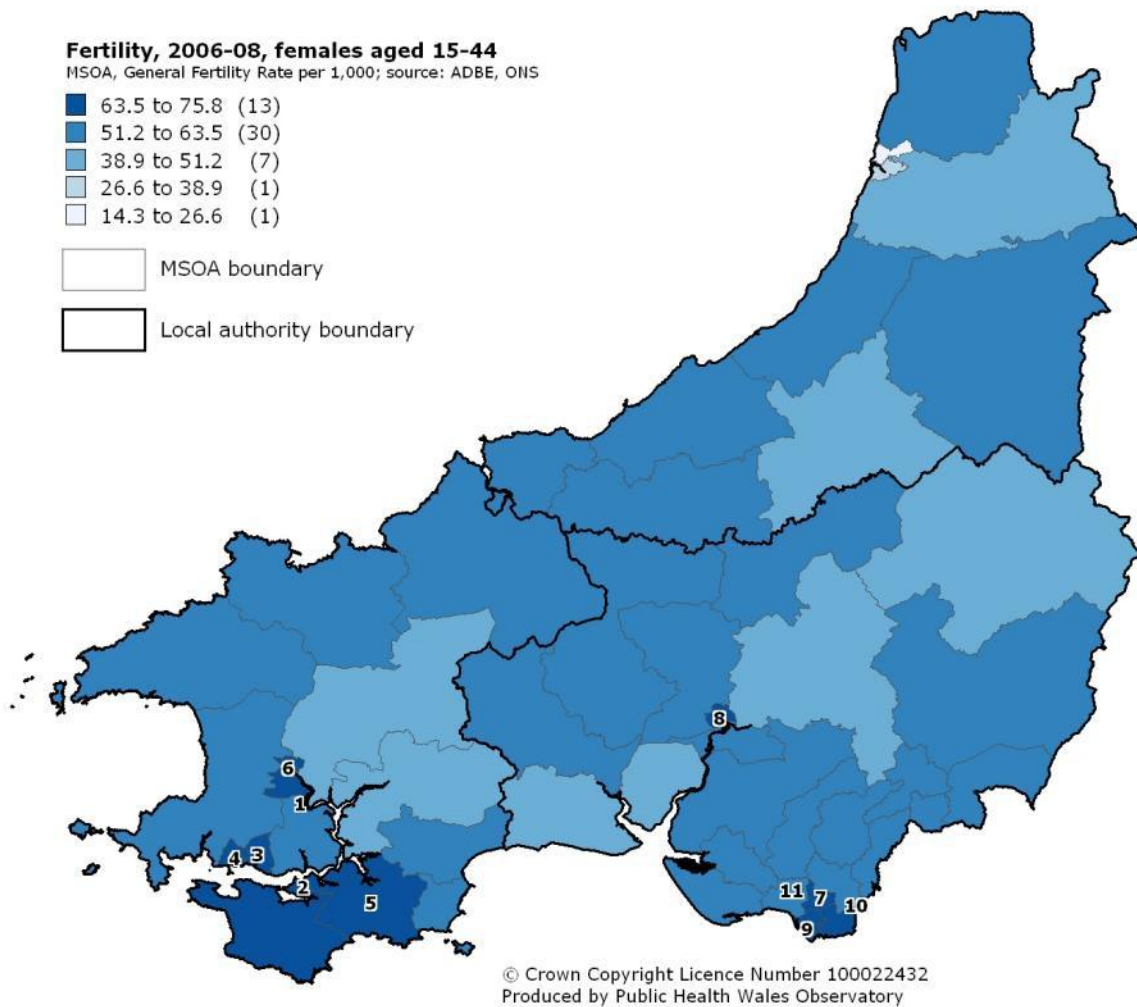


* Y-axis is truncated

2.4 Births

2.4.1 General fertility rate

Middle super output areas



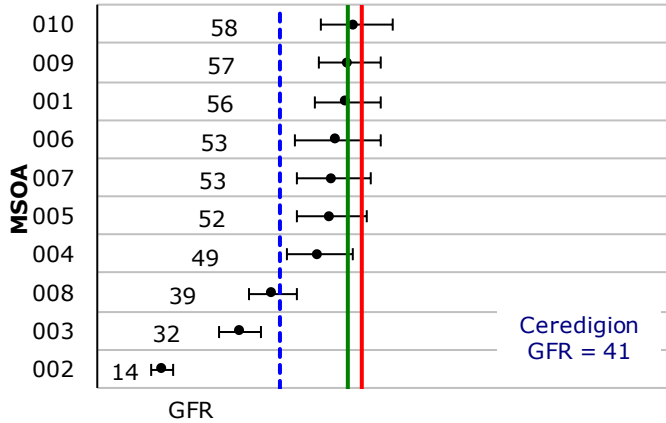
Numbers on map indicate MSOAs with a rate statistically significantly higher than the all Wales rate.

General fertility rate per 1,000 in Hywel Dda Health Board area, females aged 15-44, 2006-08

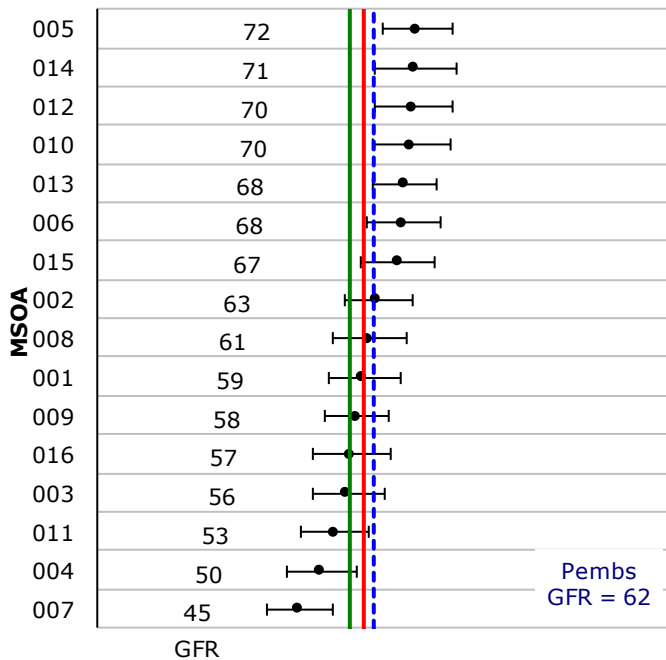
Produced by Public Health Wales Observatory, using data from ONS (ADBE, MYE)

MSOA GFR with 95% confidence interval Health Board (GFR = 57) Wales (GFR = 60) Local Authority

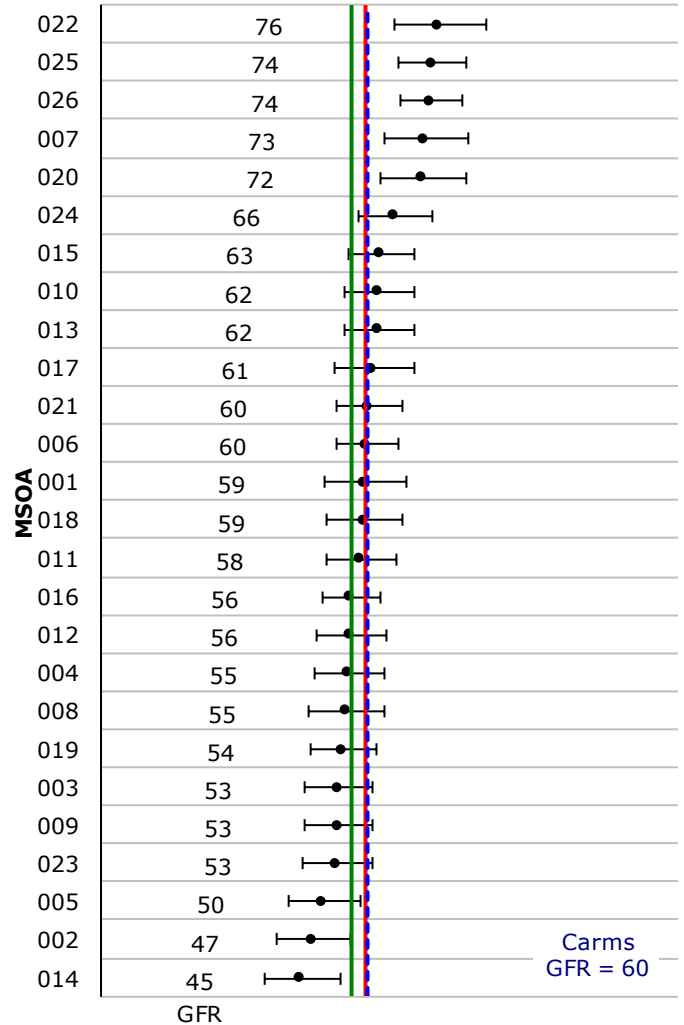
Ceredigion



Pembrokeshire



Carmarthenshire

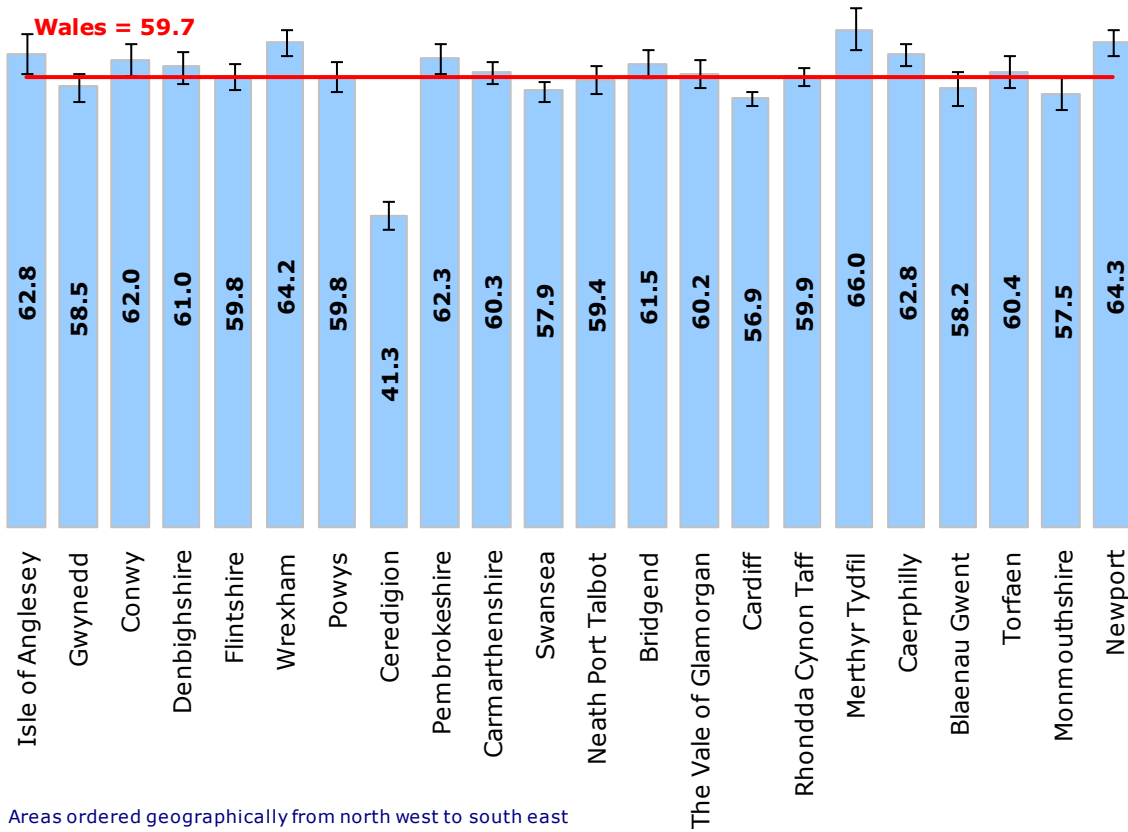


Local authorities

General fertility rate per 1,000, by local authority, 2006-08

Produced by Public Health Wales Observatory, using data from ONS (ADBE, MYE)

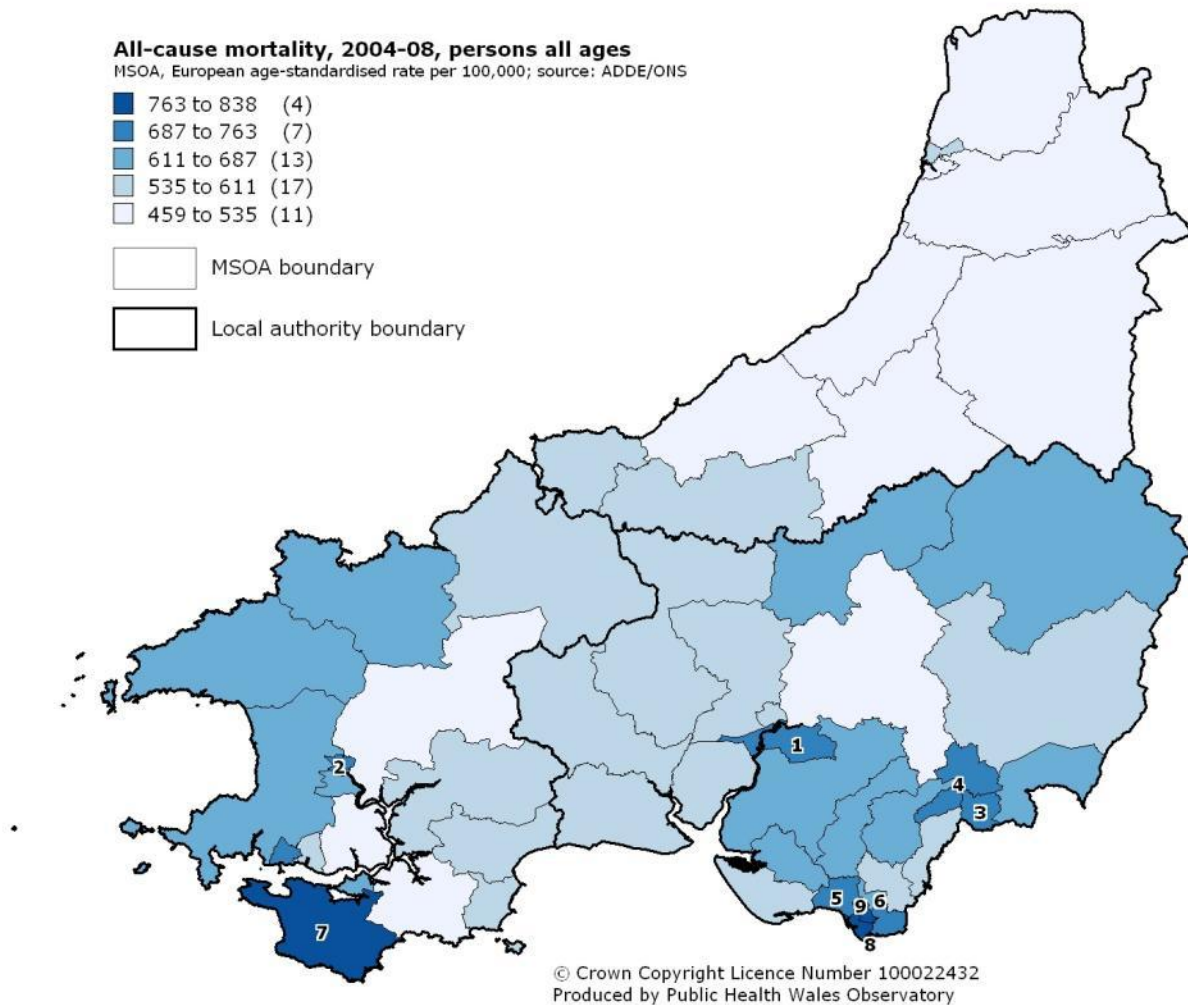
95% confidence interval



2.5 Deaths

2.5.1 All-cause mortality

Middle super output areas



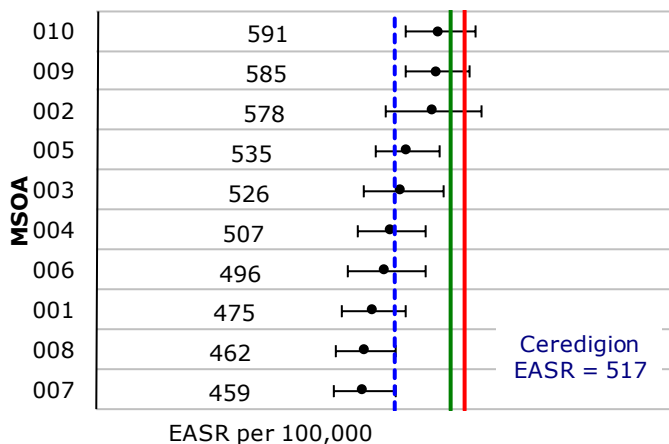
Numbers on map indicate MSOAs with a rate statistically significantly higher than the all Wales rate.

All-cause mortality in Hywel Dda Health Board area, all persons, 2004-08, European age-standardised rates per 100,000

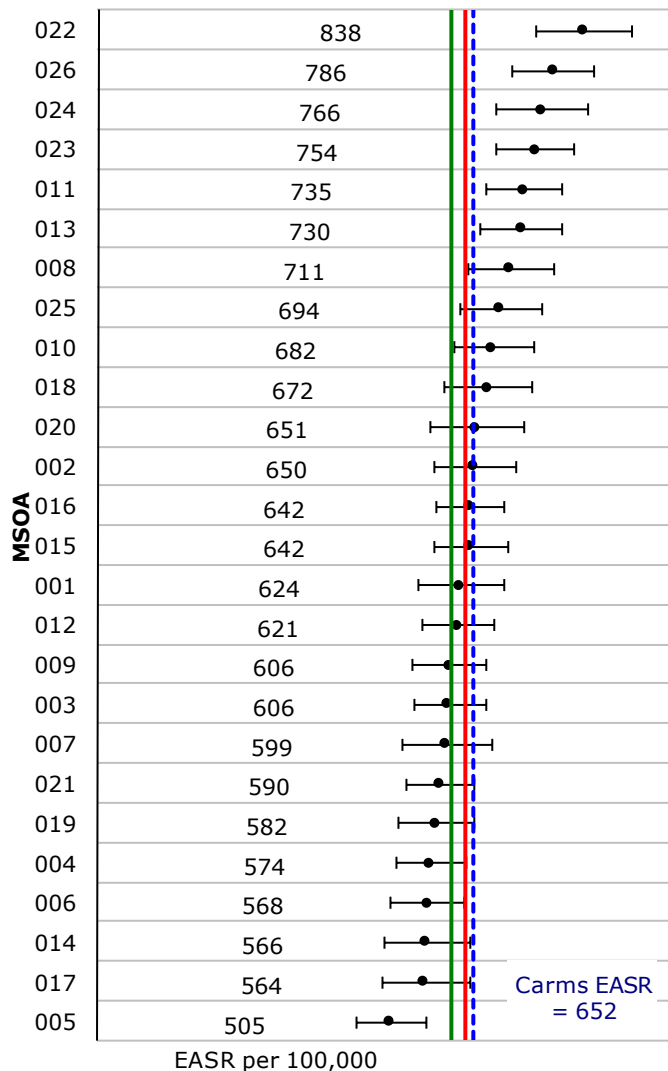
Produced by Public Health Wales Observatory, using data from ONS (ADDE, MYE)

MSOA EASR with 95% confidence interval Health Board (EASR = 613) Wales (EASR = 635) Local Authority

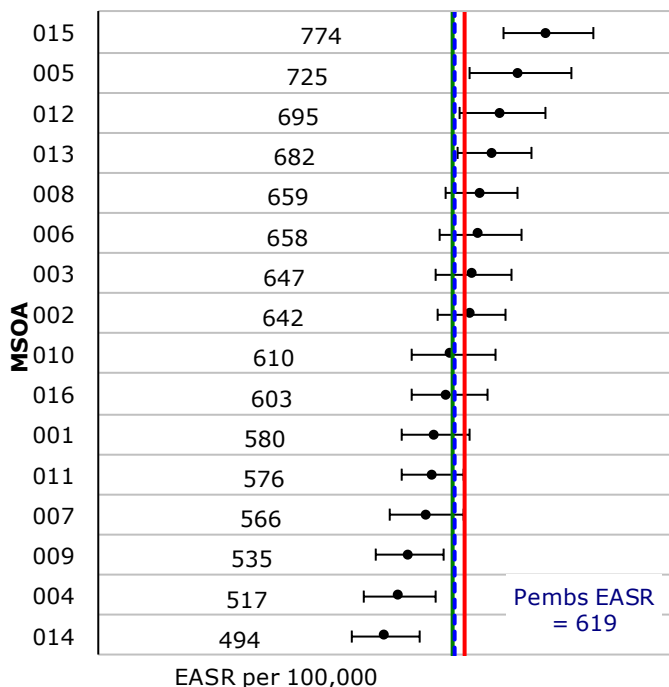
Ceredigion



Carmarthenshire



Pembrokeshire

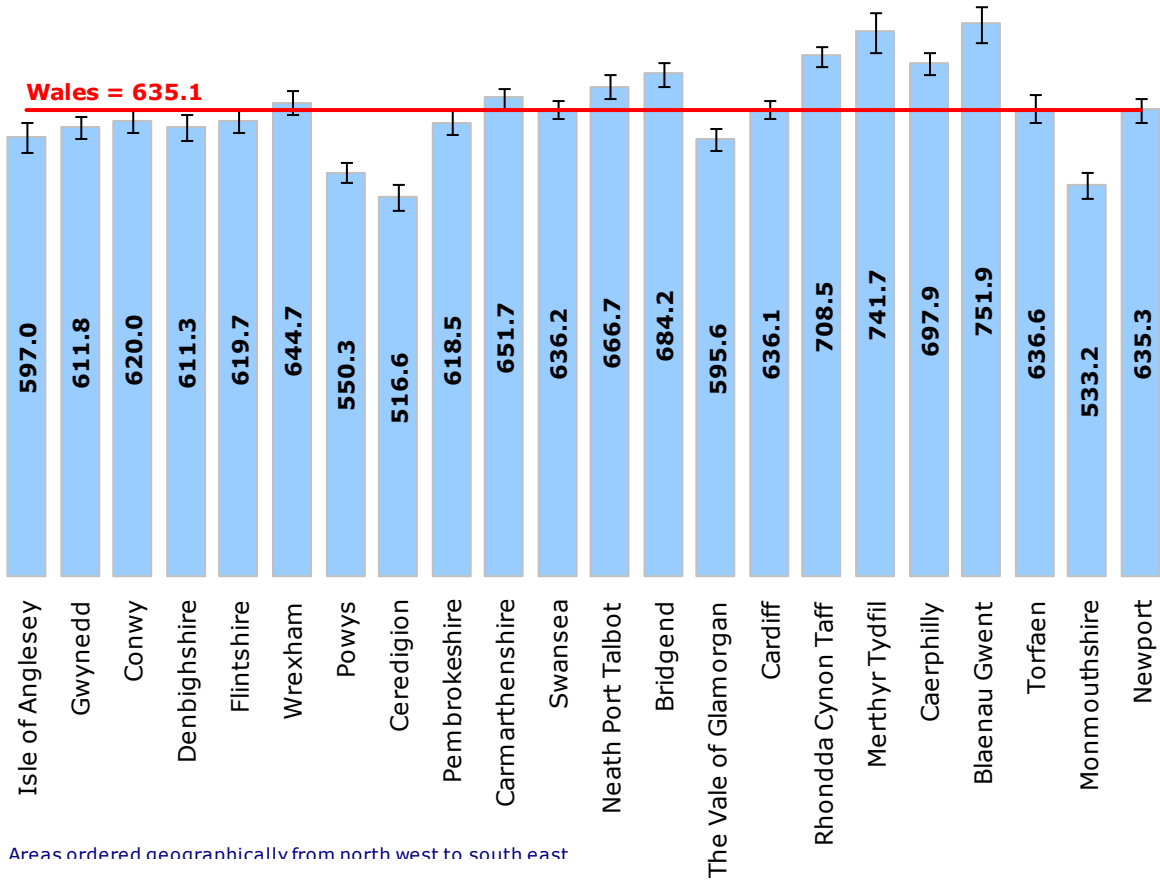


Local authorities

All cause mortality by local authority, all persons, 2004-08, European age-standardised rates per 100,000

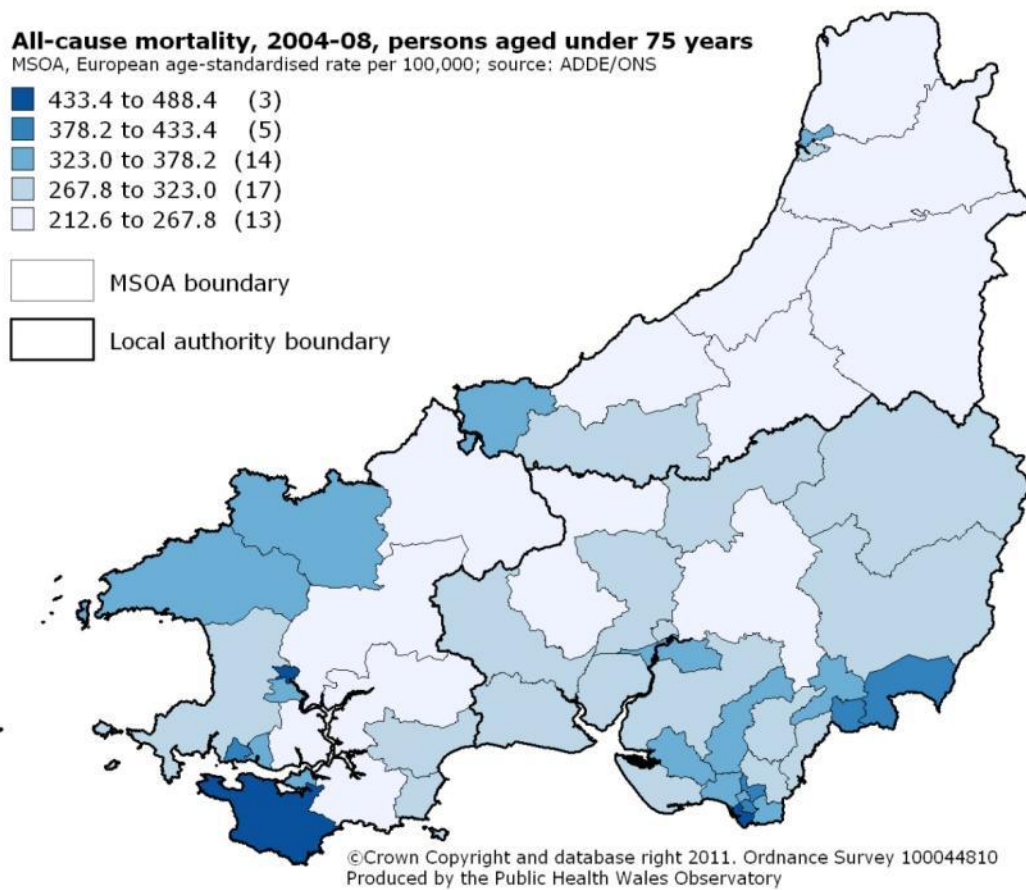
Produced by Public Health Wales Observatory, using data from ONS (ADDE, MYE)

95% confidence interval



2.5.2 All-cause mortality, aged under 75

Middle super output areas

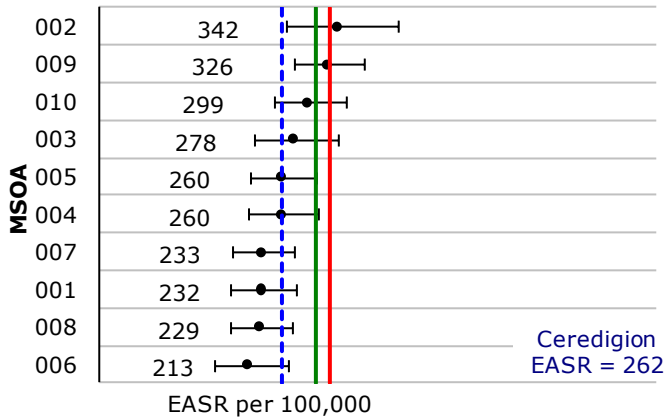


All-cause mortality in Hywel Dda Health Board area, persons aged under 75 years, 2004-08, European age-standardised rates per 100,000

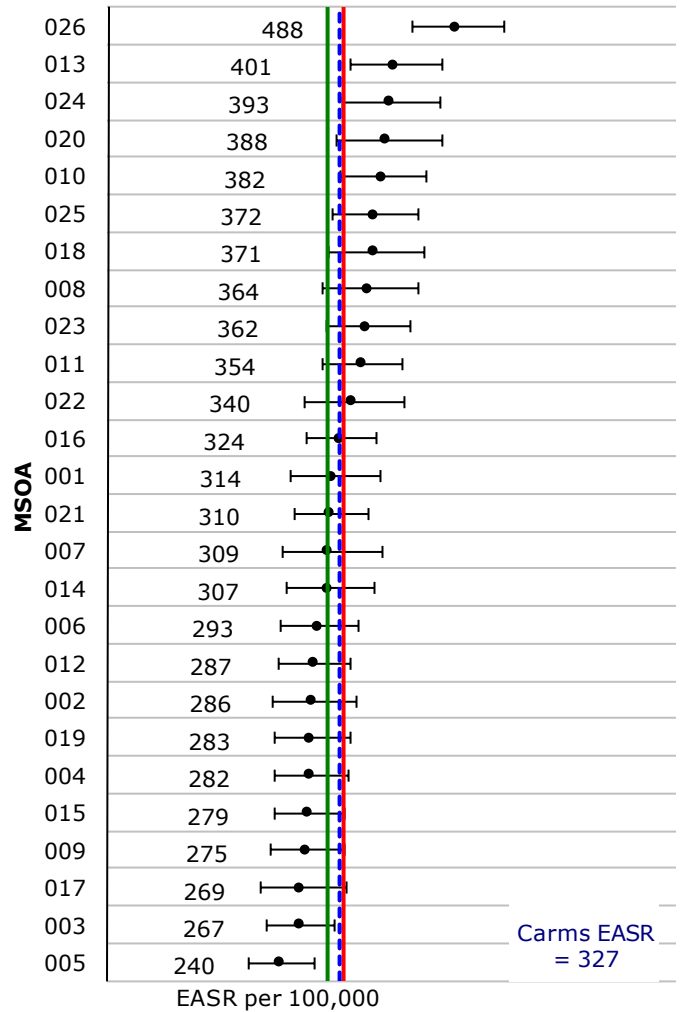
Produced by Public Health Wales Observatory, using data from ONS (ADDE, MYE)

MSOA EASR with 95% confidence interval Health Board (EASR = 310) Wales (EASR = 331) Local Authority

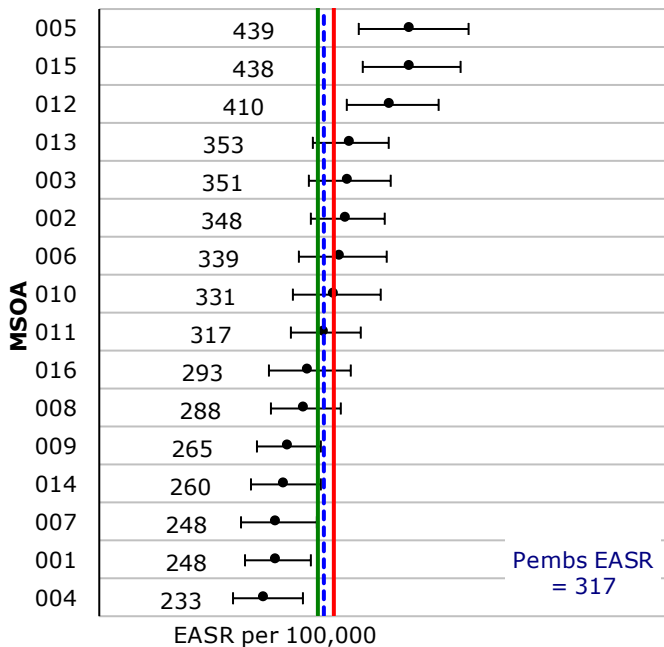
Ceredigion



Carmarthenshire



Pembrokeshire

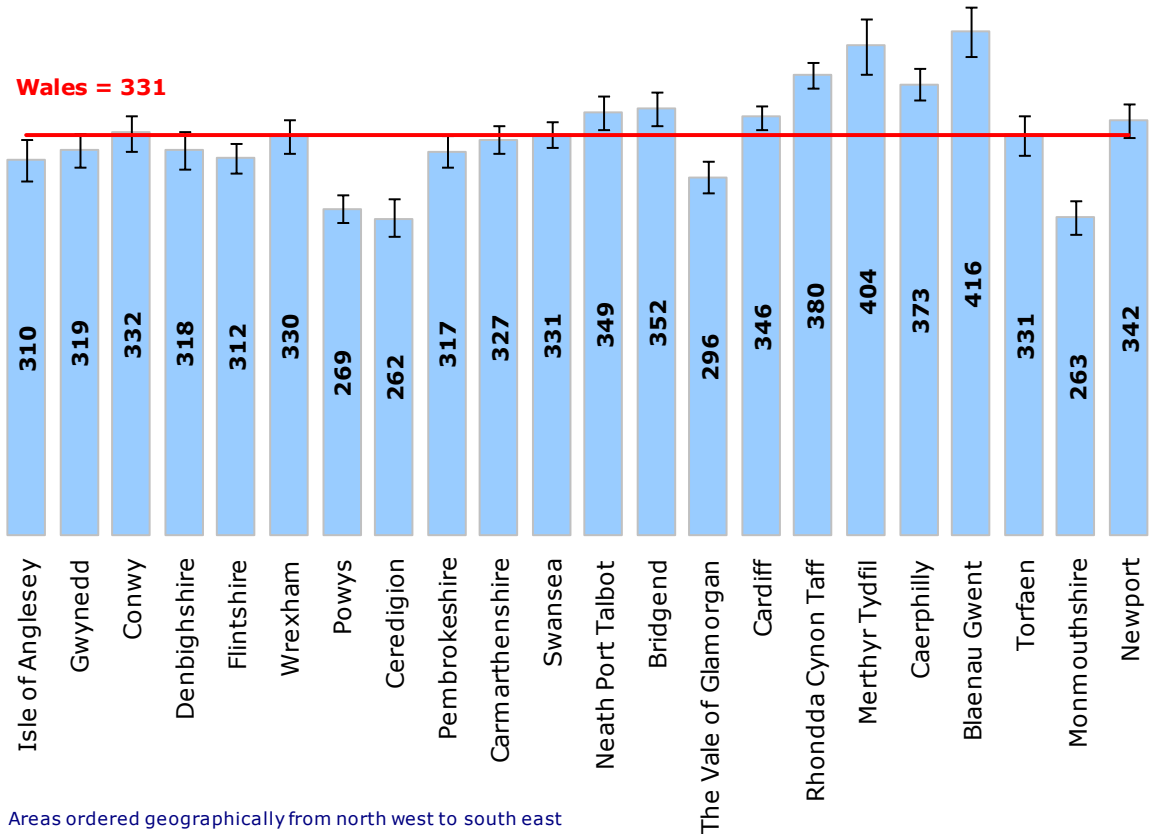


Local authorities

All cause mortality by local authority, persons aged under 75 years, 2004-08, European age-standardised rates per 100,000

Produced by Public Health Wales Observatory, using data from ONS (ADDE, MYE)

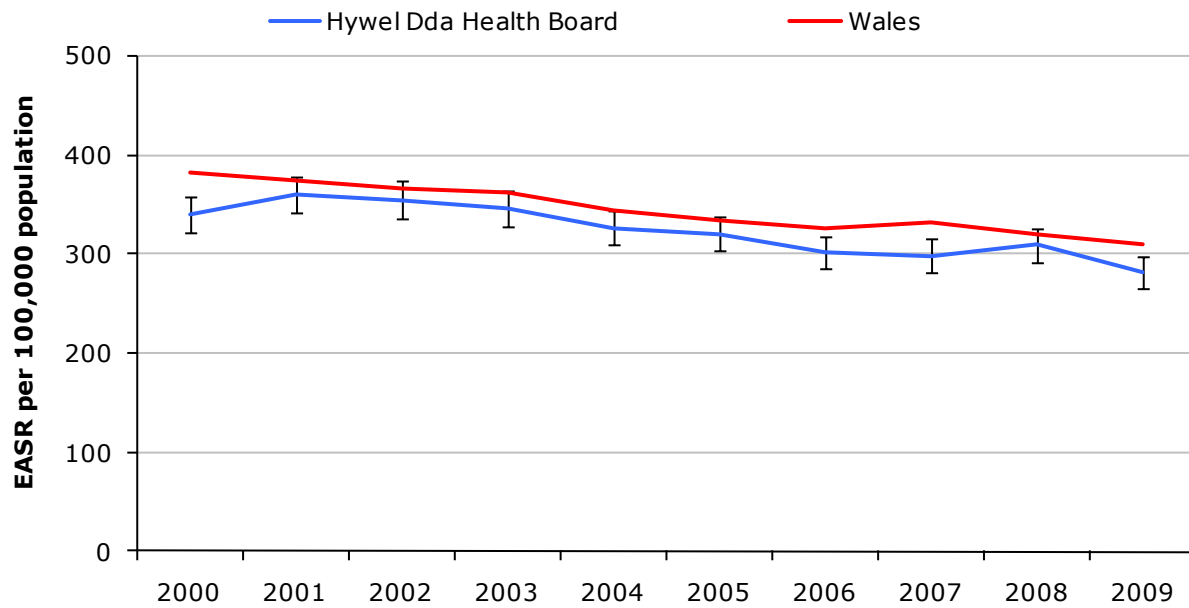
95% confidence interval



Wales and Hywel Dda Health Board trend

All-cause mortality rate trend for Hywel Dda Health Board, persons aged under 75: 2000 to 2009

Produced by the Public Health Wales Observatory, using data from ONS (ADDE, MYE)



3 Determinants of health

3.1 Determinants of health: key points

Pattern of deprivation

The pattern of deprivation as described by the Welsh Index of Multiple Deprivation shows that the most deprived areas are located in the areas of Pantyffynnon; Pembrey; Burry Port; Glanymor; Morfa; Pemberton and Cwmbach in Carmarthenshire; Cardigan town in Ceredigion, and Monkton and Gelliswick in Pembrokeshire. The least deprived areas are found to the west of Aberystwyth town in Ceredigion, Llanedi; Fforest; Hendy; Swiss Valley and Graig in Carmarthenshire, and Llandissillio and Clunderwen in Pembrokeshire.

Analysis of the association between deprivation and poor health

The association between socioeconomic deprivation and poor health outcomes is well-established. The Public Health Wales Observatory will be publishing a profile examining the relationship over time between deprivation and mortality later this year. This chart book contains some preliminary analysis released for inclusion in Director of Public Health Annual Reports. The analysis shows that the European age-standardised all-cause mortality rate in the most deprived fifth of areas within Hywel Dda Health Board is nearing twice that of the rate in the least deprived fifth for males and the gap is slightly lower for females. The charts also show the gap is narrowing marginally among females but may be widening among males.

Lifestyle data

The Welsh Health Survey is a rich source of information on lifestyle. It is a self-reported survey randomly sampling around 15 thousand adults (aged 16+) per year in Wales. The sample is constructed to allow reporting at local authority level.

Lifestyle indicators in the Hywel Dda Health Board area are generally better than, or similar to, the Wales average. However, almost one in four people smoke, leading to around 730 deaths per year within the health board area.

Two out of five people drink more alcohol than the recommended limits and nearly one quarter binge drink on at least one day a week. Hospital admissions due to alcohol and drugs are generally less common than in Wales as a whole, with particularly low levels found in Ceredigion. Nevertheless, nearly 6,500 hospital admissions and 140 deaths of Hywel Dda residents are caused by alcohol each year.

Overall, only around two in five people eat the recommended amount of fruit and vegetables. A third of the population meet physical activity guidelines. Improving diet and physical activity are essential to reducing the high proportions of people who are overweight or obese. Nearly 60 per cent of adults in the health board area are either overweight or obese.

3.2 Wider determinants of health

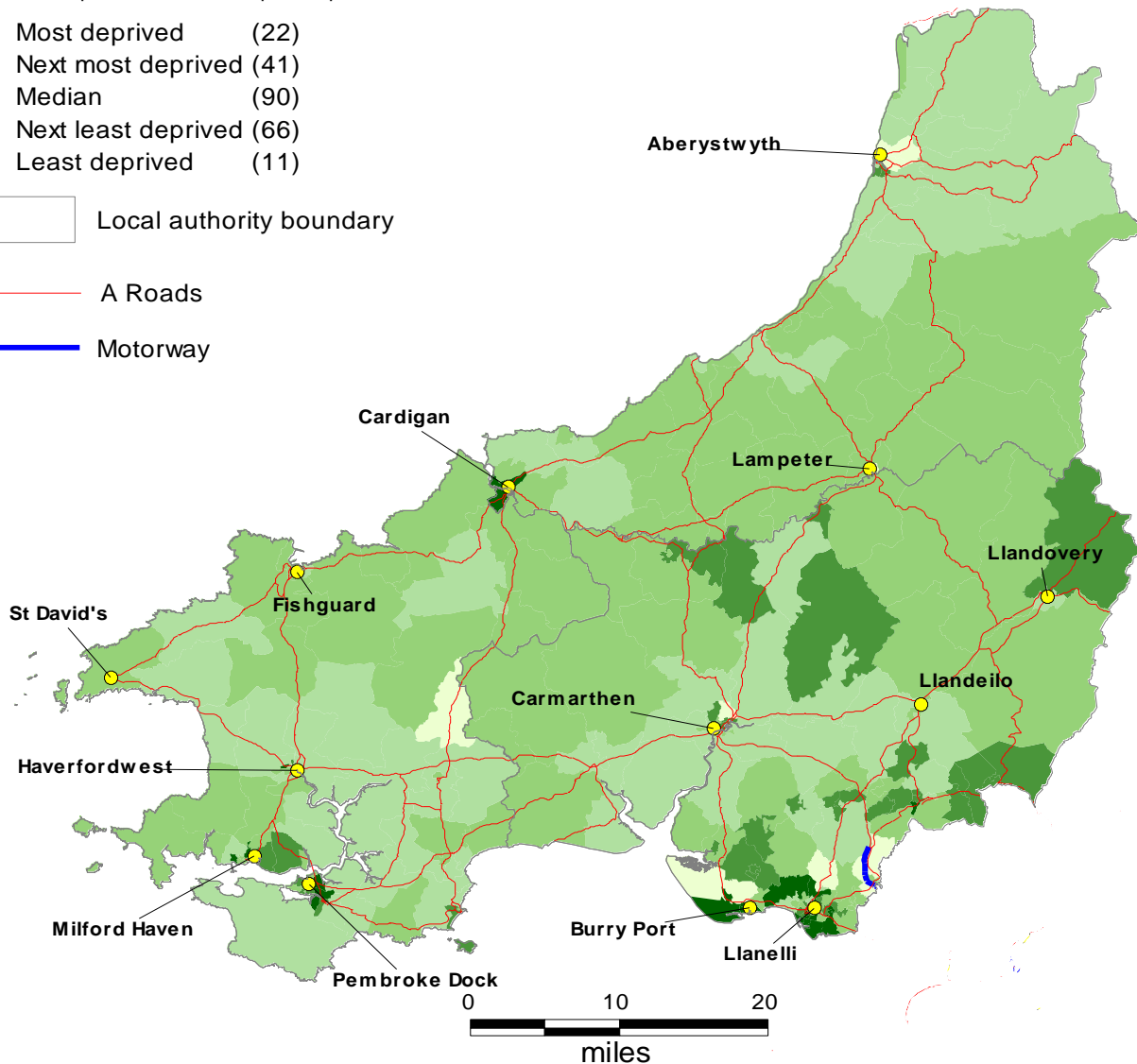
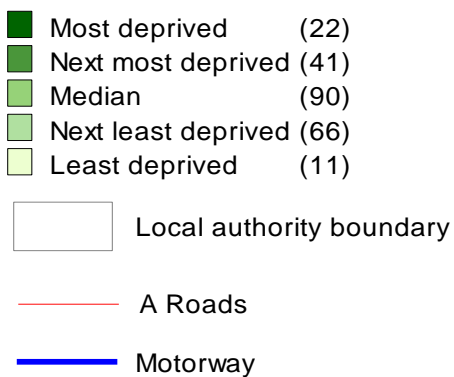
3.2.1 Deprivation in relation to Wales

The Welsh Index of Multiple Deprivation (2008) is produced at a small area level called lower super output area, and is derived from a broad range of factors including income, employment, health, education, skills and training, community safety, housing, physical environment and access to services. It is a geographically based deprivation measure which can be used to show inequalities in health and suggest areas likely to most need measures to improve health and manage ill-health.

This map shows the level of deprivation in the health board in comparison to the rest of Wales.

Overall Welsh Index of Multiple Deprivation 2008

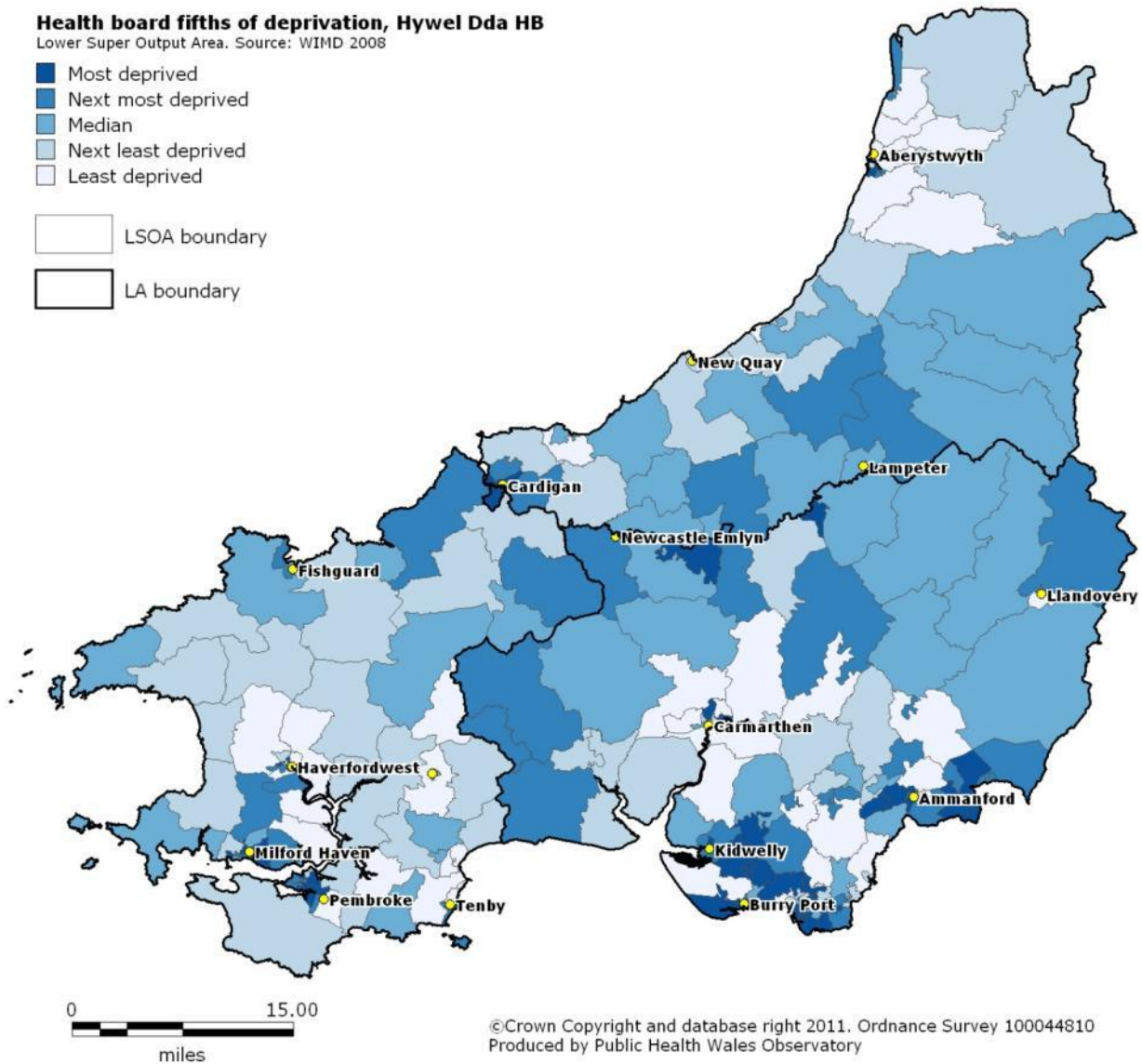
Fifths of deprivation, Lower Super Output Areas, Data source: WAG



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3.2.2 Deprivation within the health board

This map shows the most and least deprived fifths within the health board. It is this grouping that is used to demonstrate inequalities in mortality in the next section.

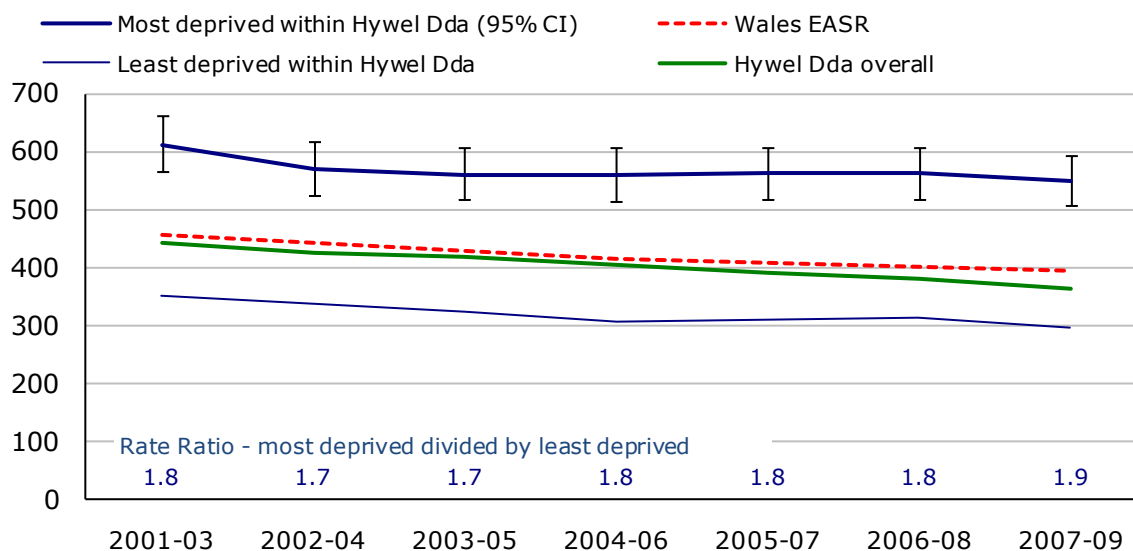


3.2.3 Inequality in all-cause mortality

These graphs compare mortality in the most deprived fifth of the health board population with the least deprived fifth of health board population.

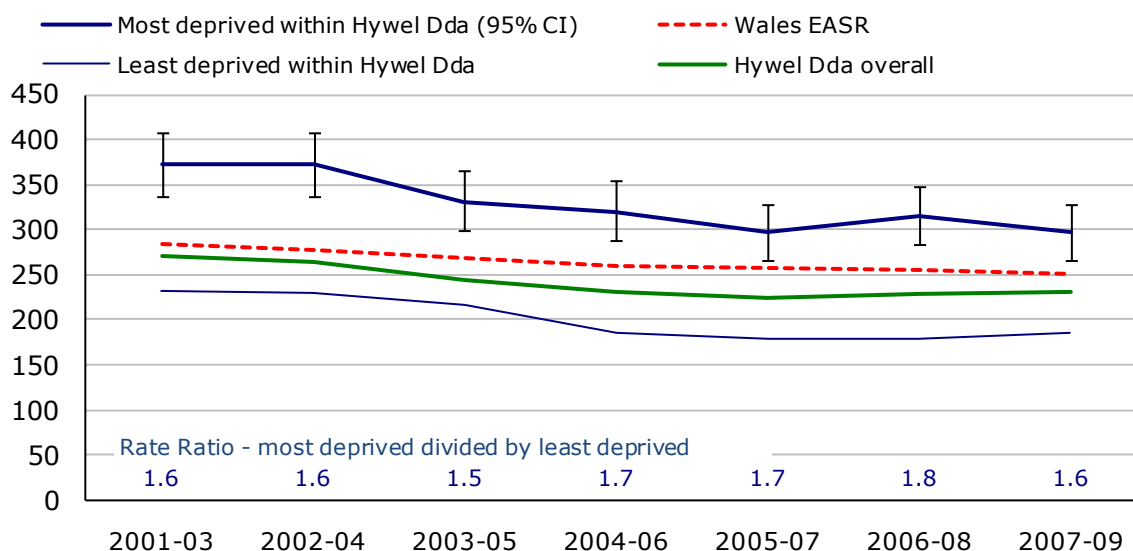
All-cause mortality, under 75, males, European age-standardised rate (EASR) per 100,000, Hywel Dda HB and Wales, 2001-09

Produced by Public Health Wales Observatory, using ADDE/MYE (ONS), WIMD 2008 (WAG)



All-cause mortality, under 75, females, European age-standardised rate (EASR) per 100,000, Hywel Dda HB and Wales, 2001-09

Produced by Public Health Wales Observatory, using ADDE/MYE (ONS), WIMD 2008 (WAG)

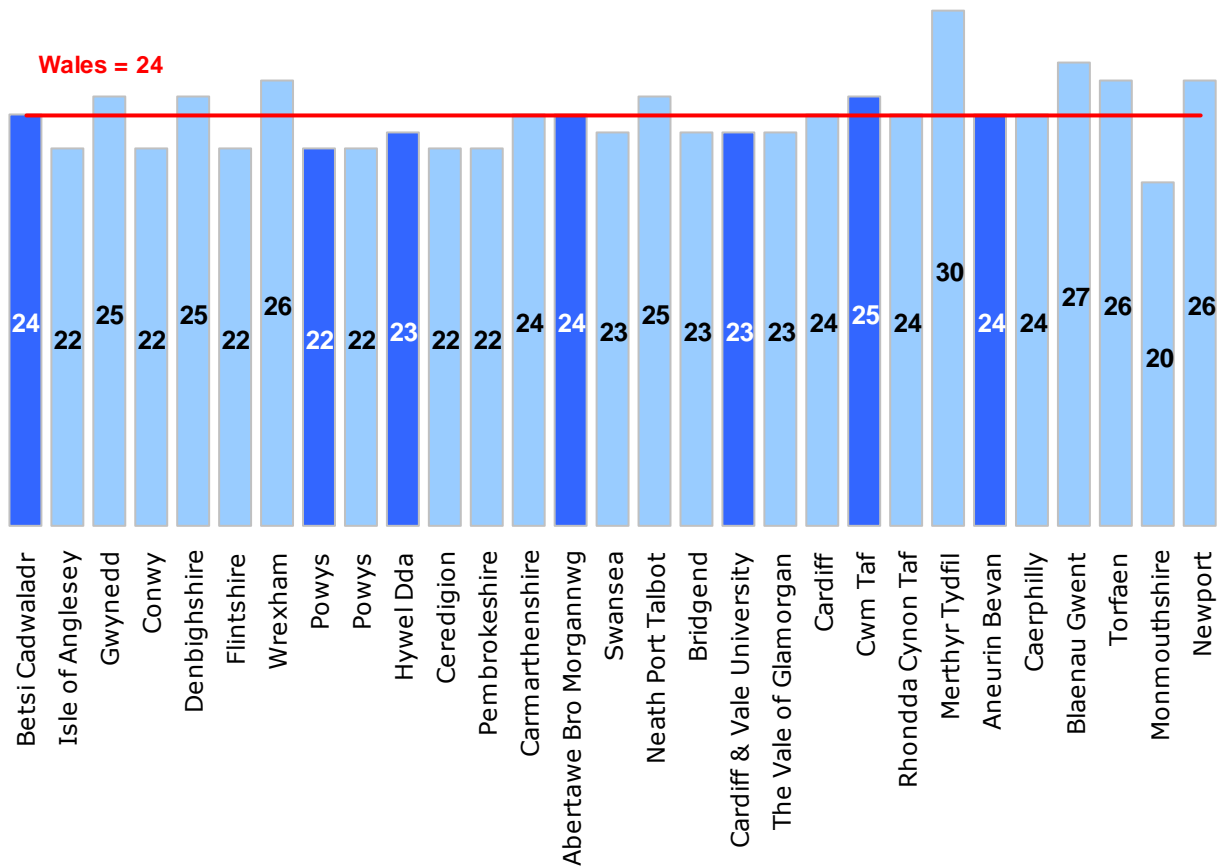


3.3 Lifestyle factors

3.3.1 Smoking as reported by adults

Adults who reported being a current smoker by local authority and health board, age standardised percentage, 2008-2009

Produced by Public Health Wales Observatory using data from the Welsh Health Survey, 2008 and 2009

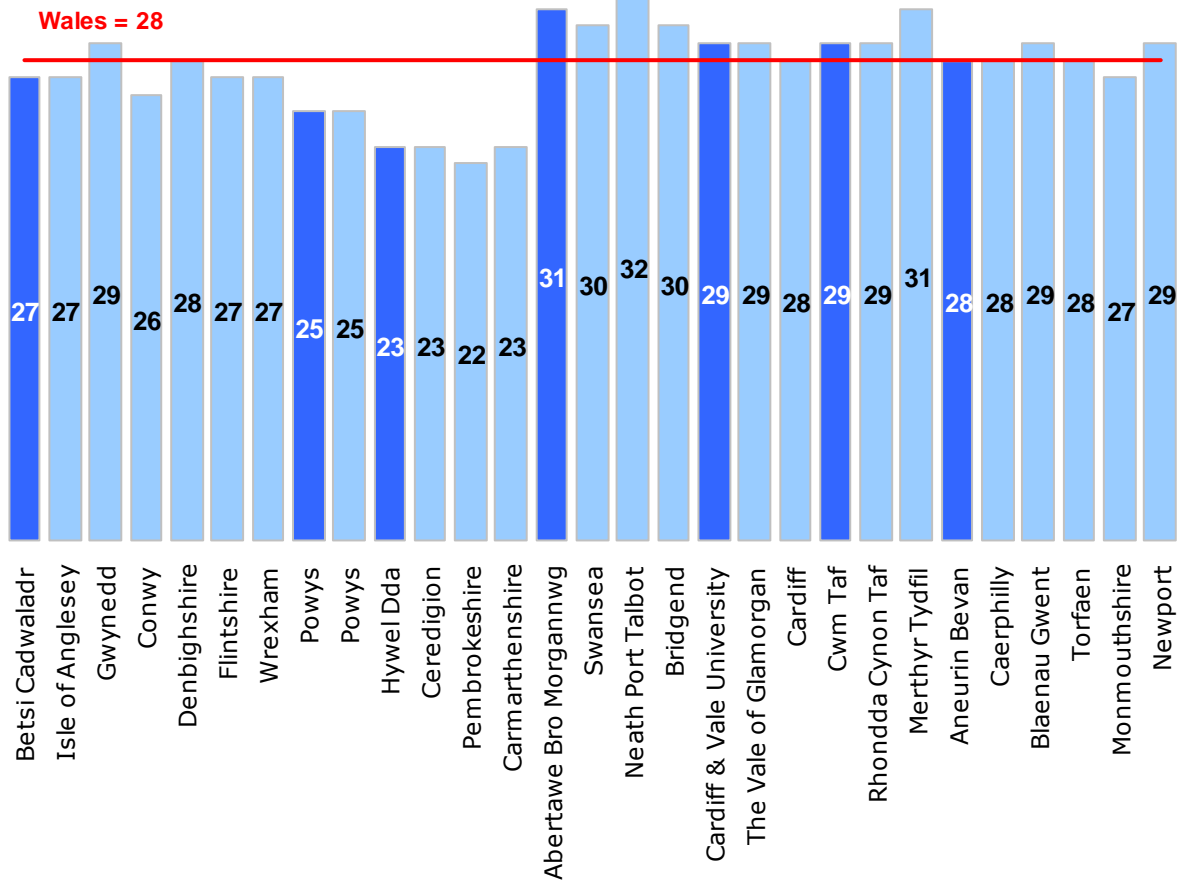


Areas ordered geographically from north west to south east

3.3.2 Binge drinking as reported by adults

Adults who reported binge drinking on at least one day in the past week by local authority and health board, age standardised percentage, 2008-2009

Produced by Public Health Wales Observatory using data from the Welsh Health Survey, 2008 and 2009

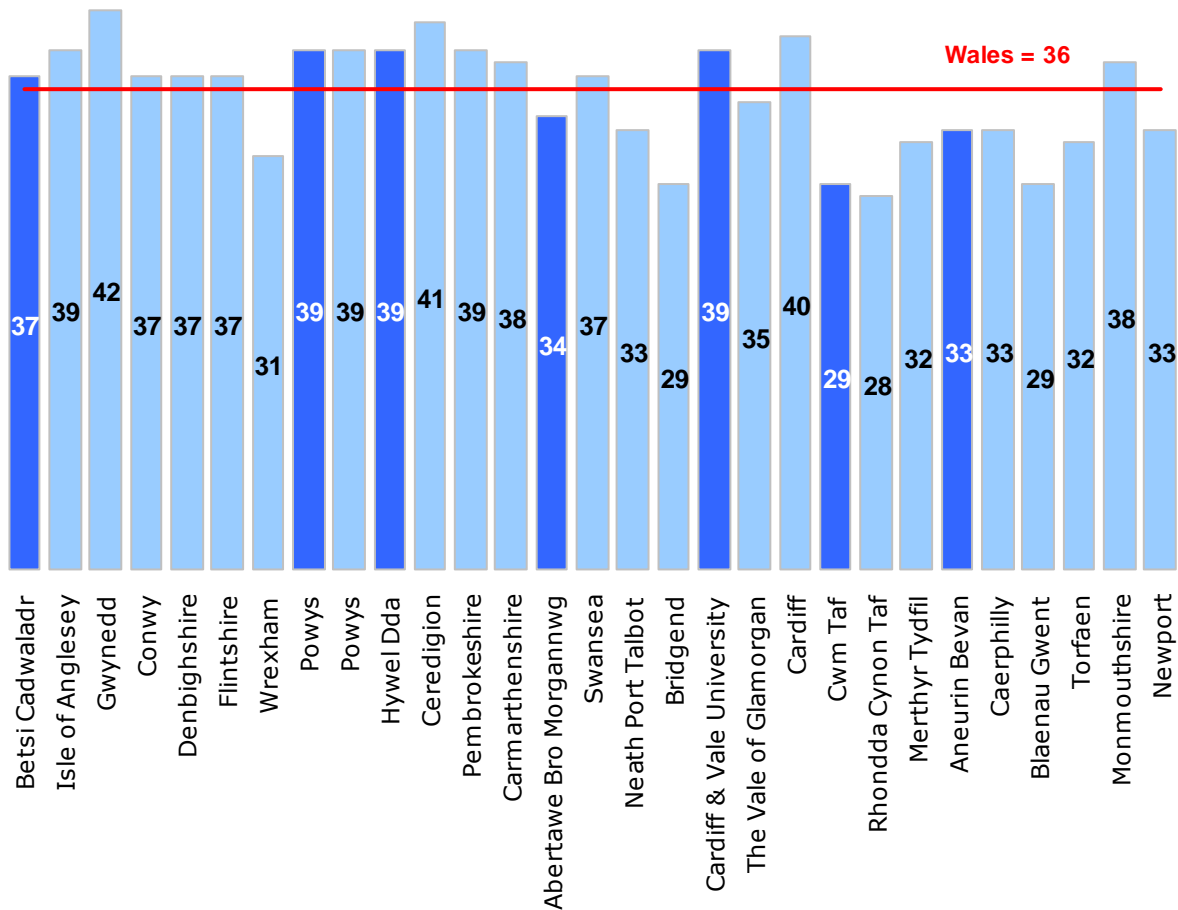


Areas ordered geographically from north west to south east

3.3.3 Five or more fruit or vegetables a day as reported by adults

Adults who reported eating five/more portions fruit/veg the previous day by local authority/health board, age standardised percentage, 2008-2009

Produced by Public Health Wales Observatory using data from the Welsh Health Survey, 2008 and 2009

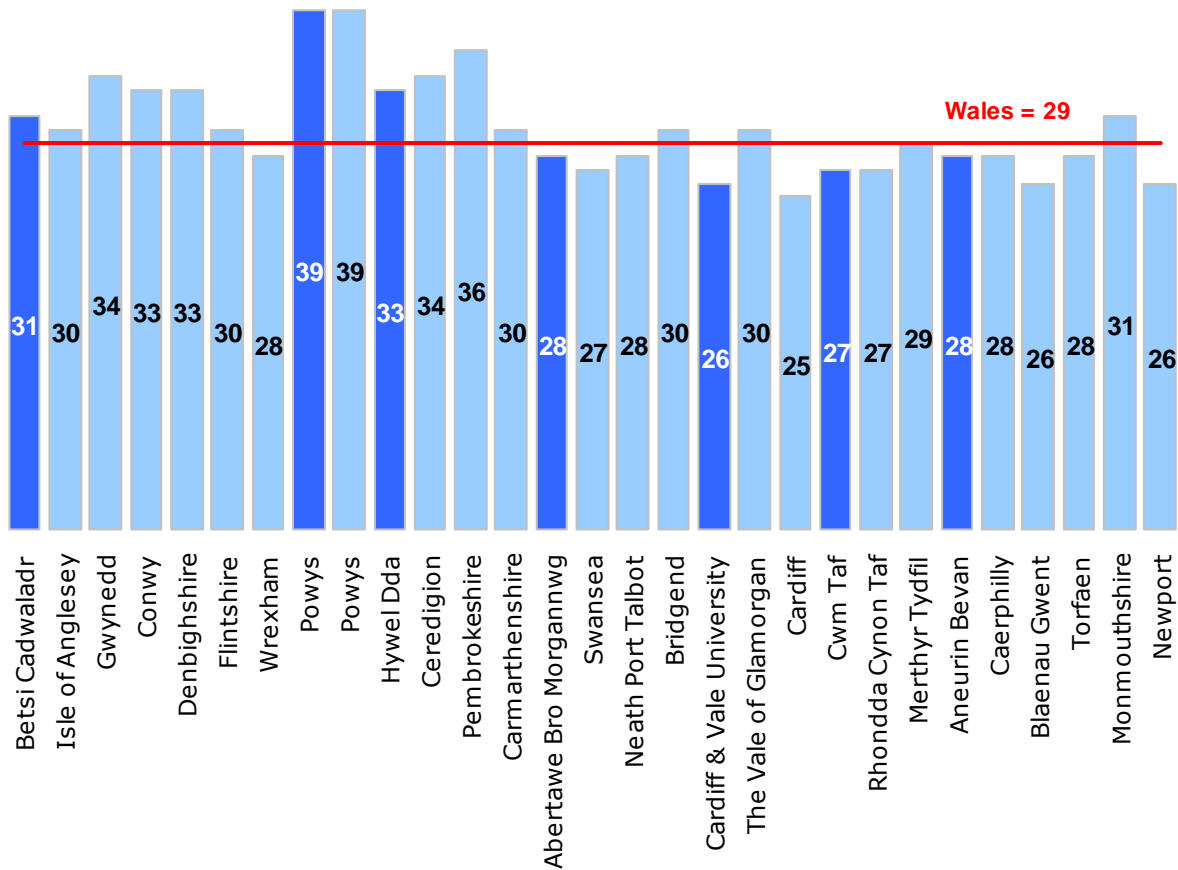


Areas ordered geographically from north west to south east

3.3.4 Physical activity as reported by adults

Adults who reported meeting physical activity guidelines in the past week by local authority/health board, age standardised percentage, 2008-2009

Produced by Public Health Wales Observatory using data from the Welsh Health Survey, 2008 and 2009

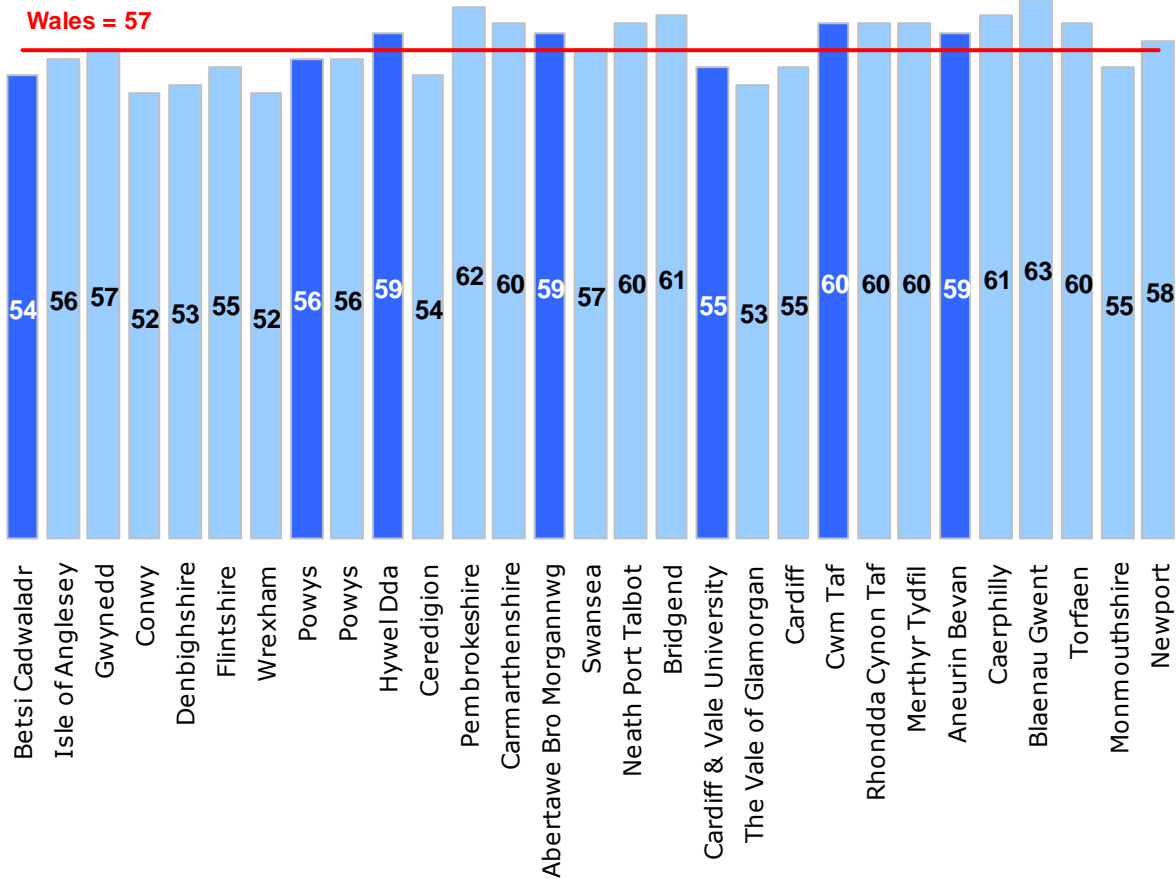


Areas ordered geographically from north west to south east

3.3.5 Overweight and obesity, adults based on self reported data

Adults who were overweight or obese by local authority and health board, age standardised percentage, 2008-2009

Produced by Public Health Wales Observatory using data from the Welsh Health Survey, 2008 and 2009



Areas ordered geographically from north west to south east

4 Use of services

4.1 Use of services: key points

Childhood immunisations

Childhood immunisation uptake rates show positive long term trends, although remain below target rates in a number of key areas. Immunisations in children under one year of age reach the 95% target. All immunisations scheduled for children in their second year of life do not reach the 95% target, and coverage of immunisations in five year olds and sixteen year olds are also below target. MMR vaccine uptake is a particular concern given a large outbreak of measles in Wales in 2009, and ongoing outbreaks in Europe in 2011. Uptakes of one dose of MMR in two year olds and two doses in five year olds have improved since 2004, but a 95% uptake of two doses is needed to eliminate measles in line with WHO goals. Improving uptake of pre-school and teenage immunisation will reduce risk of outbreaks of vaccine preventable diseases in future.

Seasonal influenza vaccination

In Wales, free seasonal influenza immunisation is offered to all people aged 65 years and over, and people between 6 months and 65 years in clinical risk groups (currently chronic respiratory disease, chronic heart disease, chronic renal disease, chronic liver disease, chronic neurological conditions, diabetes mellitus, and immunosuppression), residents of long-stay care homes and those who were the main carer for an elderly or disabled person whose welfare may be at risk if the carer fell ill. For 2009/10 WAG set a target immunisation uptake rate of 70% for people aged 65 years and over. For the 2010/11 seasonal influenza immunisation campaign the national uptake target was raised to the WHO target of 75% uptake in recommended groups. This target was also put in place for those younger than 65 years in 'at-risk' groups. During the 2010/11 campaign influenza immunisation was also offered to pregnant women who were not an existing clinical risk group.

Uptake of seasonal influenza immunisation for Hywel Dda Health Board in persons aged 65 years and over during 2010/11 was 11% under the target level. In persons aged under 65 years in the at risk groups, uptake during 2010/11 was 29% below the target level.

Population Based National Screening Programmes in Wales

Uptake/coverage rates in Hywel Dda Health Board for the national screening programmes for bowel, breast and cervical cancer and newborn hearing screening are generally on a par with Wales overall. However, newborn hearing screening is the only programme achieving the UK target rate. Rates in Ceredigion for cervical screening for 20 to 64 yr olds are noticeably lower than for Wales and the other local authorities.

Primary care services

The latest Welsh Health Survey data show that age-standardised percentages of primary care service use by adults in Hywel Dda Health Board are broadly on a par with those for Wales as a whole.

Use of secondary and tertiary care

Age-standardised overall hospital admission rates in persons aged under 75 years for 2009 in Hywel Dda Health Board show that overall rates are slightly lower than Wales; the rate for Ceredigion being the lowest of the 22 local authorities. Drilling down to the MSOA level there is considerable variation. Rates are lowest in the Lampeter, Llanfihangel Ystrad, Llangybi and Llanwenog areas of Ceredigion; the highest rates are found in the areas of Kidwelly; Mynyddygarreg; Trimsaran; Pembrey; Achddu; Seaside; Morfa; Machynys and Tyisha in Carmarthenshire.

Looking at emergency admissions in this age group, the health board rate is below that of Wales; the lowest rate at local authority level across Wales being Ceredigion. At the MSOA level the rate varies with the lowest rates found in Tenby, Penally and Caldey Island in Pembrokeshire. The rate is notably higher in the Seaside, Morfa, Machynys and Tyisha areas of Carmarthenshire compared to other MSOAs in the health board. High rates of emergency hospital admission may be indicative of inadequate self-care and primary care services.

The health board elective admission rate is slightly above that for Wales. However, the rate in Ceredigion is lower than in Carmarthenshire, Pembrokeshire and Wales. At the MSOA level rates are highest in the Kidwelly, Mynyddygarreg and Trimsaran areas of Carmarthenshire; the lowest rate is found in the Lampeter, Llanfihangel Ystrad, Llangybi and Llanwenog areas of Ceredigion.

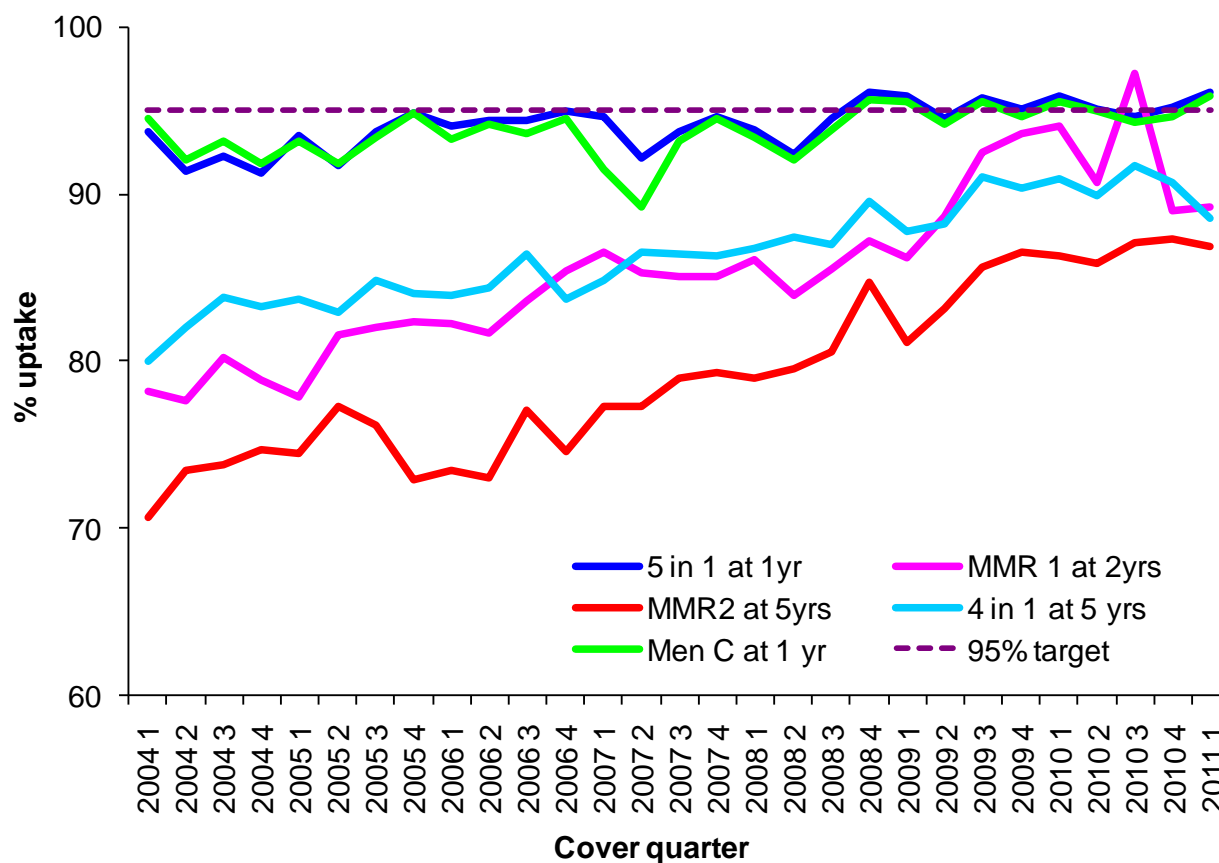
4.2 Prevention services: vaccination uptake

Note: Y-axes in the graphs of this section are truncated

4.2.1 Childhood immunisations

Routine childhood immunisation Hywel Dda Health Board area, trends 2004-2011

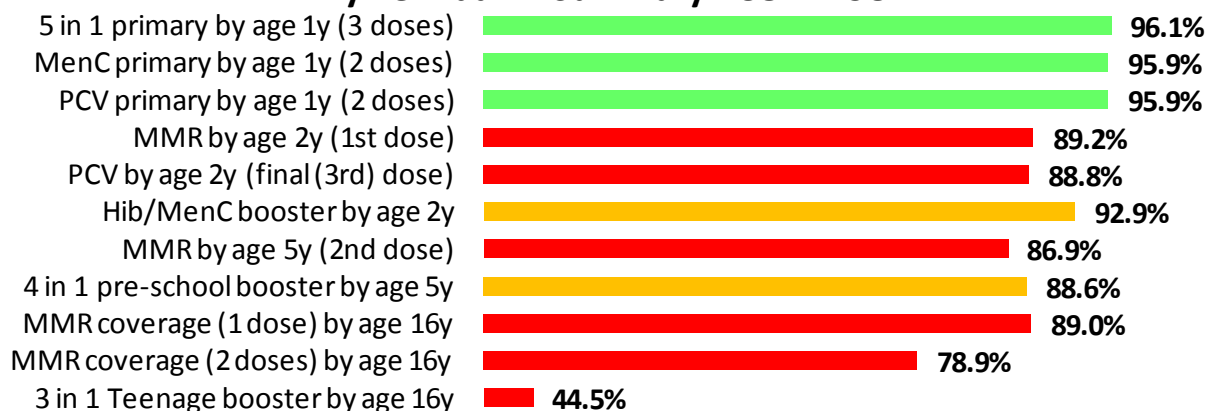
Produced by Public Health Wales Vaccine Preventable Disease Programme, from the Public Health Wales COVER reports



Routine childhood immunisation Hywel Dda Health Board area, 2011 quarter 1

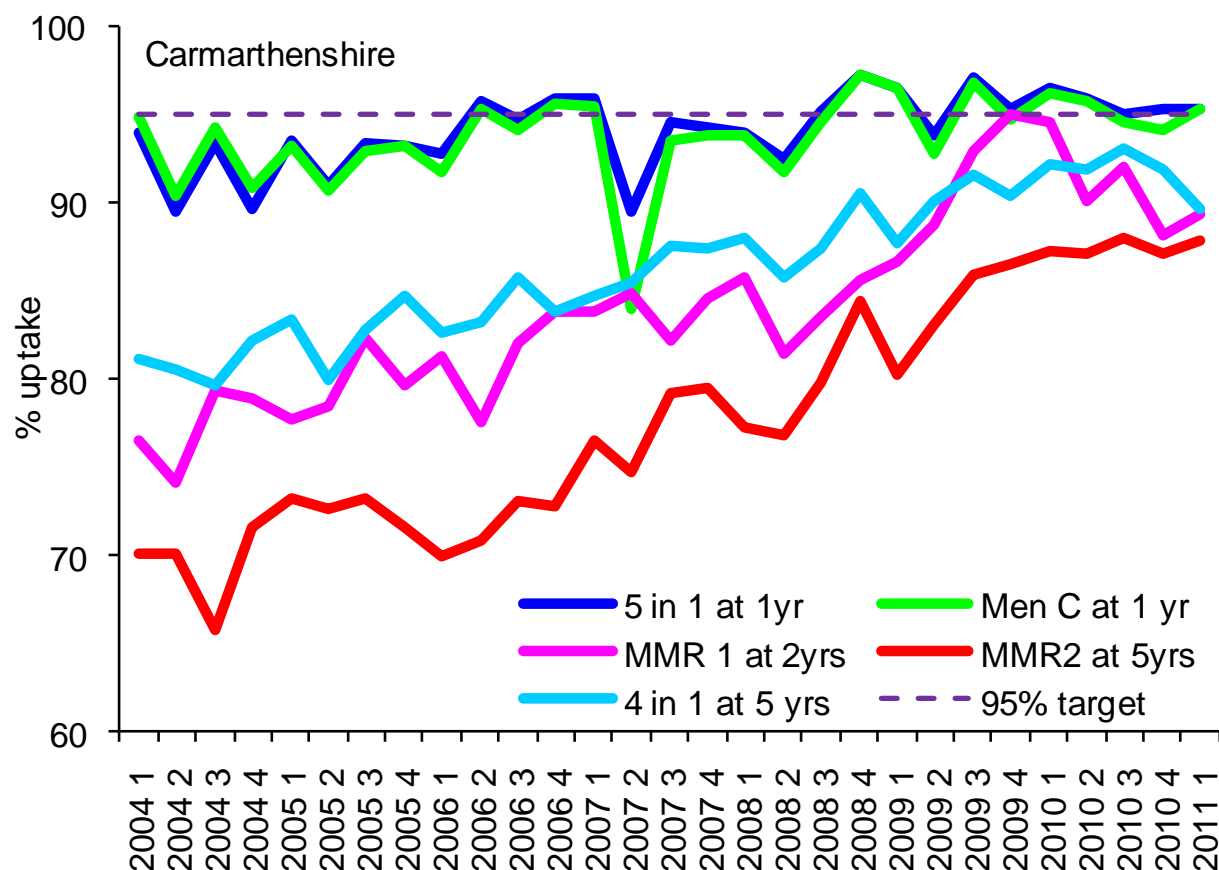
Produced by Public Health Wales Vaccine Preventable Disease Programme, from the Public Health Wales COVER reports

Hywel Dda HB Summary - COVER98



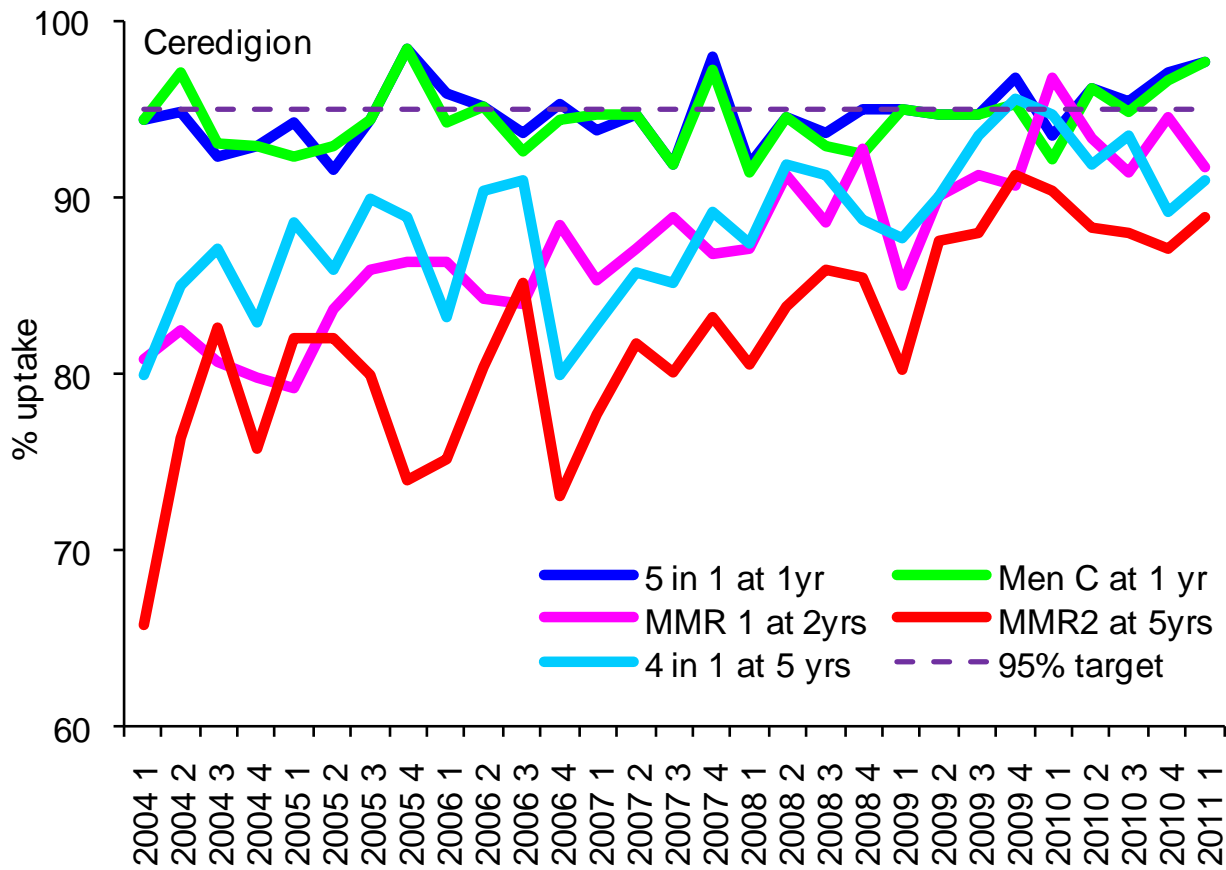
Routine childhood immunisation Carmarthenshire area, trends 2004-2011

Produced by Public Health Wales Vaccine Preventable Disease Programme, from the Public Health Wales COVER reports



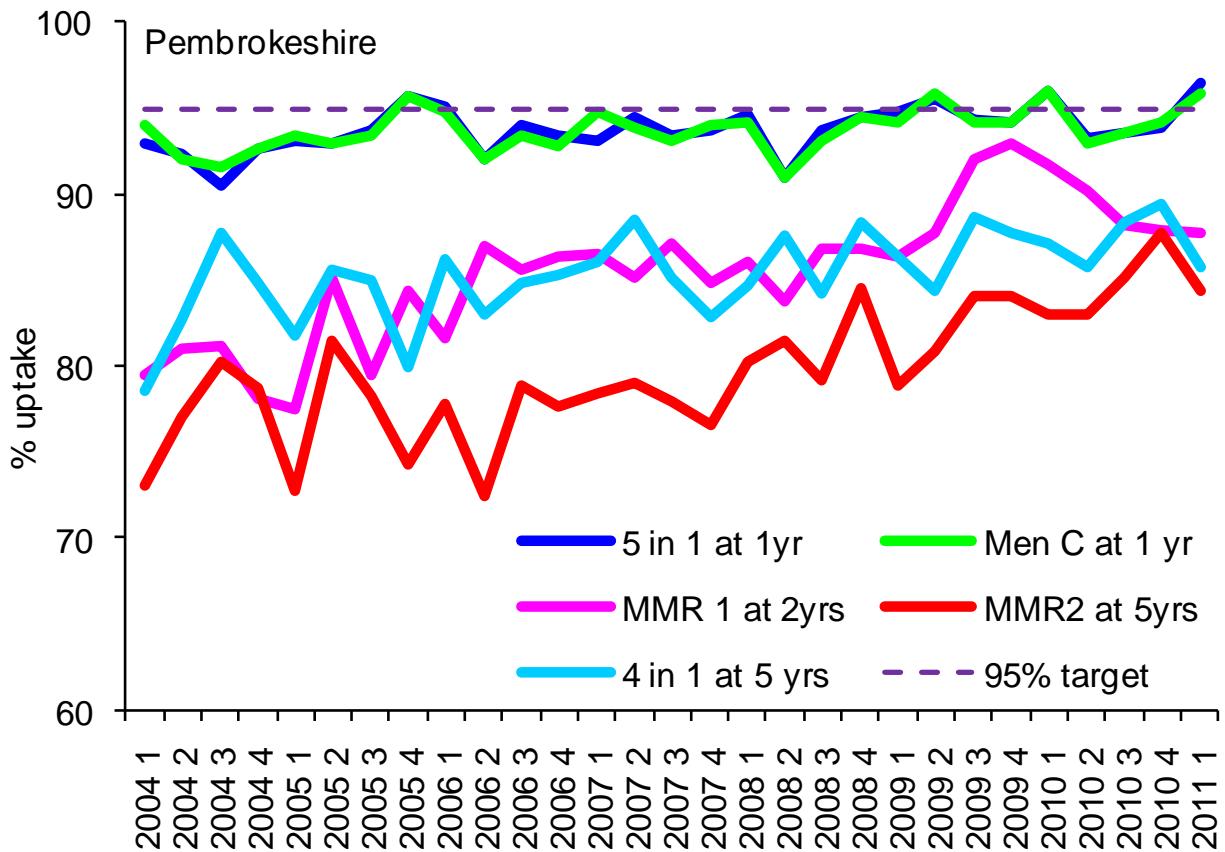
Routine childhood immunisation Ceredigion area, trends 2004-2011

Produced by Public Health Wales Vaccine Preventable Disease Programme, from the Public Health Wales COVER reports



Routine childhood immunisation Pembrokeshire area, trends 2004-2011

Produced by Public Health Wales Vaccine Preventable Disease Programme, from the Public Health Wales COVER reports



4.2.2 Seasonal influenza vaccination

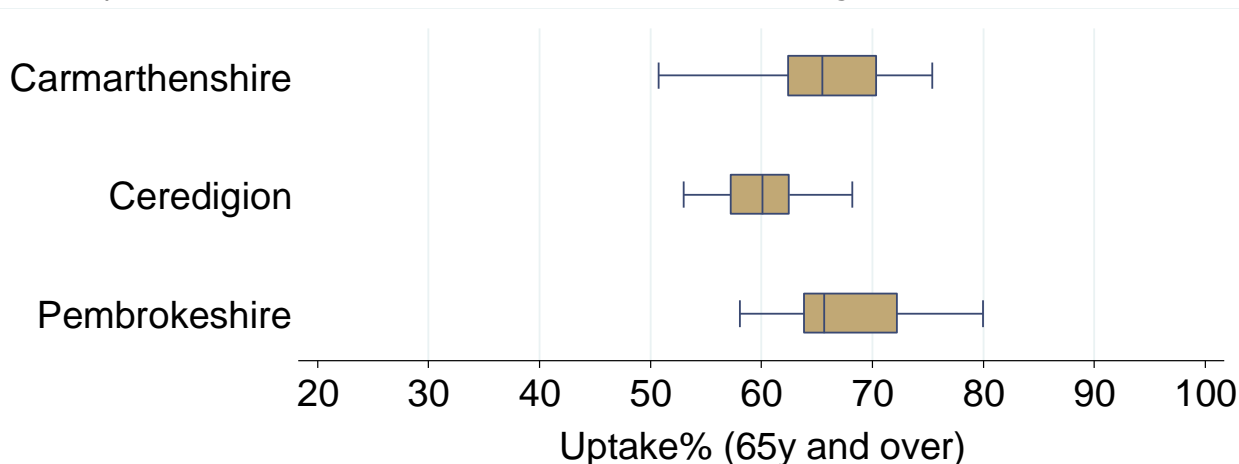
Uptake of seasonal influenza immunisation in Hywel Dda Health Board area, 2010/2011

Produced by Public Health Wales Vaccine Preventable Disease Programme, data source: Audit +

	Patients aged 65y and over			Patients aged under 65y at risk		
	Total patients	Patients immunised	Uptake (%)	Total patients	Patients immunised	Uptake (%)
Carmarthenshire	36,001	23,324	64.8	18,397	8,676	47.2
Ceredigion	19,402	11,610	59.8	8,368	3,732	44.6
Pembrokeshire	25,903	17,226	66.5	12,841	5,689	44.3
Health Board total	81,306	52,160	64.2	39,606	18,097	45.7

Distribution of practice level seasonal influenza immunisation uptake rates (patients aged 65 years and over), Hywel Dda Health Board area, 2010/2011

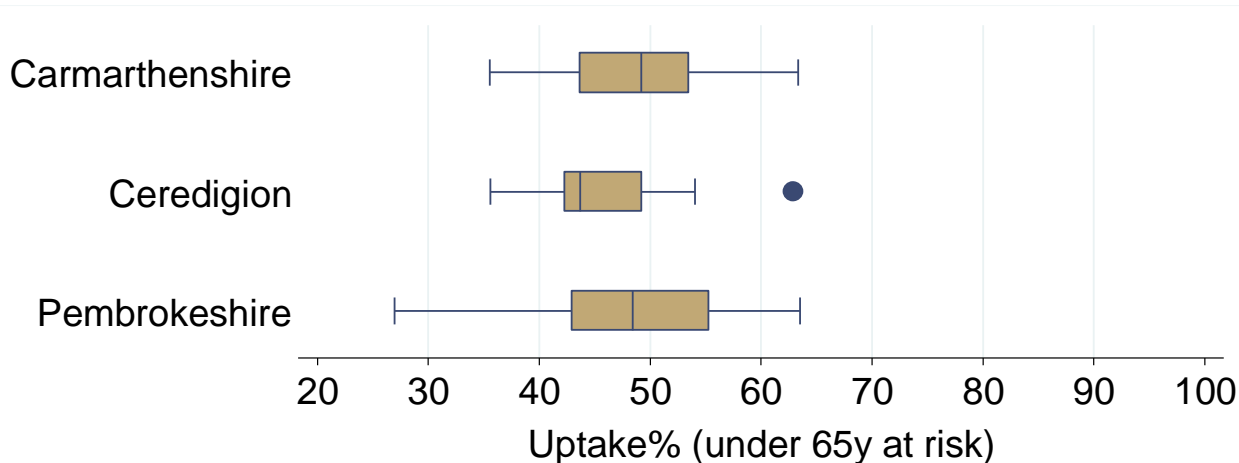
Produced by Public Health Wales Vaccine Preventable Disease Programme, data source: Audit +



Produced by Public Health Wales Vaccine Preventable Disease Programme
Data source: Audit Plus Data Quality System

Distribution of practice level seasonal influenza immunisation uptake rates (patients aged under 65 years at risk), Hywel Dda Health Board area, 2010/2011

Produced by Public Health Wales Vaccine Preventable Disease Programme, data source: Audit +



Produced by Public Health Wales Vaccine Preventable Disease Programme
Data source: Audit Plus Data Quality System

The line inside the shaded box represents the median practice uptake rate (half of the local authority practices have an uptake higher than the median value and half have an uptake lower than the median value). The shaded box represents the spread in uptake rates of the central 50% of practices, this is called the interquartile range. The whiskers extending above and below the shaded box represent the spread in practice uptake rates for the majority of practices within the local authority. Any practices with uptake rates that are very different from the majority of practices within the local authority are termed 'outliers' and appear as dots outside the whiskers.

4.3 Population Based National Screening Programmes in Wales

Screening is a process of identifying apparently healthy people who may be at increased risk of a disease or condition. They can then be offered information, further tests and appropriate treatment to reduce their risk and/or any complications arising from the disease or condition.

In the context of screening programmes:

Uptake is the proportion of people routinely invited for screening for who a screening test result is recorded within the same invitation episode. Uptake is an important measure of the acceptability of a screening programme. There are minimum uptake standards and targets set for each of the programmes.

Coverage is the proportion of people resident and eligible at a particular point in time who have been screened at least once in a defined time period (dependent on the screening interval of the different programmes).

4.3.1 Uptake of national screening programmes in Wales

Uptake of breast, bowel, cervical and newborn hearing screening programme statistics for Hywel Dda Health Board area, period 1 April 2009-31 March 2010 compared to all Wales

Produced by Screening Division, Public Health Wales

Screening programme	Age range / Test frequency in Wales	UK target rate	Wales rate	Hywel Dda	Carmarthenshire	Ceredigion	Pembrokeshire
Bowel Screening ¹	Currently 60-69 years / every 2 years	Uptake: 60%	55.3%	57.2%	57.6%	57.0%	56.6%
Breast Screening ²	50-70 years / every 3 years	Uptake: Minimum 70%, Target 80%	76.2%	79.5%	79.2%	78.7%	79.9%
Cervical Screening ³ (aged 20-64)	20-64 years / every 3 years	Coverage: 80% at 5 years (aged 25-64)	76.2%	74.9%	76.3%	69.1%	76.7%
Cervical Screening ⁴ (aged 25-64)	20-64 years / every 3 years	Coverage: 80% at 5 years (aged 25-64)	79.5%	78.9%	79.0%	77.9%	79.4%
Newborn Hearing Screening ⁵	Newborn babies / within first month of birth	Uptake: 95%	99.7%	99.4%	99.7%	97.9%	99.8%

Notes

1 Bowel: Uptake of people invited April 2009 to end of March 2010

2 Breast: uptake stated (of those routinely invited, number screened)

3 Cervical (aged 20-64): coverage stated, tested within 5 years

4 Cervical (aged 25-64): coverage stated, tested within 5 years - the 25-64 age range allows direct comparison with England

5 Newborn: uptake stated (of babies born, number tested)

4.4 Primary care services

4.4.1 Use of primary care as reported by adults

Hywel Dda Health Board adults who reported particular service use, Welsh Health Survey 2008 & 2009.

	Observed per cent	Age- standardised percent	Wales per cent
Health service use			
Family doctor (GP) in the past two weeks	17	17	18
In the past three months: Accident, injury or poisoning needing hospital treatment or a visit to casualty	6	6	5
In the past twelve months:			
Pharmacist	69	68	70
Dentist	72	72	70
Optician	50	49	49
Unweighted base (i)			
All aged 16+	3,803	3,803	29,331

Source: Welsh Health Survey 2008 + 2009

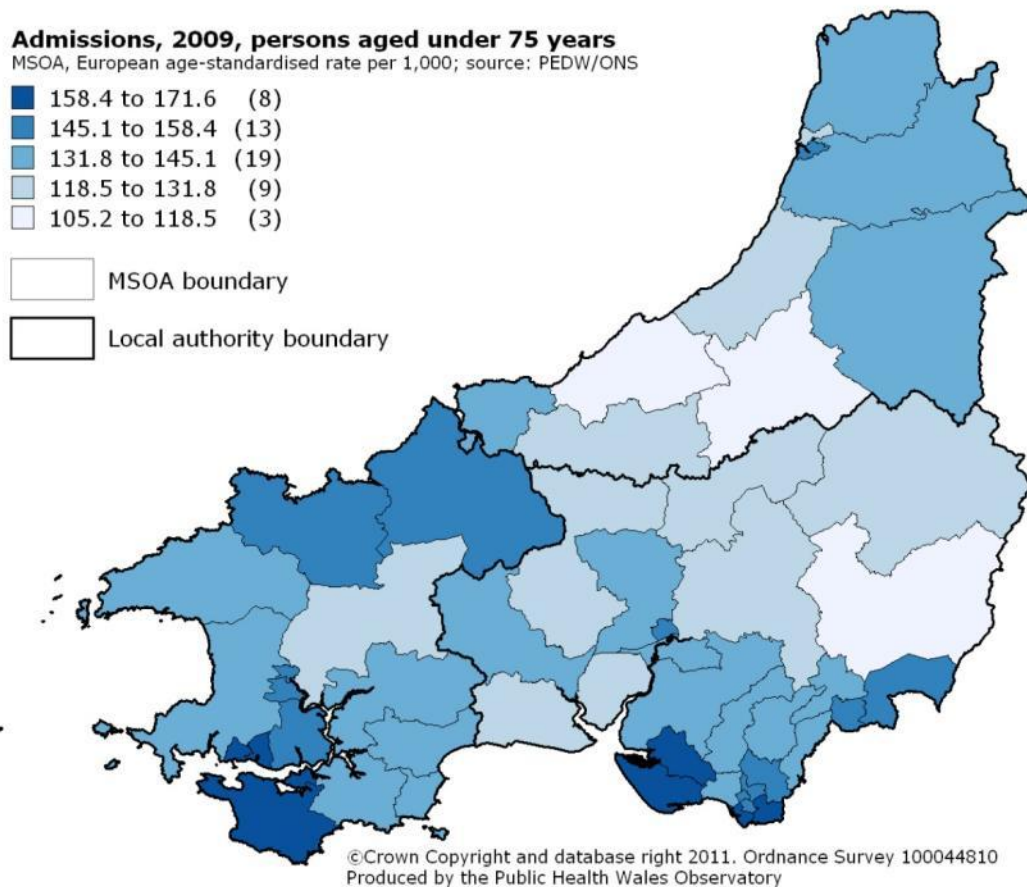
(i) Bases vary: those shown are for the whole sample.

Age standardised rate is standardised to the Wales population.

4.5 Use of secondary and tertiary care





4.5.1 Hospital admissions: individuals aged under 75

Middle super output areas

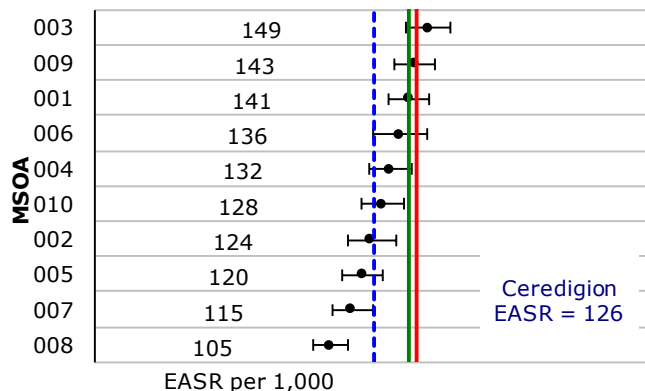


Hospital admissions in Hywel Dda Health Board area, persons aged under 75, 2009, European age-standardised rates per 1,000

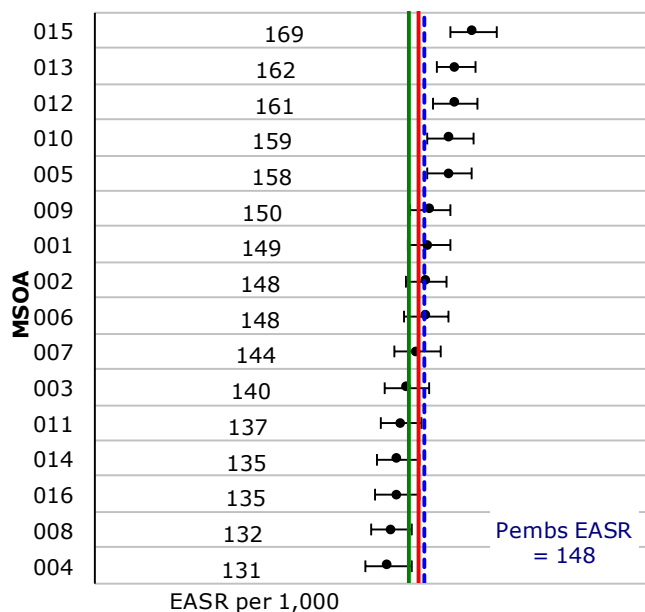
Produced by Public Health Wales Observatory, using data from NWIS (PEDW), ONS (MYE)

 MSOA EASR with 95% confidence interval
  Health Board (EASR = 141)
  Wales (EASR = 145)
  Local Authority

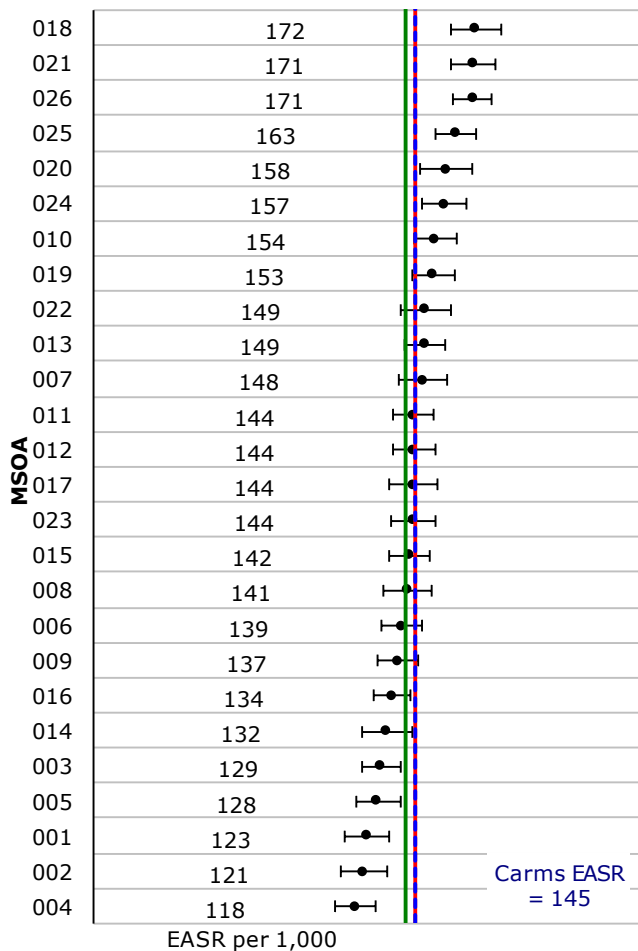
Ceredigion



Pembrokeshire



Carmarthenshire

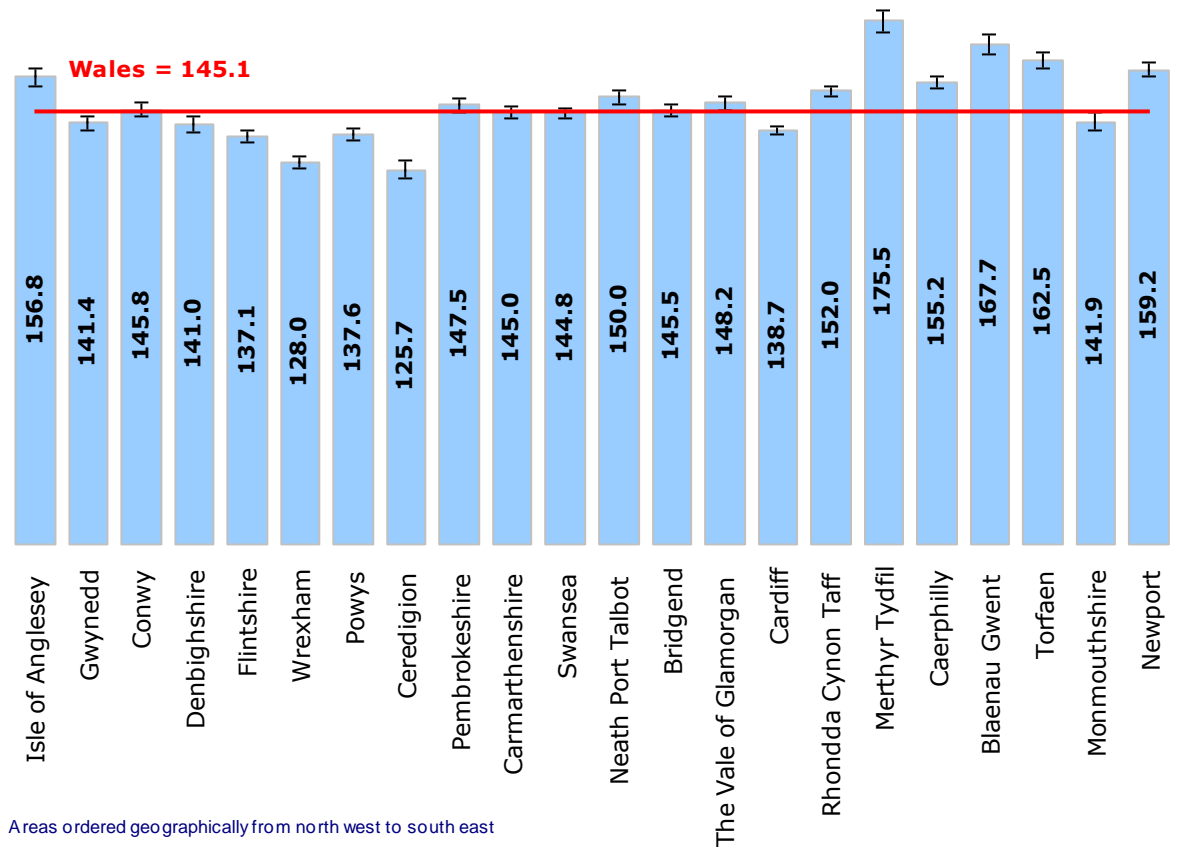


Local authorities

Hospital admissions by local authority, persons aged under 75, 2009, European age-standardised rates per 1,000

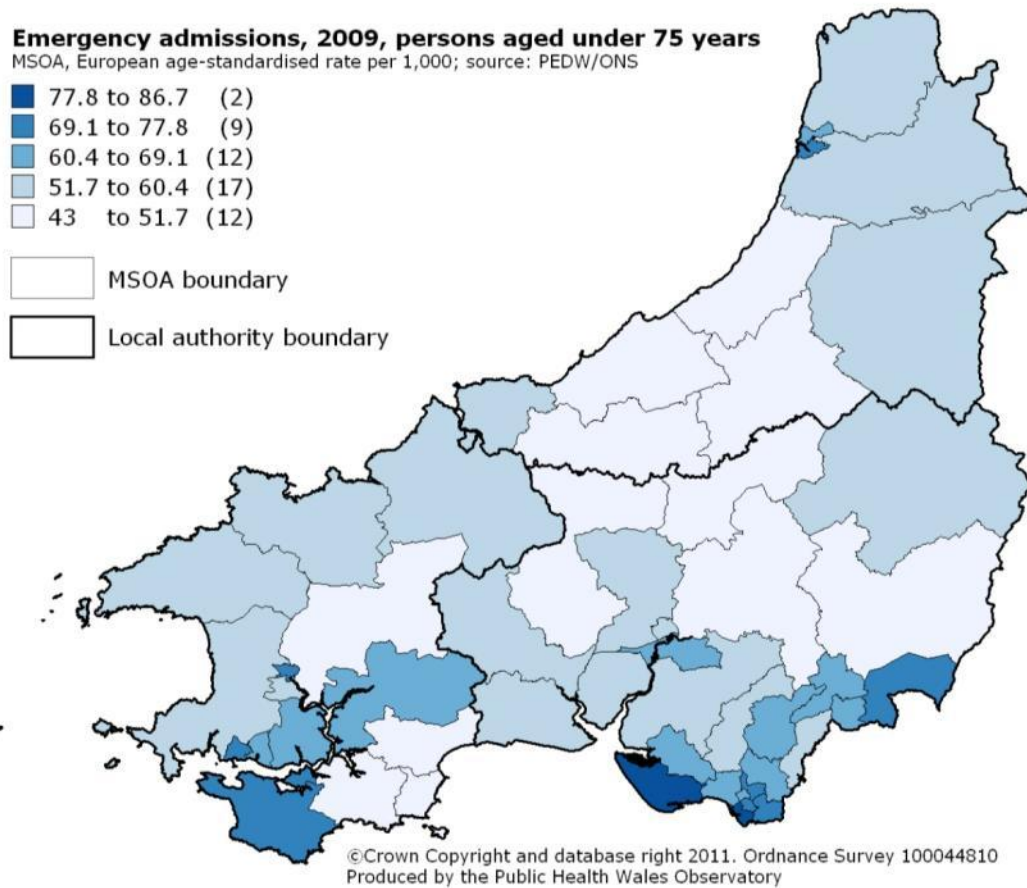
Produced by Public Health Wales Observatory, using data from NWS (PEDW), ONS (MYE)

95% confidence interval







4.5.2 Emergency hospital admissions: individuals aged under 75

Middle super output areas

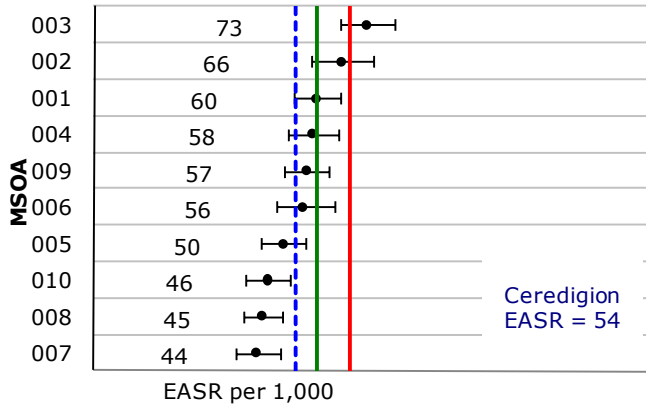


Emergency hospital admissions in Hywel Dda Health Board area, persons aged under 75, 2009, European age-standardised rates per 1,000

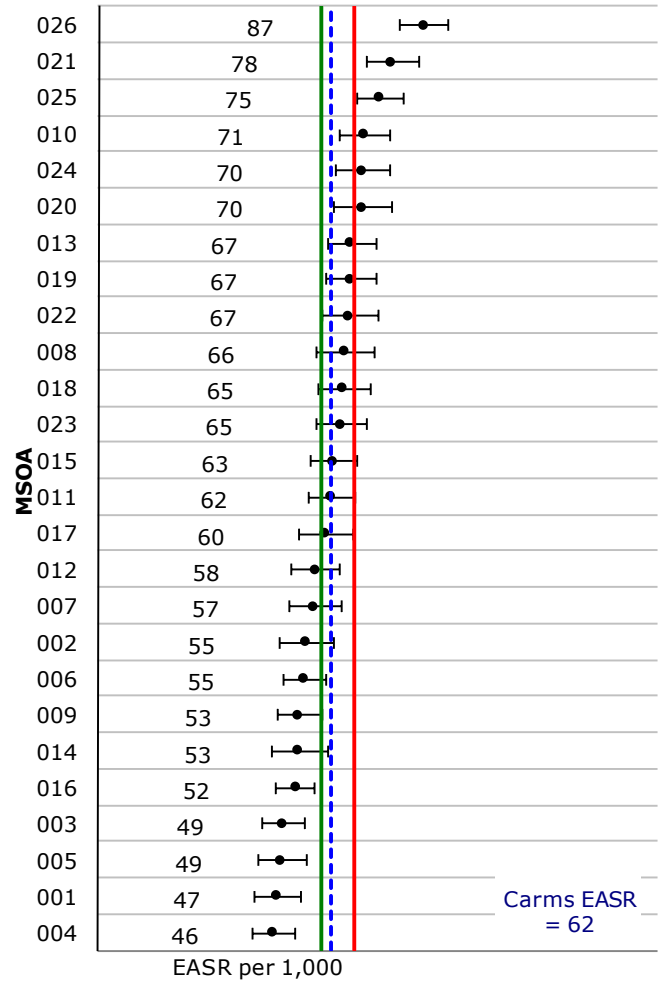
Produced by Public Health Wales Observatory, using data from NWIS (PEDW), ONS (MYE)

 MSOA EASR with 95% confidence interval
  Health Board (EASR = 59)
  Wales (EASR = 68)
  Local Authority

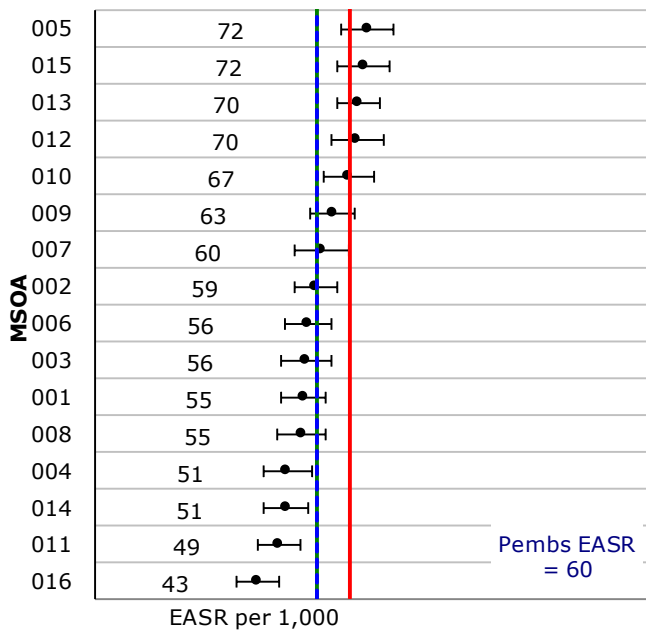
Ceredigion



Carmarthenshire



Pembrokeshire

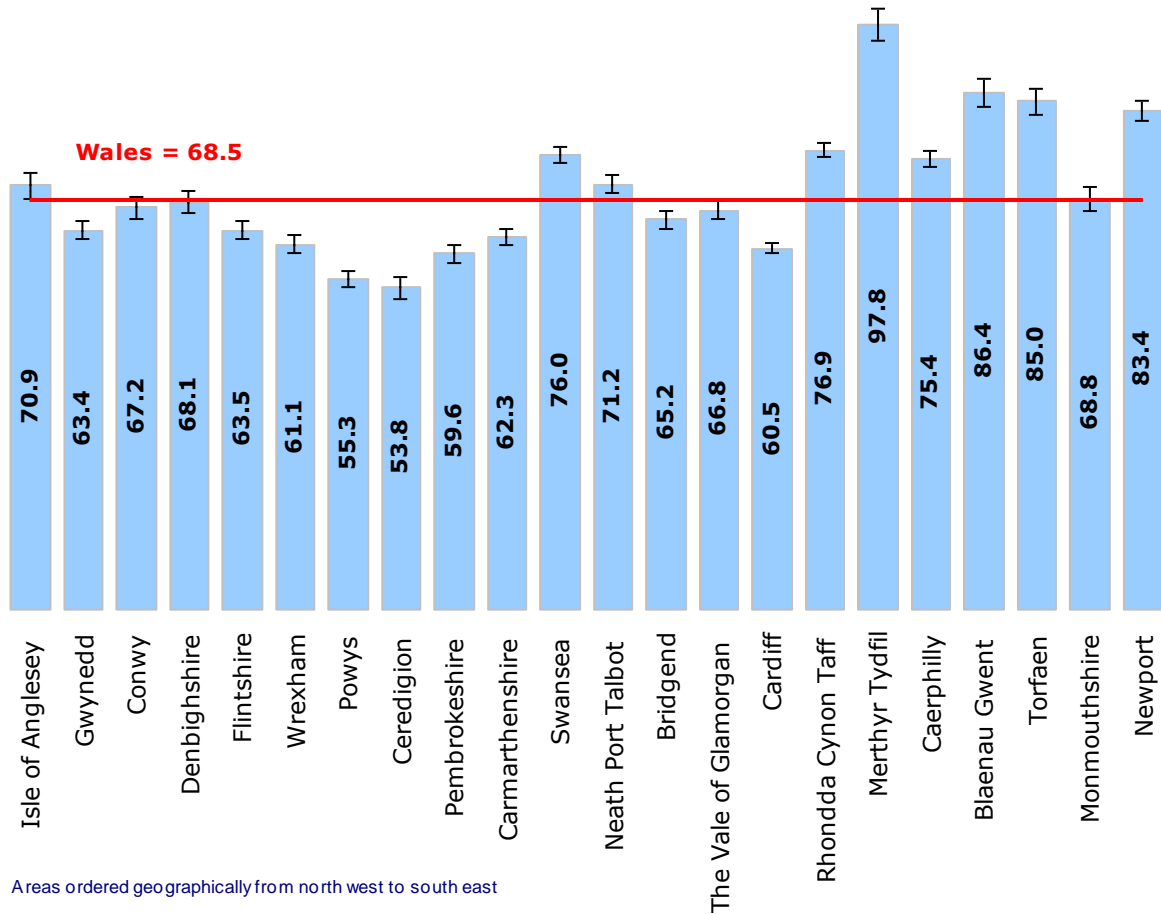


Local authorities

Emergency hospital admissions by local authority, persons aged under 75, 2009, European age-standardised rates per 1,000

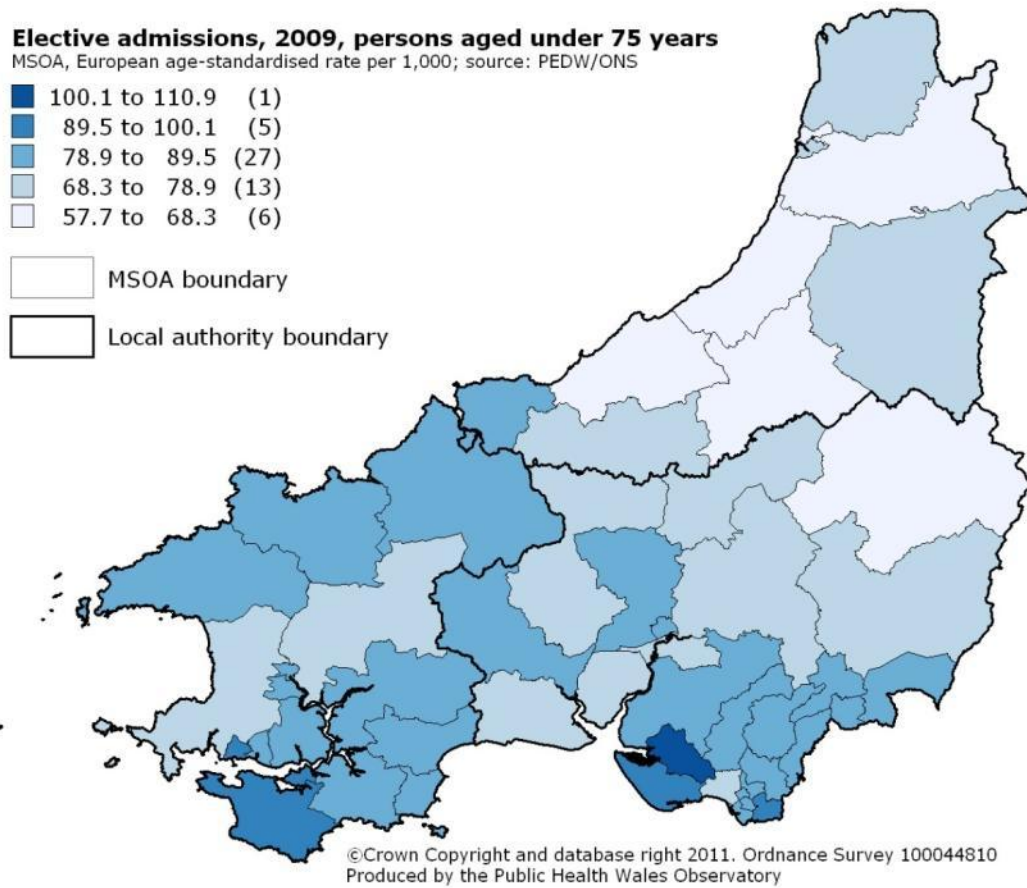
Produced by Public Health Wales Observatory, using data from NWS (PEDW), ONS (M YE)

95% confidence interval



4.5.3 Elective hospital admissions: individuals aged under 75

Middle super output areas

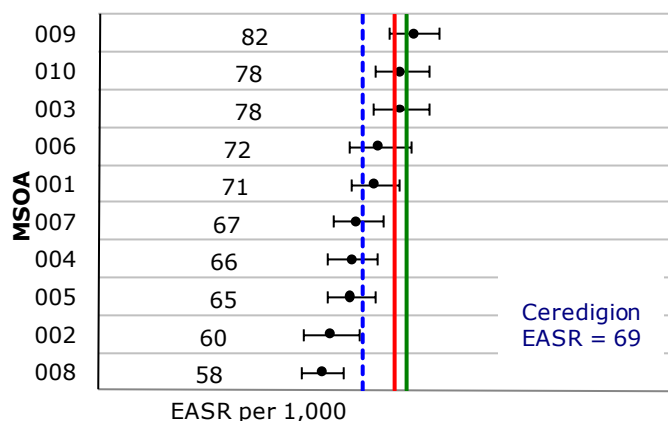


Elective hospital admissions in Hywel Dda Health Board area, persons aged under 75, 2009, European age-standardised rates per 1,000

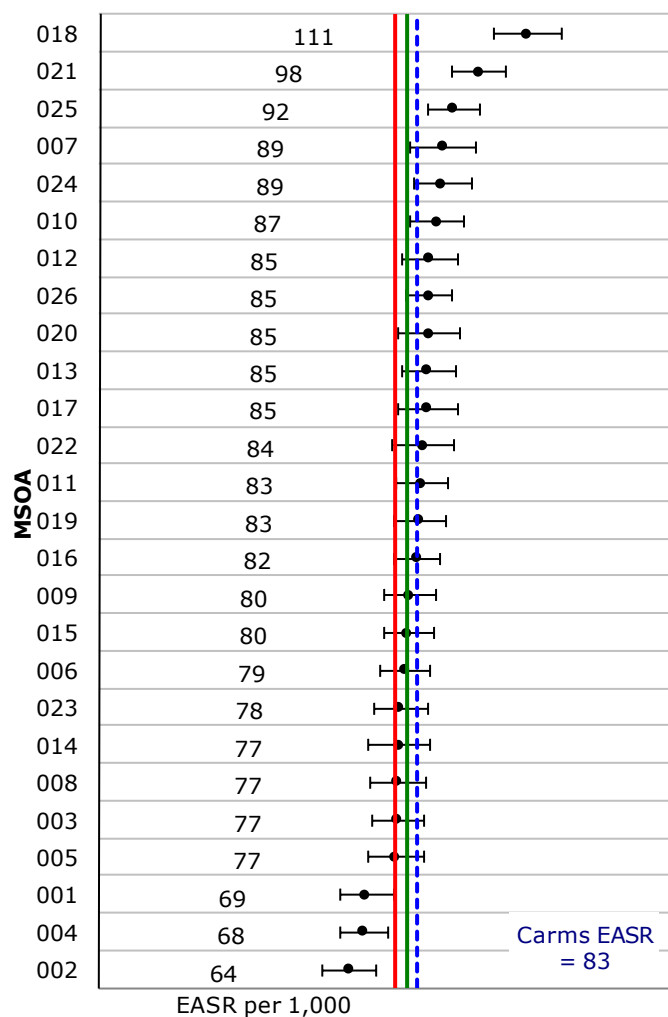
Produced by Public Health Wales Observatory, using data from NWIS (PEDW), ONS (MYE)

—•— MSOA EASR with 95% confidence interval — Health Board (EASR = 80) — Wales (EASR = 77) - - - Local Authority

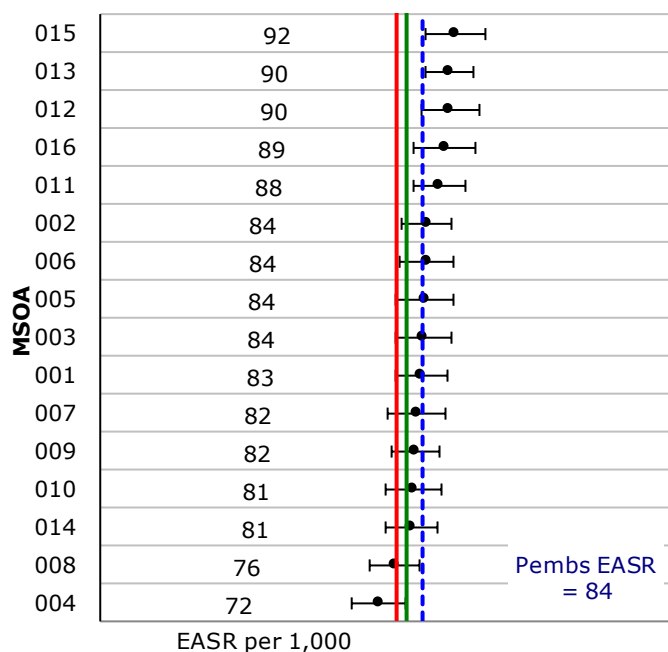
Ceredigion



Carmarthenshire



Pembrokeshire

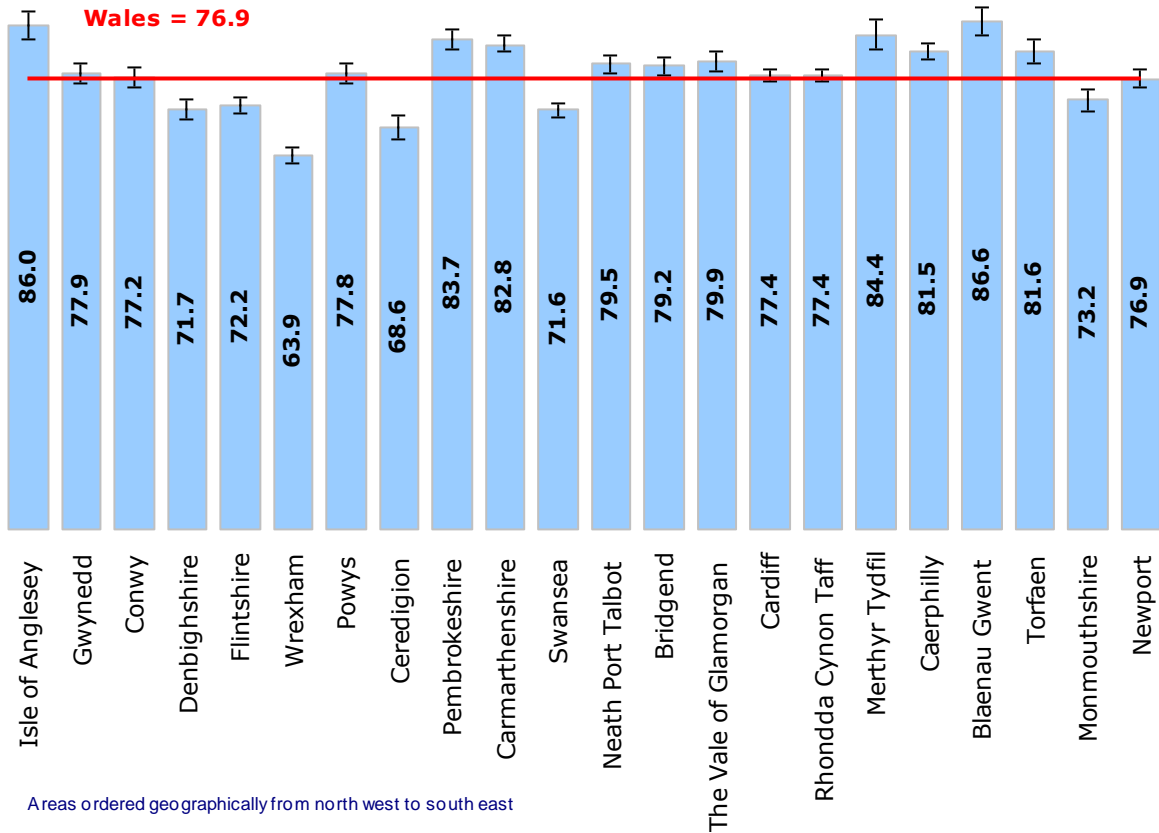


Local authorities

Elective hospital admissions by local authority, persons aged under 75, 2009, European age-standardised rates per 1,000

Produced by Public Health Wales Observatory, using data from NWIS (PEDW), ONS (M YE)

95% confidence interval



5 Health status

5.1 Health status: key points

There are consistent general patterns exhibited across the various indices of health status. Hywel Dda Health Board has generally better levels of health than Wales as a whole. Between the three local authority areas of the health board, Carmarthenshire shows the poorest levels of health and Ceredigion the best having taken account of age, however there is considerable variation within local authority areas.

Low birth weight

Low birth weight is associated with poor maternal health and lifestyle and there is increasing evidence to show an association with adverse effects later in life. The percentage of singleton live born babies weighing under 2500g in Hywel Dda Health Board is slightly lower than Wales, with Ceredigion having the lowest rate of the 22 local authority areas. At the MSOA level, the areas with the highest percentages are found in Hundleton; Monkton and Pembroke Dock areas in Pembrokeshire. Areas well below the Wales average are Newquay; Llangrannog; Penbryn and Llanarth in Ceredigion, and Llansteffan; Laugharne; Pendine; Llangynog; Llanllwch; Red Roses; Llandovery; Llansawel; Porthyrhyd and Pumsaint in Carmarthenshire.

Self-reported health status

The Welsh Health Survey contains a number of questions on health status, including the SF36 questionnaire which can be summarised into overall physical and mental health scores. The latest results show that self reported physical and mental health scores are better in Hywel Dda Health Board than in Wales as a whole. At the local authority level, self reported physical and mental health scores are generally worse in Carmarthenshire when compared with Ceredigion or Pembrokeshire. The data also show that a higher percentage of adults in Hywel Dda Health Board reported having a limiting long term illness in comparison to Wales (which includes problems related to old age). This is due to the particularly high rate in Carmarthenshire; almost three in ten adults resident in the area reporting a limiting long term illness. Looking at persons reporting current treatment for a mental health condition, the overall health board rate is slightly lower than Wales, but the rate in Carmarthenshire matches Wales.

Mortality from specific conditions

Circulatory disease includes heart disease and stroke and is the most common underlying cause of death in Wales. Lifestyle factors such as diet, exercise, alcohol consumption and especially smoking are known to be implicated in circulatory disease. The European age-standardised mortality rate in all persons for Hywel Dda Health Board is comparable to Wales but there is a substantial variation across local authorities in the health board area. Ceredigion exhibits the lowest local authority rate in Wales while the Carmarthenshire rate is much higher than Wales. At MSOA level the variation is even greater with the rate between the lowest and highest areas more than doubling. The lowest rates are found in the areas of

New Quay; Llangrannog; Llanarth and Penbryn in Ceredigion. The highest rate by far is found in the Capel and Lliedi areas in Carmarthenshire. When looking at mortality rates from circulatory disease in persons under 75 years only, the pattern is broadly similar although notably the rate for the Capel and Lliedi areas of Carmarthenshire is marginally below the Wales average for the age group; the highest rate is found in parts of Haverfordwest in Pembrokeshire.

Coronary heart disease is a sub-category within circulatory disease and includes heart attacks. Smoking is a major cause of coronary heart disease. The European age-standardised mortality rate for Hywel Dda Health Board is slightly better than the Wales rate and there is some variation across local authorities; the Carmarthenshire rate is similar to Wales while the rates for Ceredigion and Pembrokeshire are below. At MSOA level, once again, variation is high. The pattern is similar to that for circulatory disease with the lowest rates in New Quay; Llangrannog; Penarth and Llanarth in Ceredigion, and the highest rates are found in Cross Hands; Penygroes; Llannon and Tumble in Carmarthenshire.

Cancer is the second most common cause of death in Wales. Causes of cancer are multifactorial, varying depending on the site but smoking and other lifestyle factors are important risk factors. The European age-standardised mortality rate for Hywel Dda Health Board is lower than Wales and at local authority level, Ceredigion has the lowest local rate in Wales. At MSOA level there is significant variation. The lowest rates are located in the Lampeter, Llanfihangel Ystrad, Llangybi and Llanwenog areas of Ceredigion. Pembroke Dock in Pembrokeshire is where the highest rates of cancer mortality are found.

Respiratory disease is a very common cause of death. Once again, smoking is a major risk factor for respiratory disease. The European age-standardised mortality rate for Hywel Dda Health Board is lower than Wales but there is substantial variation across the local authorities in the health board area; the rates for Ceredigion and Pembrokeshire are very similar and well below the Wales rate, whereas the rate for Carmarthenshire is on a par with Wales. At the MSOA level there is considerable variation with the rate almost quadrupling between lowest and highest. The wider confidence intervals on the caterpillar charts are indicative of the fact that there are fewer respiratory disease deaths than for cancer or circulatory disease. The lowest rates are found in Carew, Lamphey, Cosheston, Manorbier, and Milton in Pembrokeshire. The highest rates are again found in Lliedi, Capel, Seaside, Morfa, Machynys and Tyisha in Carmarthenshire.

Cancer survival

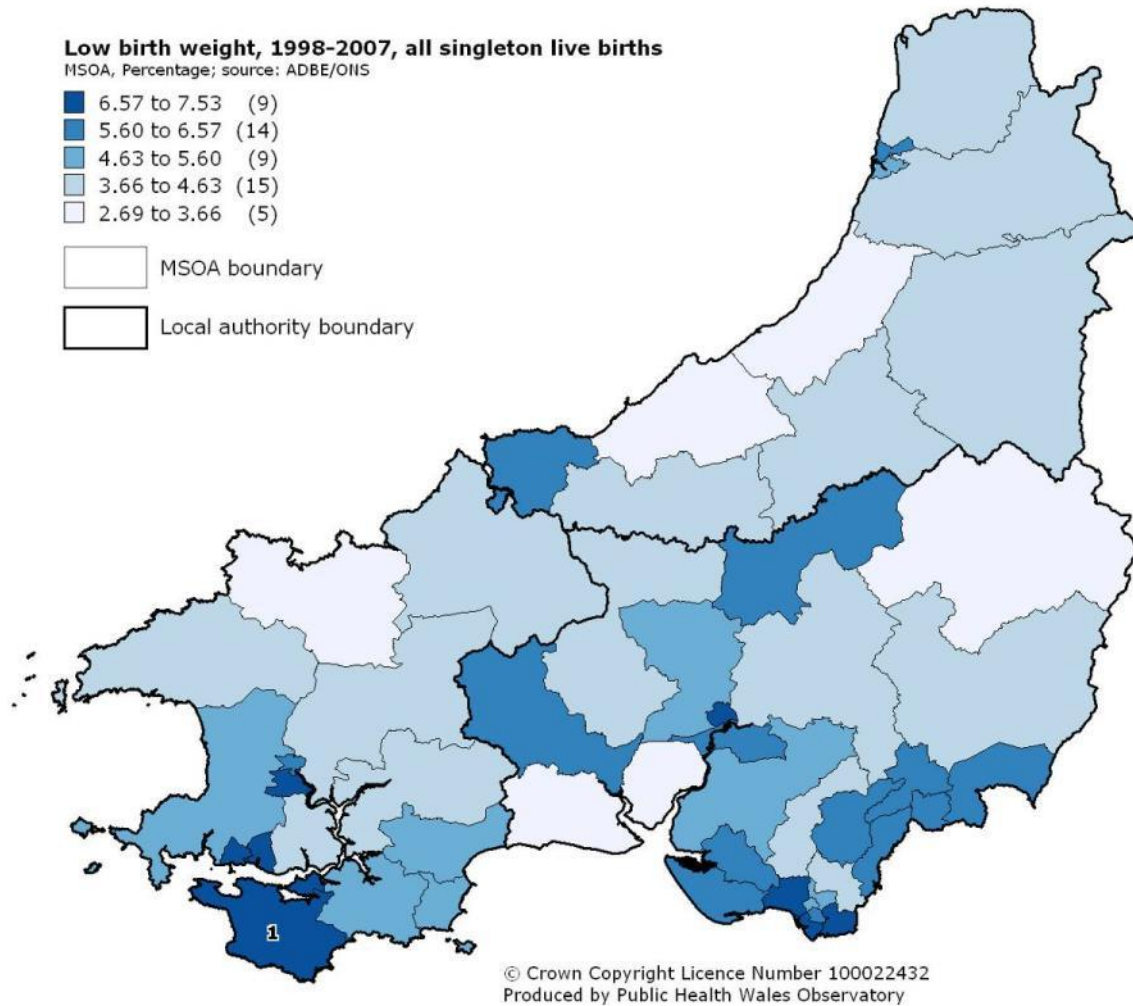
Relative survival is the most widely used method in population studies. It is the ratio of the survival observed in the group of cancer patients to the survival that would be expected if they were subject to the same overall mortality rates by age, sex and calendar period as the general population. The expected probabilities are obtained from life tables for Wales that provide the life expectancy of persons for a given year by age and sex. The problems arising with crude survival are therefore overcome. It enables one to measure variations in cancer survival (or its complement, mortality) independently of variations in expected (background) mortality associated with various factors (age and sex in these analyses). The regional data for Wales indicate a steady improvement in one year relative survival for both males and females.

The site-specific one and five year relative survival figures indicate that there is little difference between Hywel Dda Health Board and Wales as a whole except for lung cancer in females where the five year survival was statistically significantly worse than Wales.

5.2 Physical and mental health

5.2.1 Low birth weight

Middle super output areas



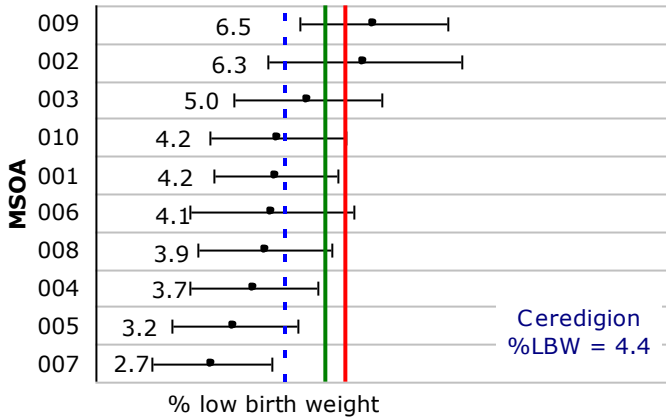
Numbers on map indicate MSOAs with a rate statistically significantly higher than the all Wales rate.

Low birth weight in Hywel Dda Health Board area, percentage of singleton live births, 1998-2007

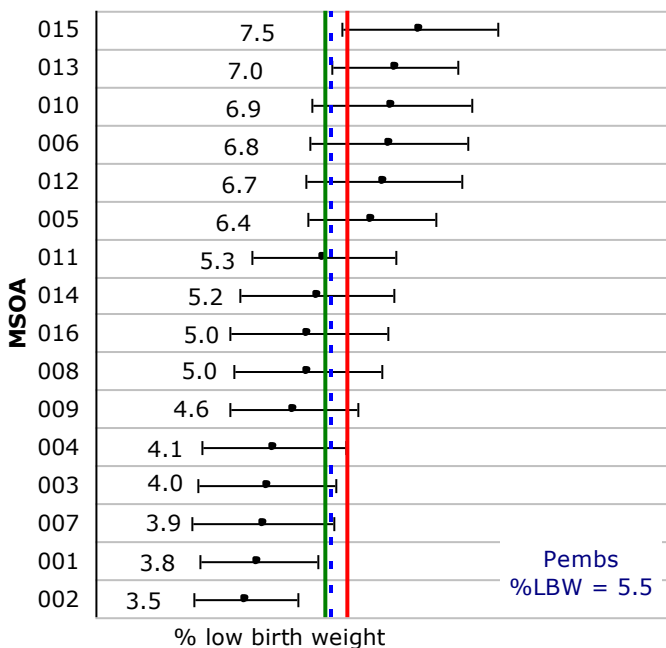
Produced by Public Health Wales Observatory, using data from ONS (ADBE, MYE)

—●— MSOA % with 95% confidence interval — Health Board (5.4%) — Wales (5.8%) - - - Local Authority

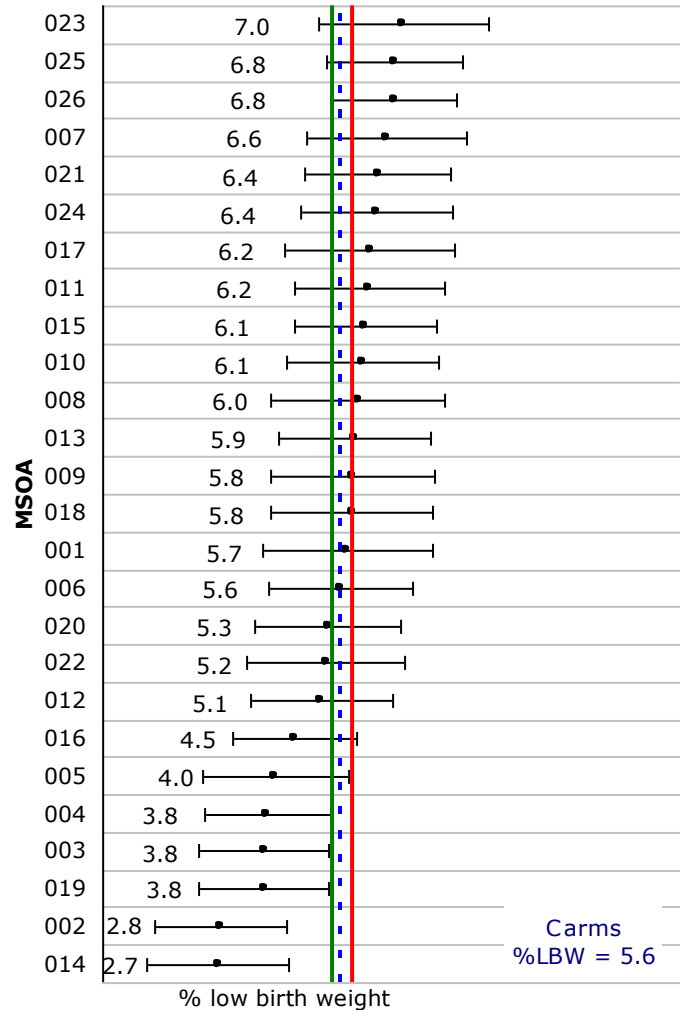
Ceredigion



Pembrokeshire



Carmarthenshire

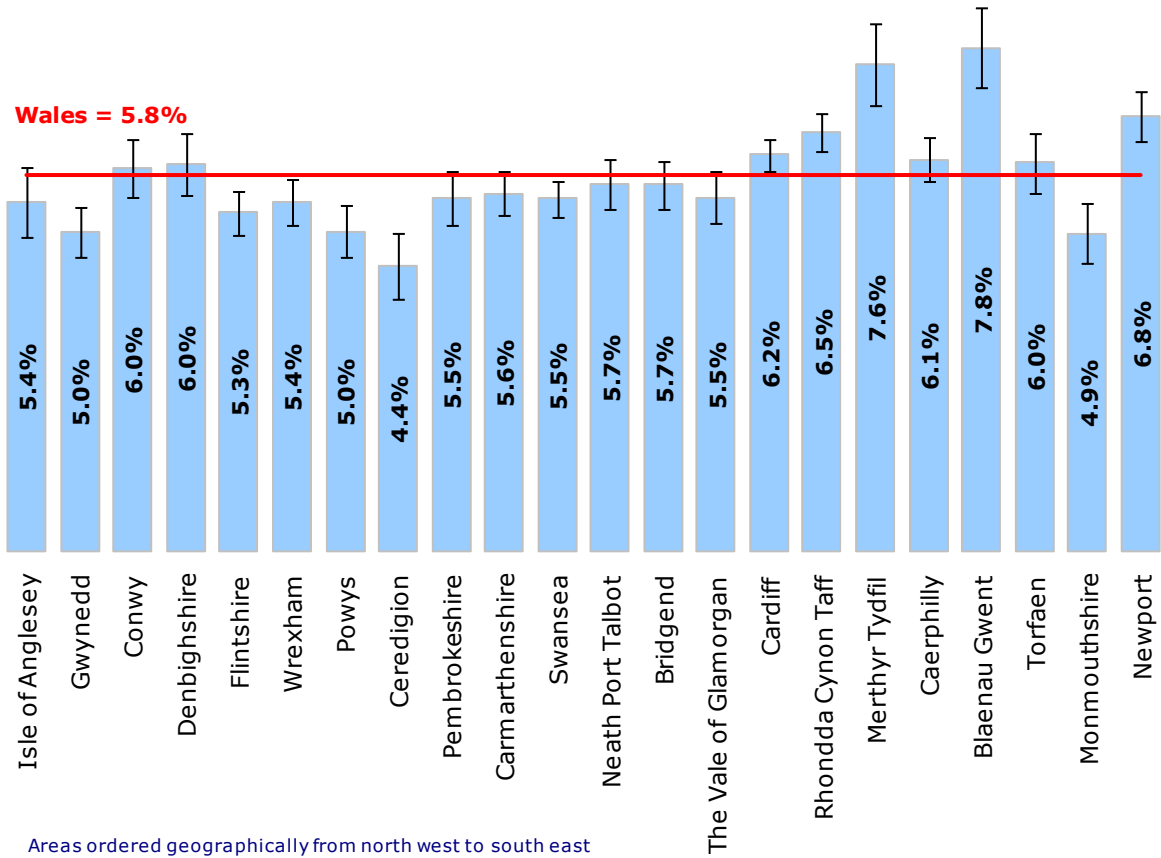


Local authorities

Low birth weight by local authority, percentage of singleton live births, 1998-2007

Produced by Public Health Wales Observatory, using data from ONS (ADBE, MYE)

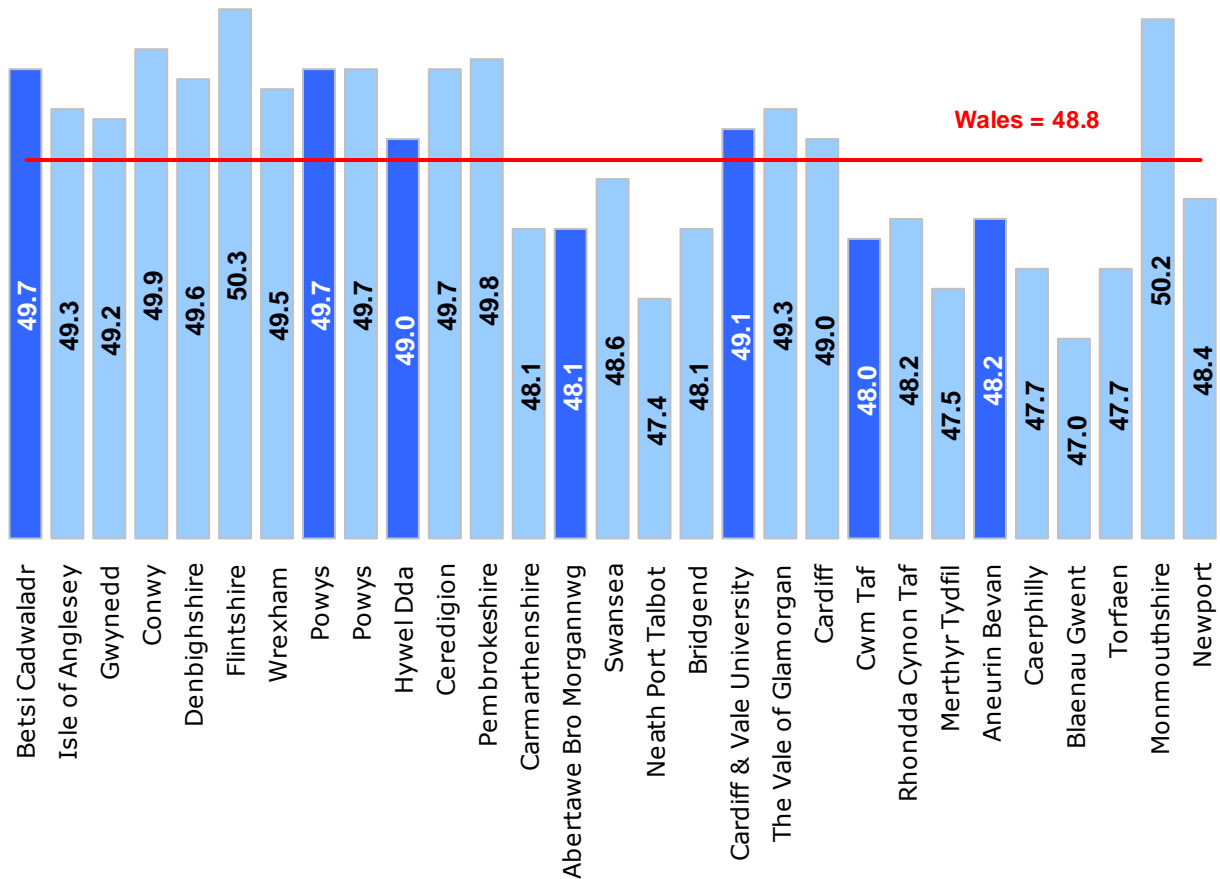
95% confidence interval



5.2.2 Physical health as reported by adults*

Mean SF-36 Physical component summary score by local authority and health board, age standardised rate, 2008-2009

Produced by Public Health Wales Observatory using data from the Welsh Health Survey, 2008 and 2009



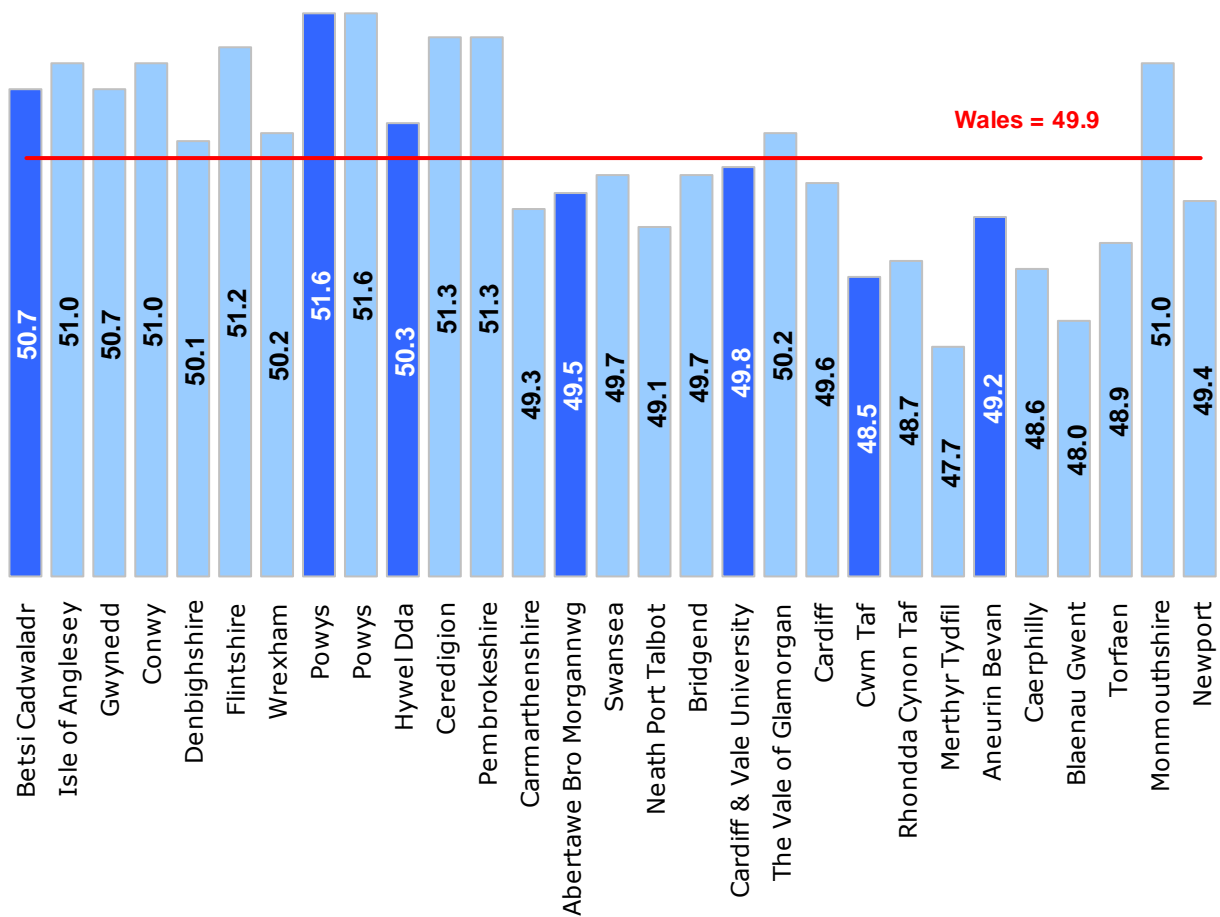
Areas ordered geographically from north west to south east

* Y-axis is truncated to 45

5.2.3 Mental health as reported by adults*

Mean SF-36 Mental component summary score by local authority and health board, age standardised rate, 2008-2009

Produced by Public Health Wales Observatory using data from the Welsh Health Survey, 2008 and 2009



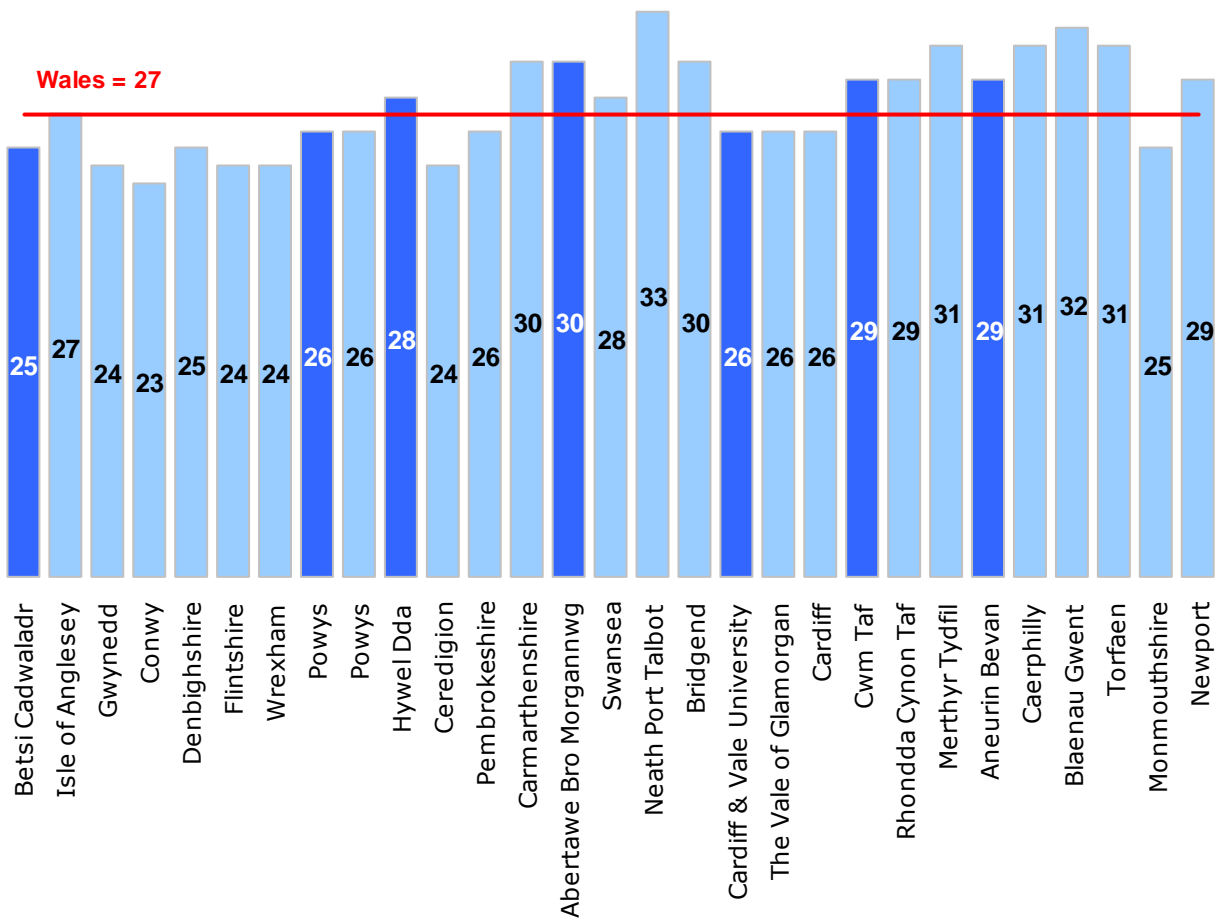
Areas ordered geographically from north west to south east

* Y-axis is truncated to 45

5.2.4 Limiting long term illness as reported by adults

Adults who reported having a limiting long-term illness by local authority and health board, age standardised percentage, 2008-2009

Produced by Public Health Wales Observatory using data from the Welsh Health Survey, 2008 and 2009

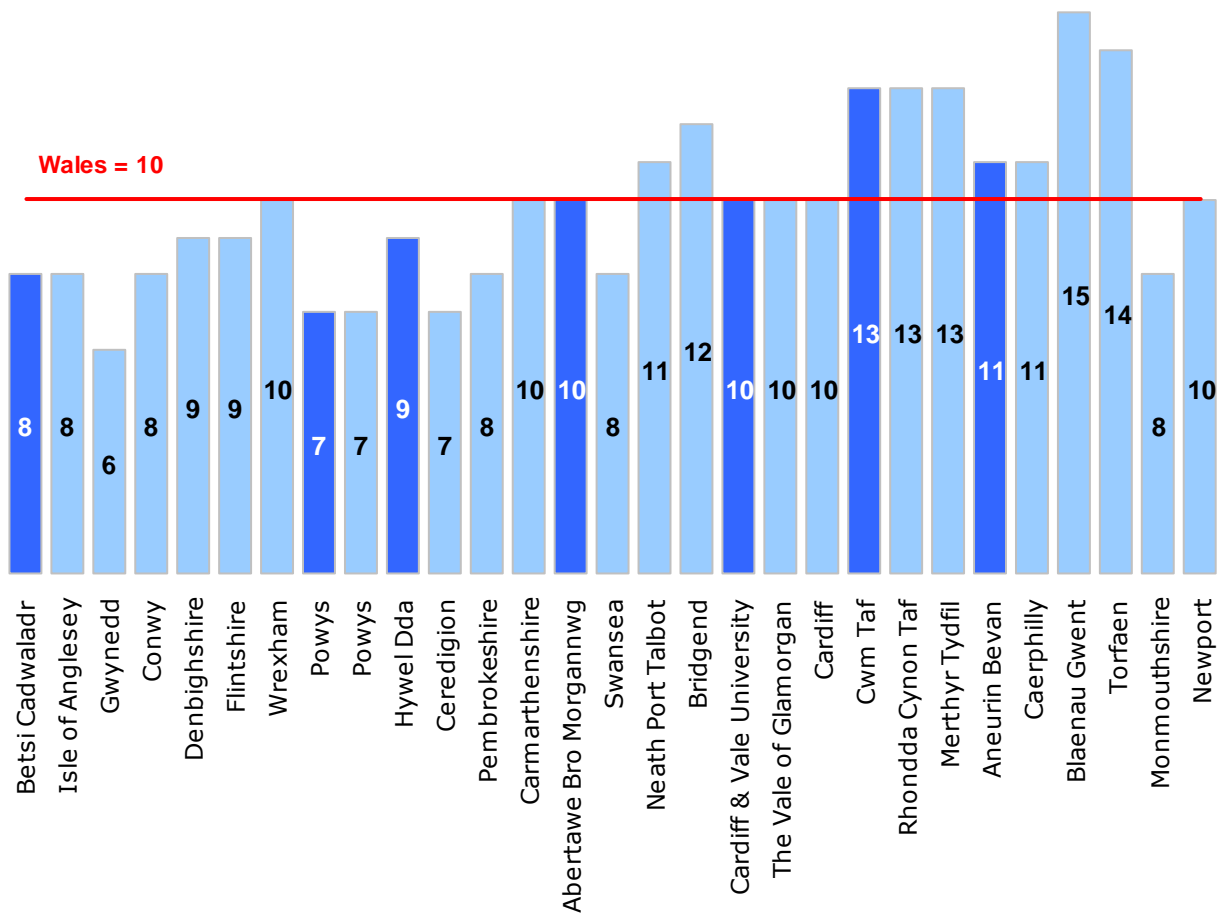


Areas ordered geographically from north west to south east

5.2.5 Mental illness as reported by adult

Adults who reported currently being treated for a mental illness by local authority and health board, age standardised percentage, 2008-2009

Produced by Public Health Wales Observatory using data from the Welsh Health Survey, 2008 and 2009

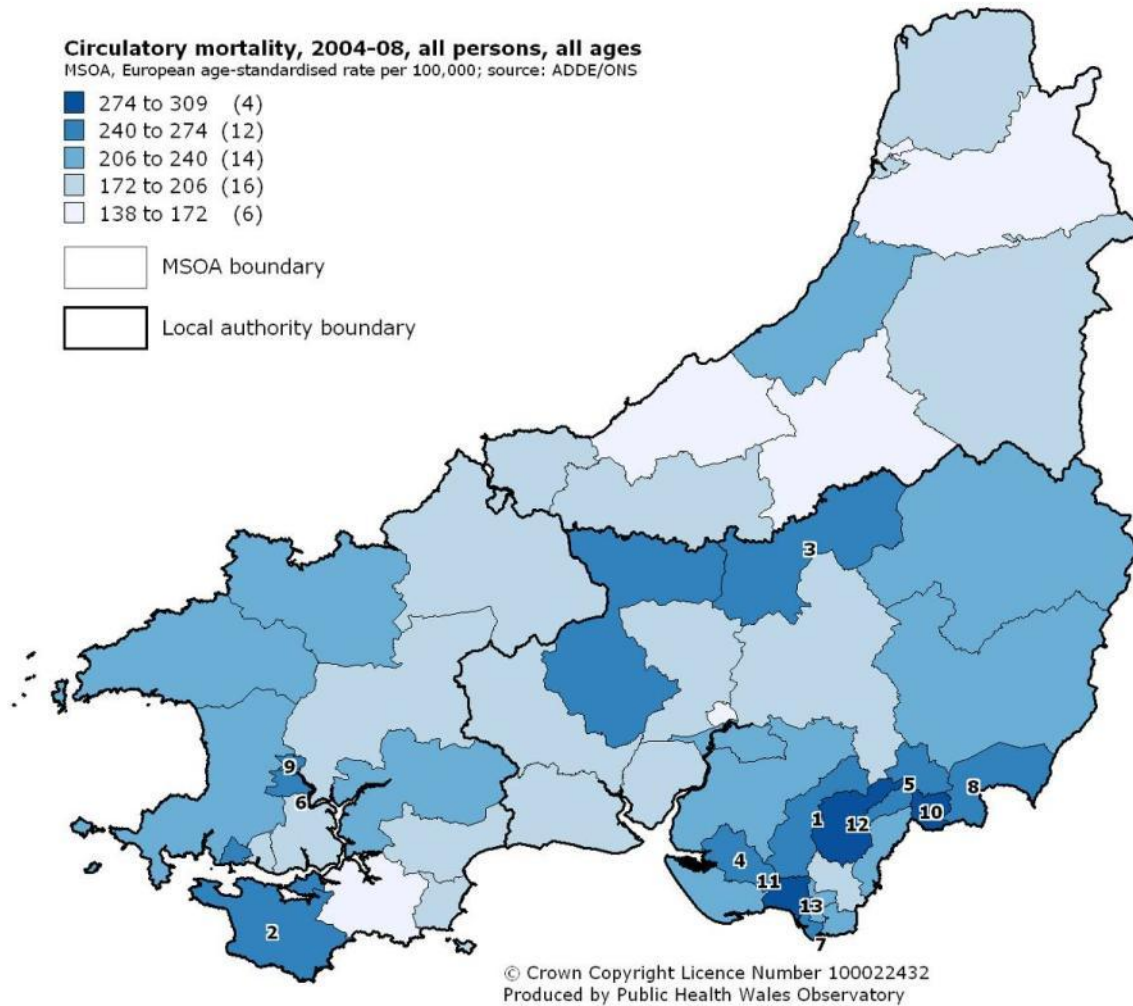


Areas ordered geographically from north west to south east

5.3 Mortality from specific conditions

5.3.1 Mortality from circulatory disease, all ages

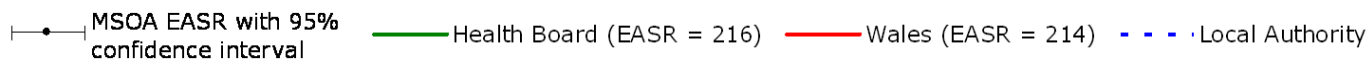
Middle super output areas



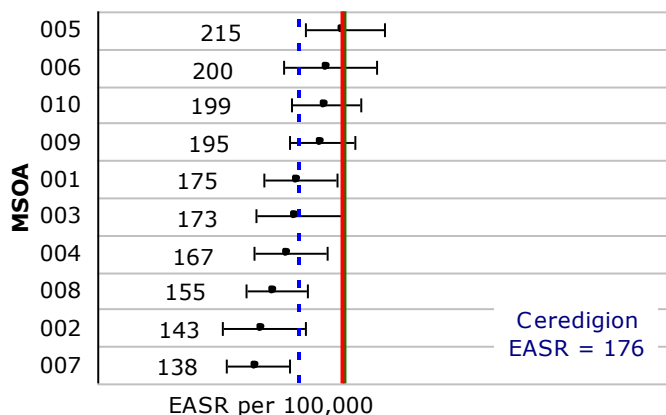
Numbers on map indicate MSOAs with a rate statistically significantly higher than the all Wales rate.

Mortality from circulatory disease in Hywel Dda Health Board area, all persons, 2004-08, European age-standardised rates per 100,000

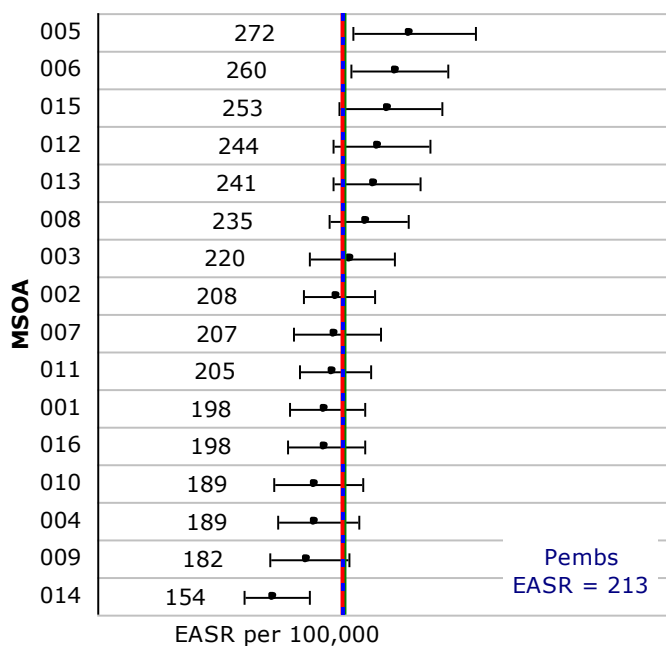
Produced by Public Health Wales Observatory, using data from ONS (ADDE, MYE)


 MSOA EASR with 95% confidence interval Health Board (EASR = 216) Wales (EASR = 214) Local Authority

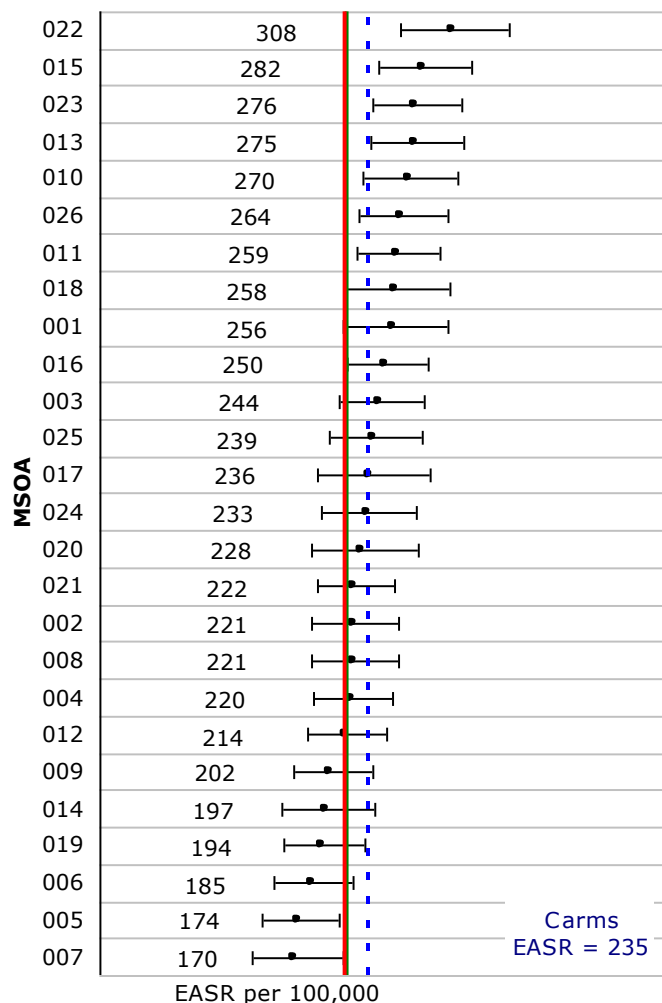
Ceredigion



Pembrokeshire



Carmarthenshire

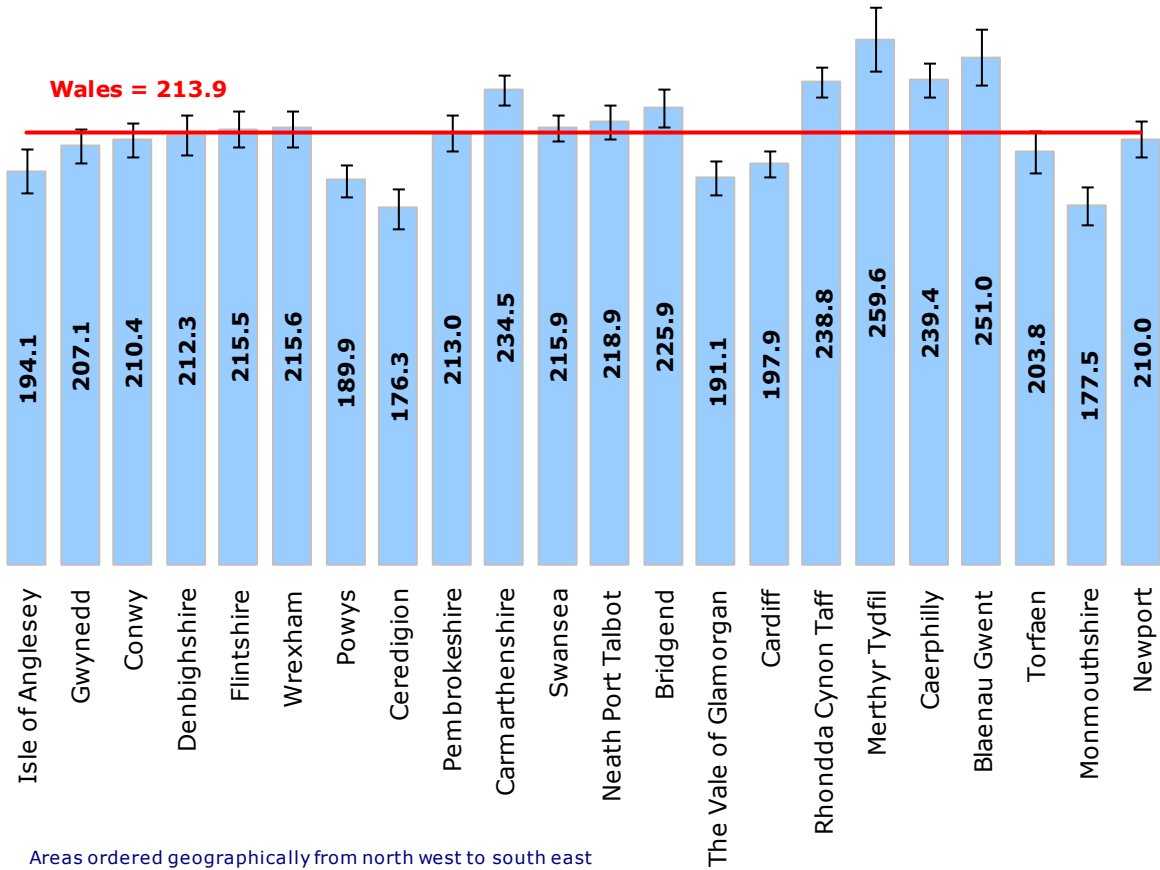


Local authorities

Mortality from circulatory disease by local authority, all persons, 2004-08, European age-standardised rates per 100,000

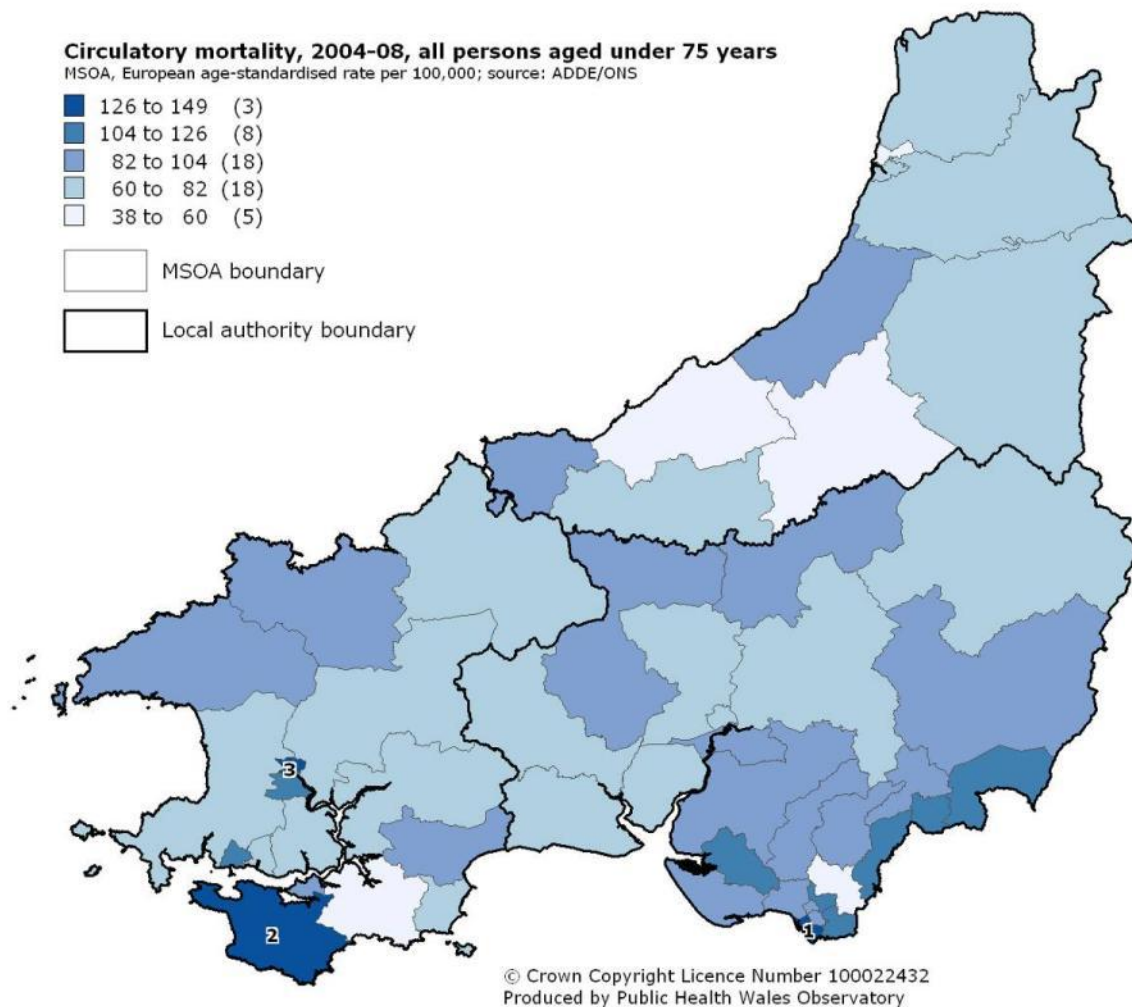
Produced by Public Health Wales Observatory, using data from ONS (ADDE, MYE)

95% confidence interval



5.3.2 Mortality from circulatory disease, under 75s

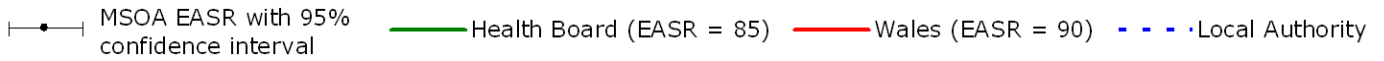
Middle super output areas



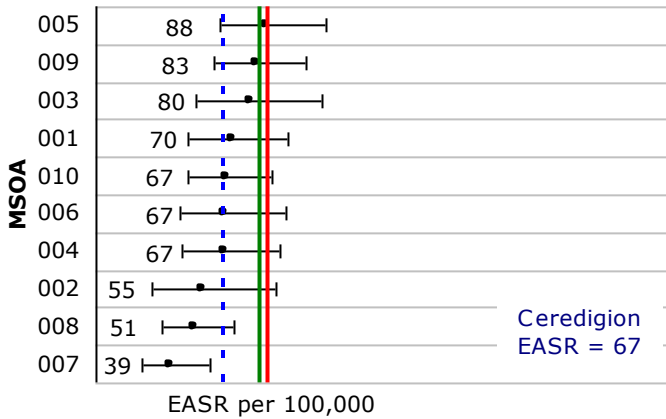
Numbers on map indicate MSOAs with a rate statistically significantly higher than the all Wales rate.

Mortality from circulatory disease in Hywel Dda Health Board area, all persons aged under 75, 2004-08, European age-standardised rates per 100,000

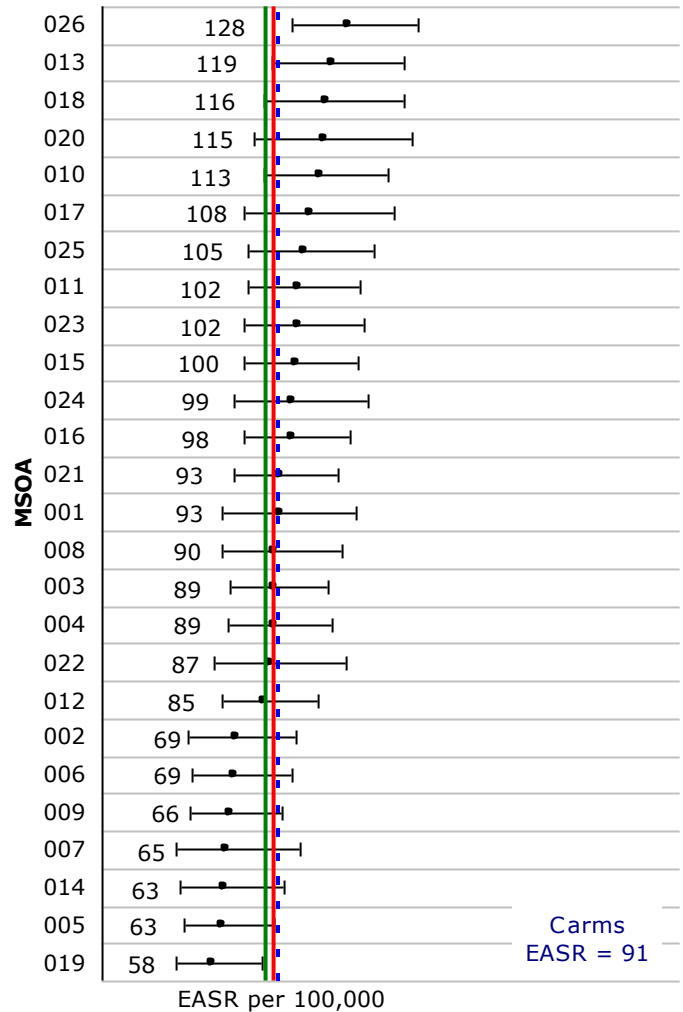
Produced by Public Health Wales Observatory, using data from ONS (ADDE, MYE)


MSOA EASR with 95% confidence interval Health Board (EASR = 85) Wales (EASR = 90) Local Authority

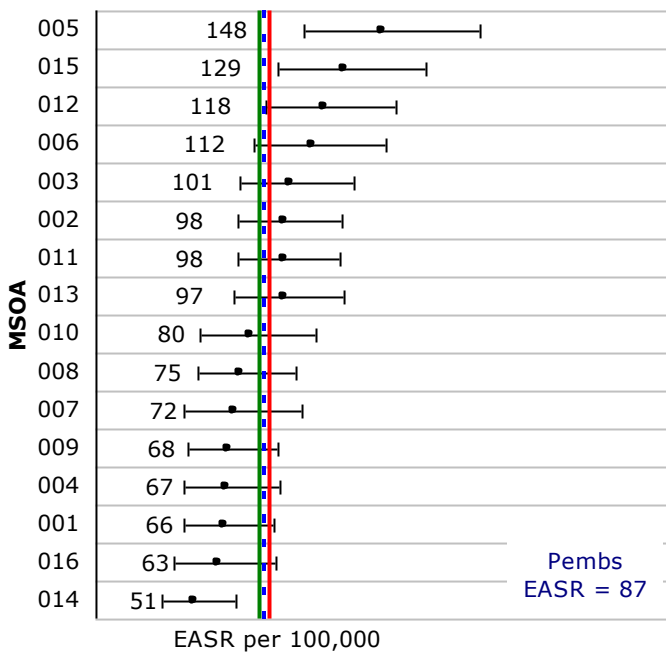
Ceredigion



Carmarthenshire



Pembrokeshire

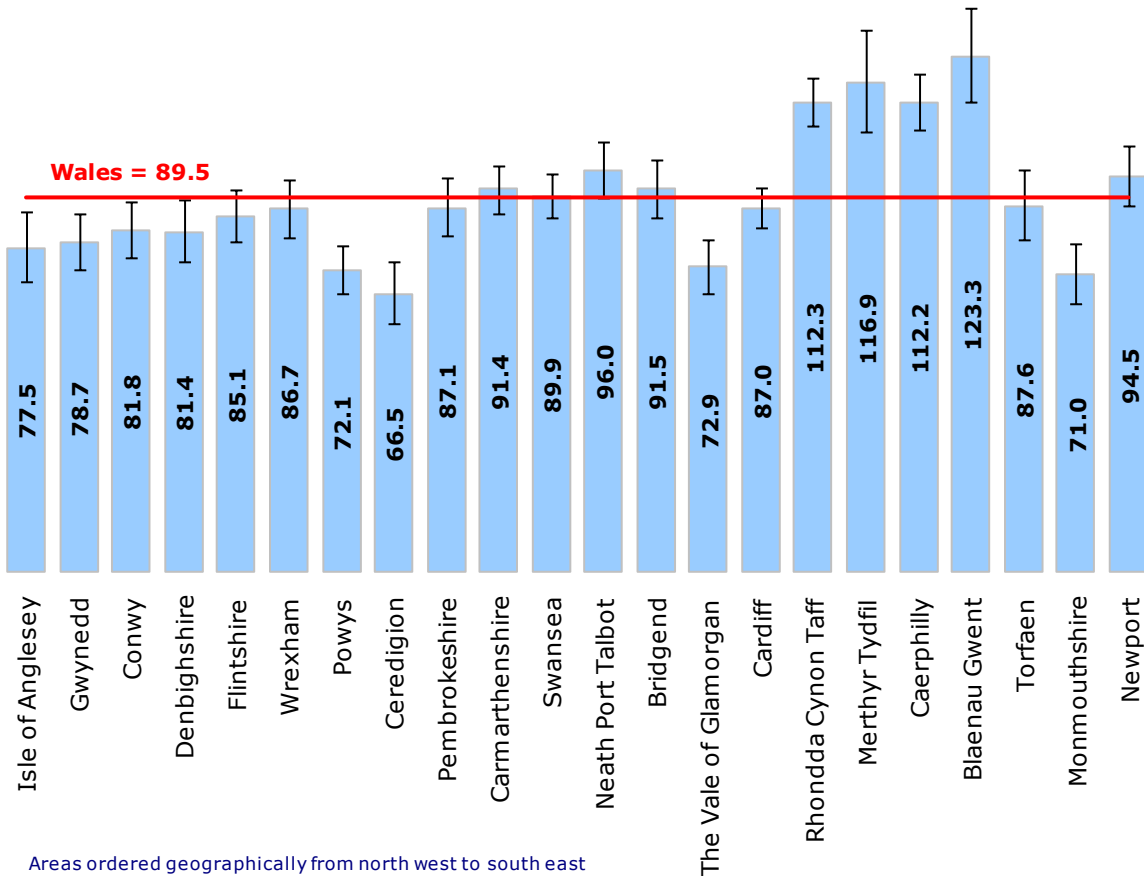


Local authorities

Mortality from circulatory disease by local authority, all persons aged under 75, 2004-08, European age-standardised rates per 100,000

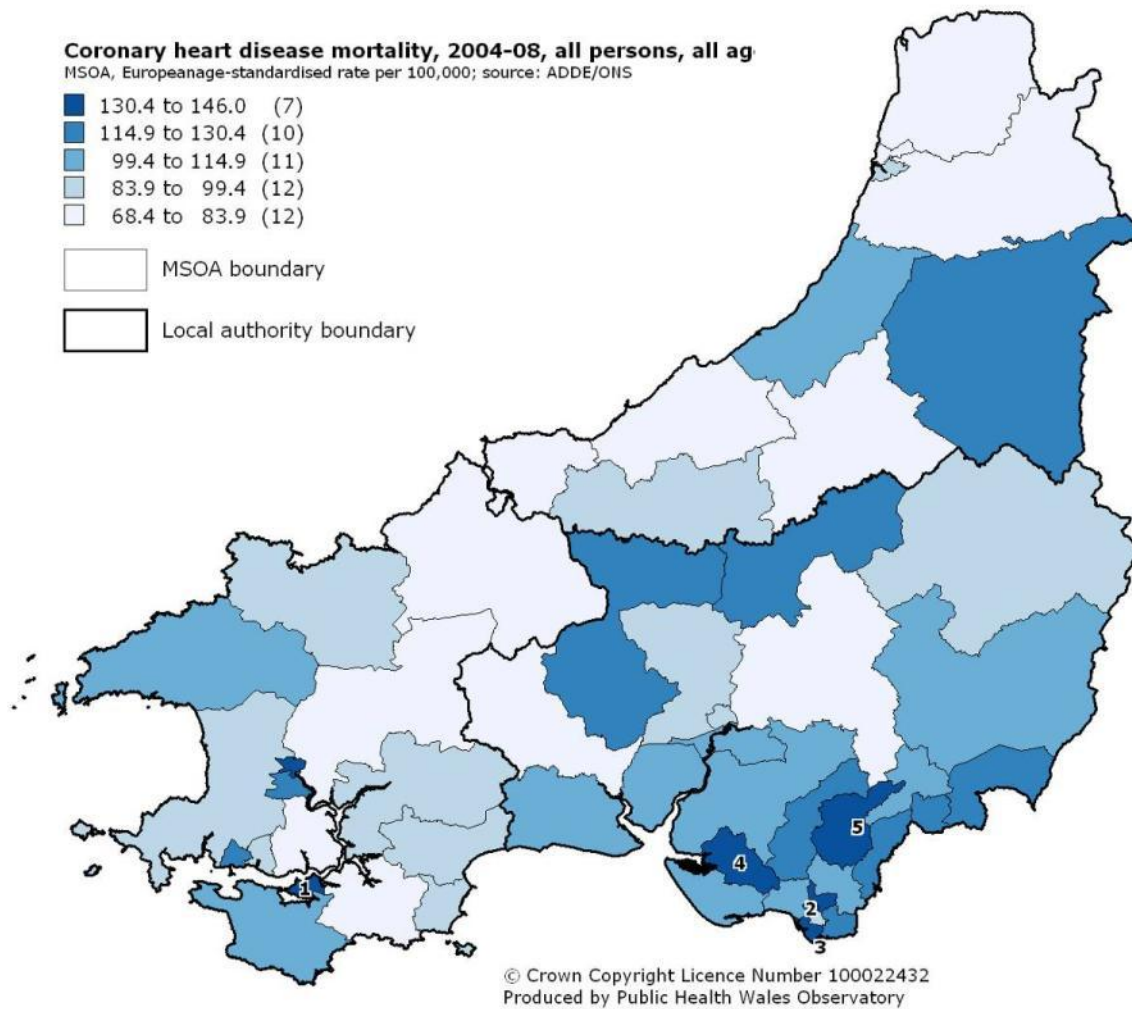
Produced by Public Health Wales Observatory, using data from ONS (ADDE, MYE)

95% confidence interval



5.3.3 Mortality from coronary heart disease

Middle super output areas



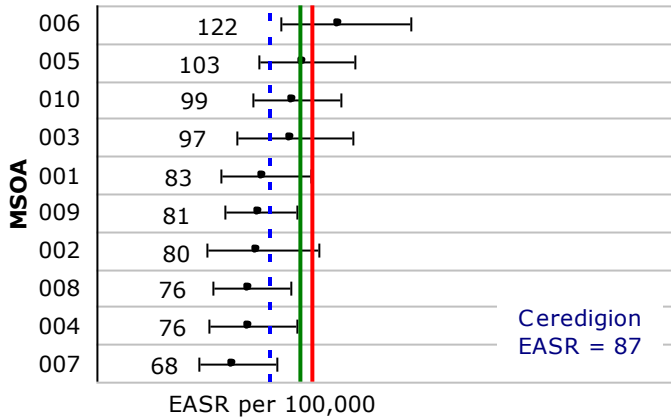
Numbers on map indicate MSOAs with a rate statistically significantly higher than the all Wales rate.

Mortality from coronary heart disease in Hywel Dda Health Board area, all persons, 2004-08, European age-standardised rates per 100,000

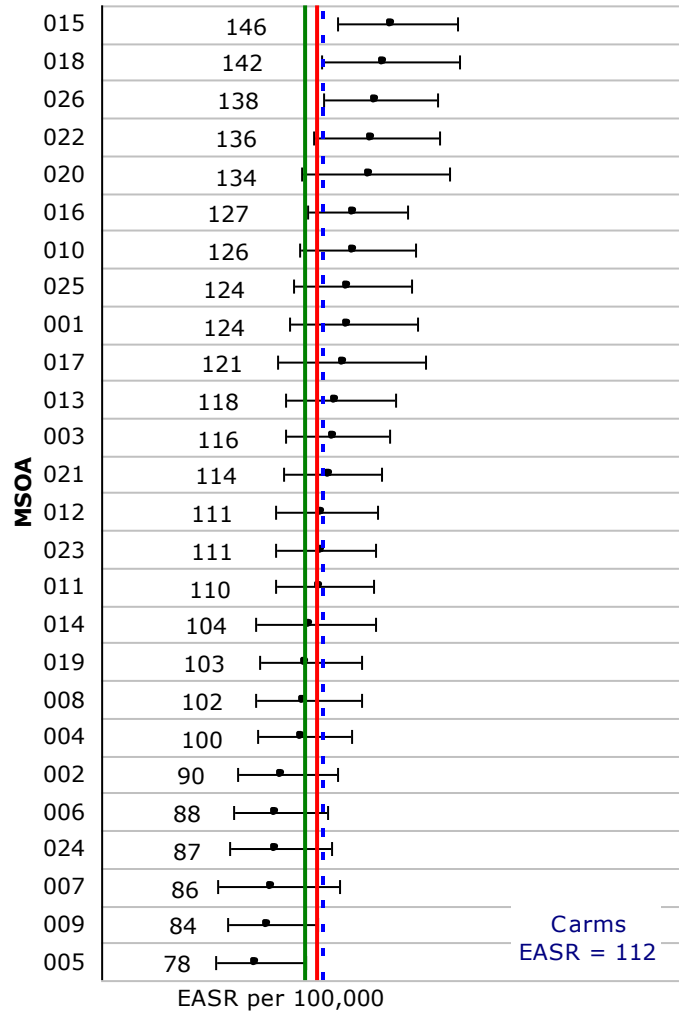
Produced by Public Health Wales Observatory, using data from ONS (ADDE, MYE)

MSOA EASR with 95% confidence interval Health Board (EASR = 102) Wales (EASR = 108) Local Authority

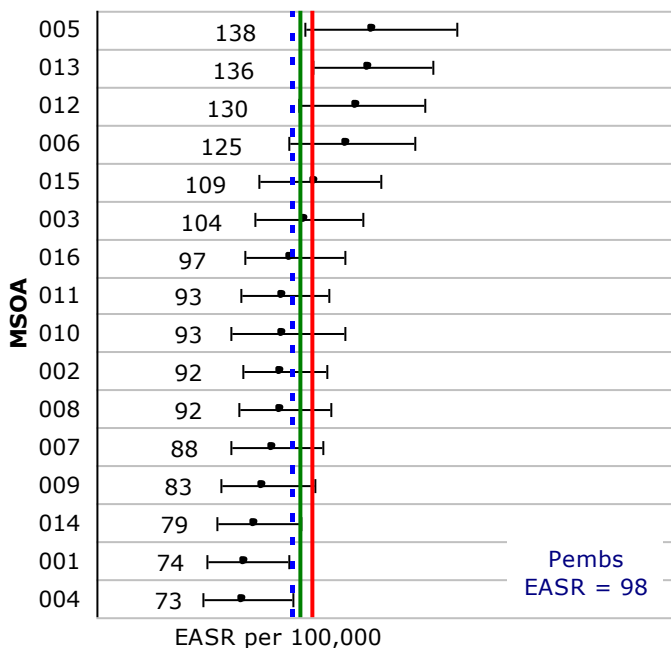
Ceredigion



Carmarthenshire



Pembrokeshire

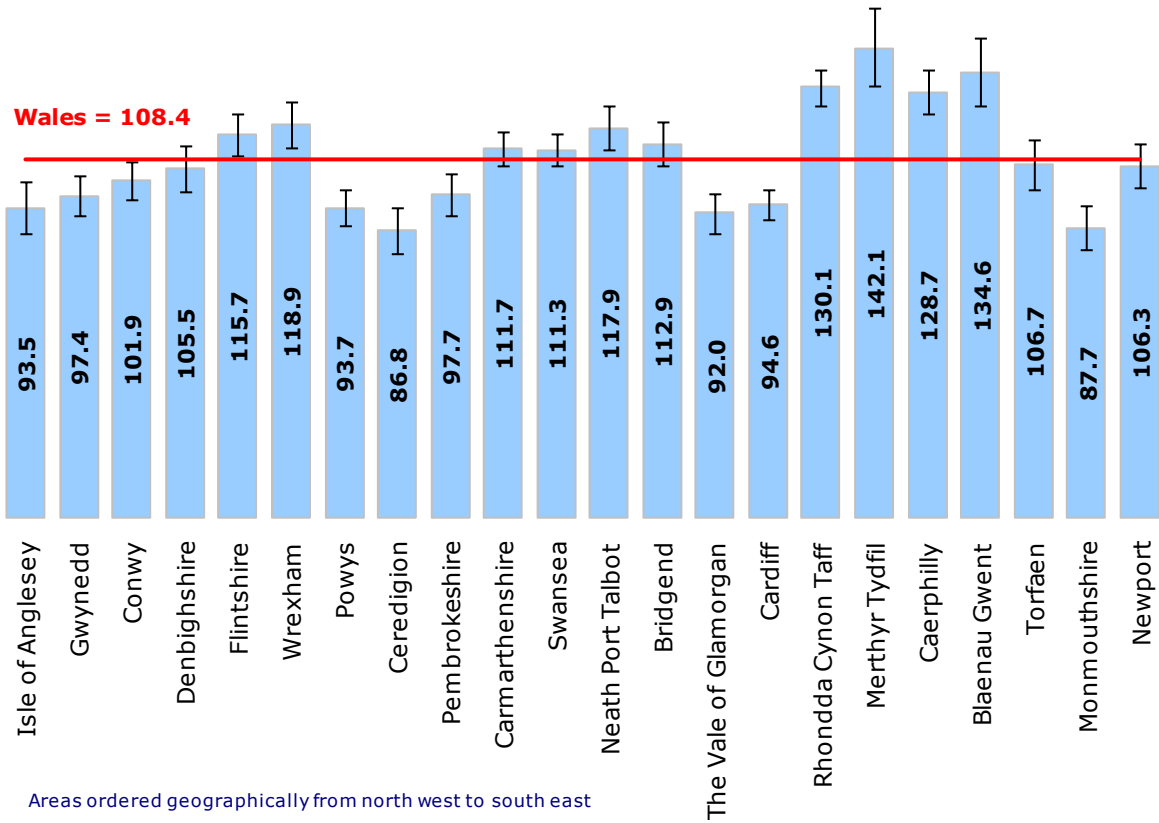


Local authorities

Mortality from coronary heart disease by local authority, all persons, 2004-08, European age-standardised rates per 100,000

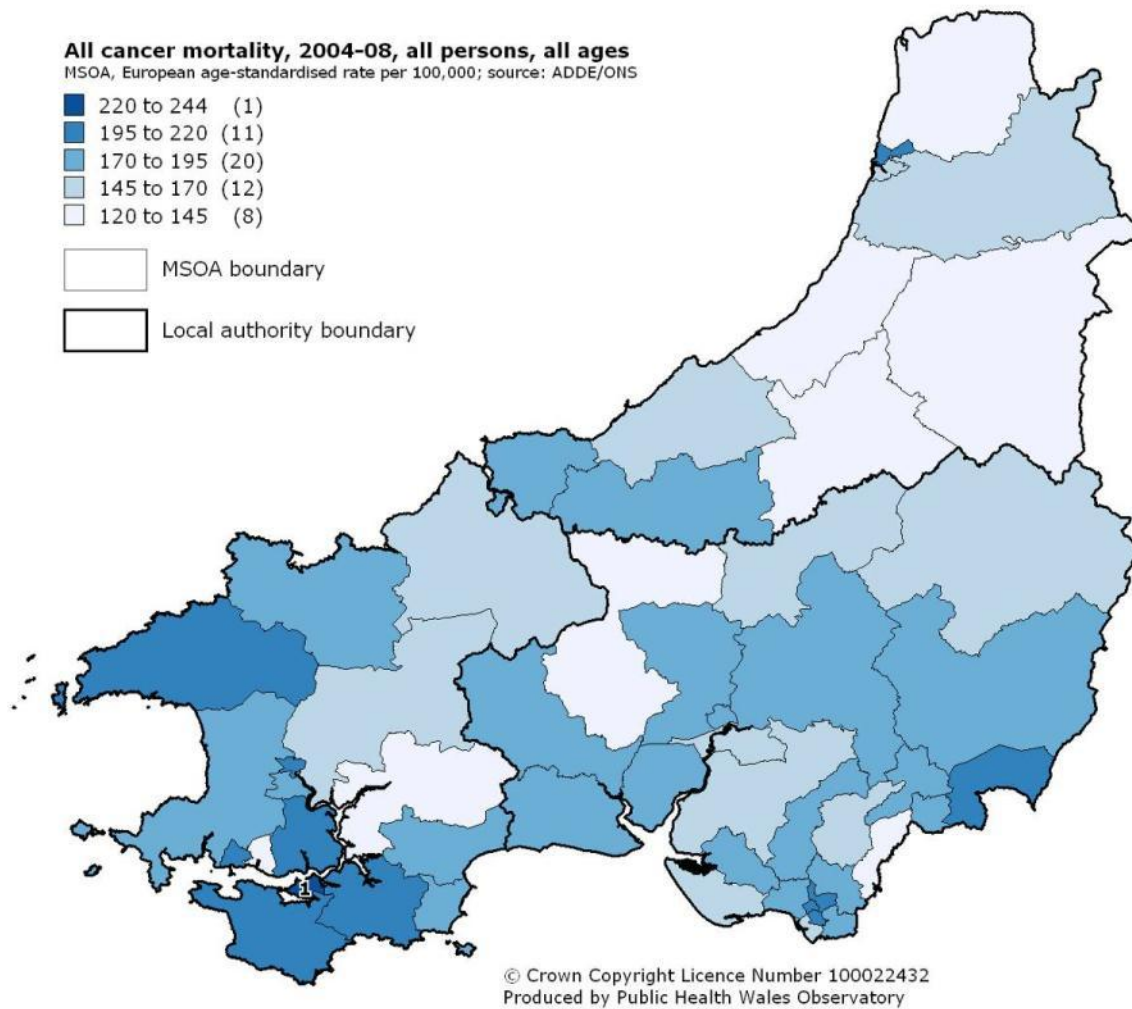
Produced by Public Health Wales Observatory, using data from ONS (ADDE, MYE)

95% confidence interval



5.3.4 Mortality from cancer

Middle super output areas



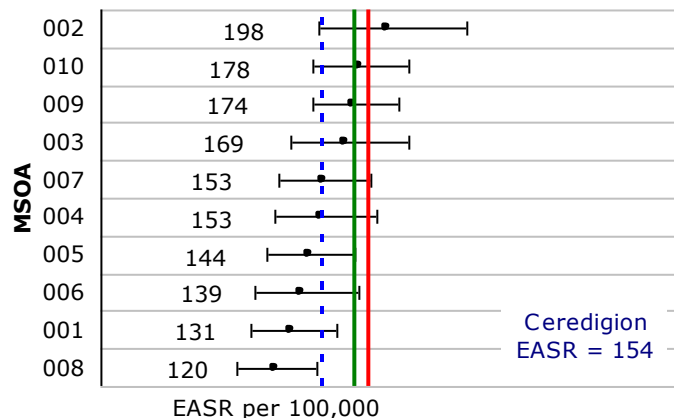
Numbers on map indicate MSOAs with a rate statistically significantly higher than the all Wales rate.

Mortality from all cancers in Hywel Dda Health Board area, all persons, 2004-08, European age-standardised rates per 100,000

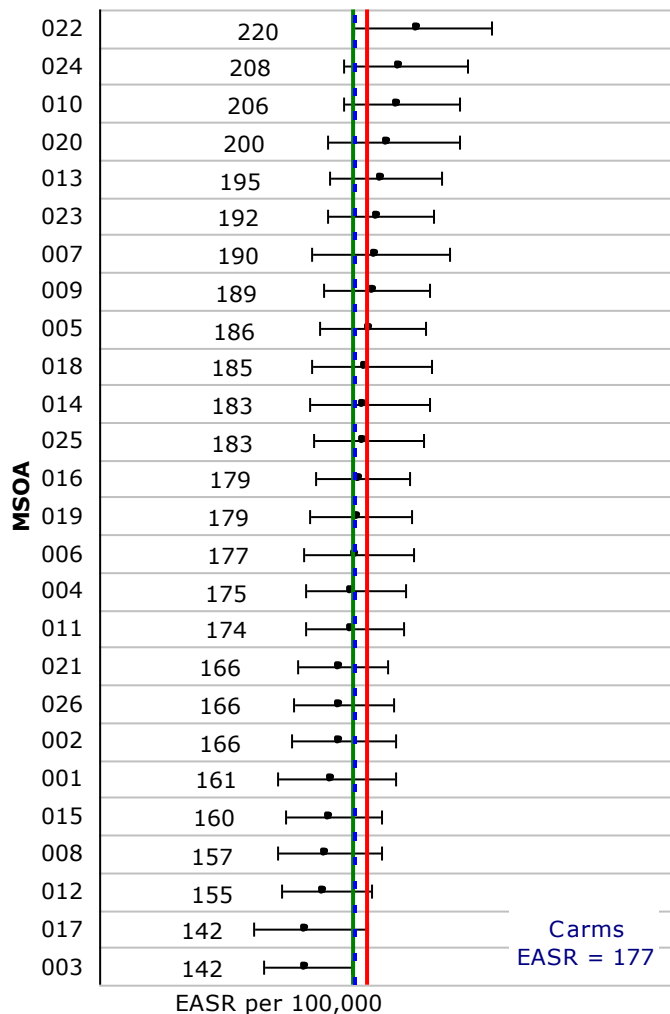
Produced by Public Health Wales Observatory, using data from ONS (ADDE, MYE)

—•— MSOA EASR with 95% confidence interval — Health Board (EASR = 175) — Wales (EASR = 186) - - - Local Authority

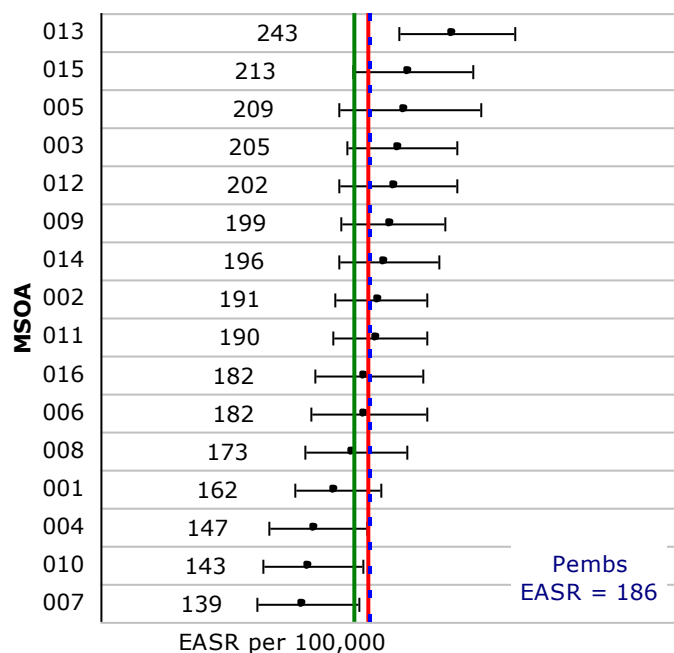
Ceredigion



Carmarthenshire



Pembrokeshire

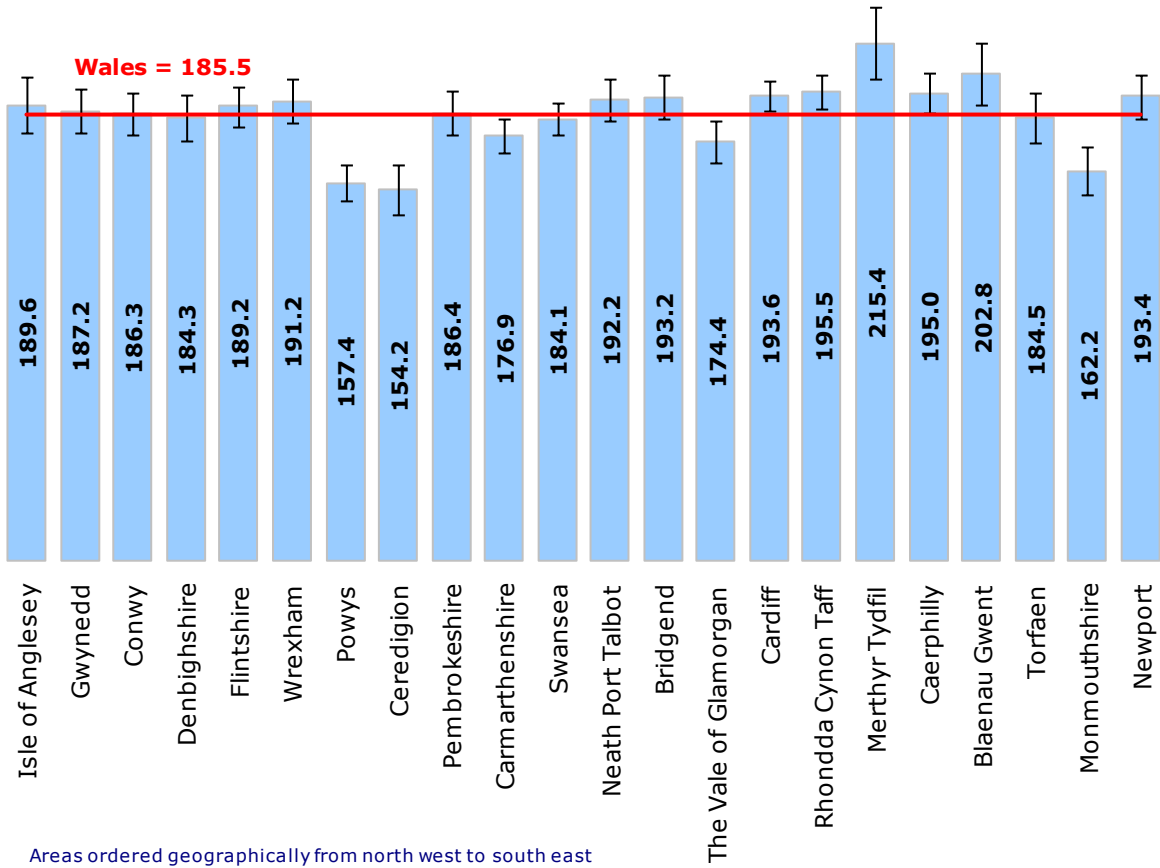


Local authorities

Mortality from all cancers by local authority, all persons, 2004-08, European age-standardised rates per 100,000

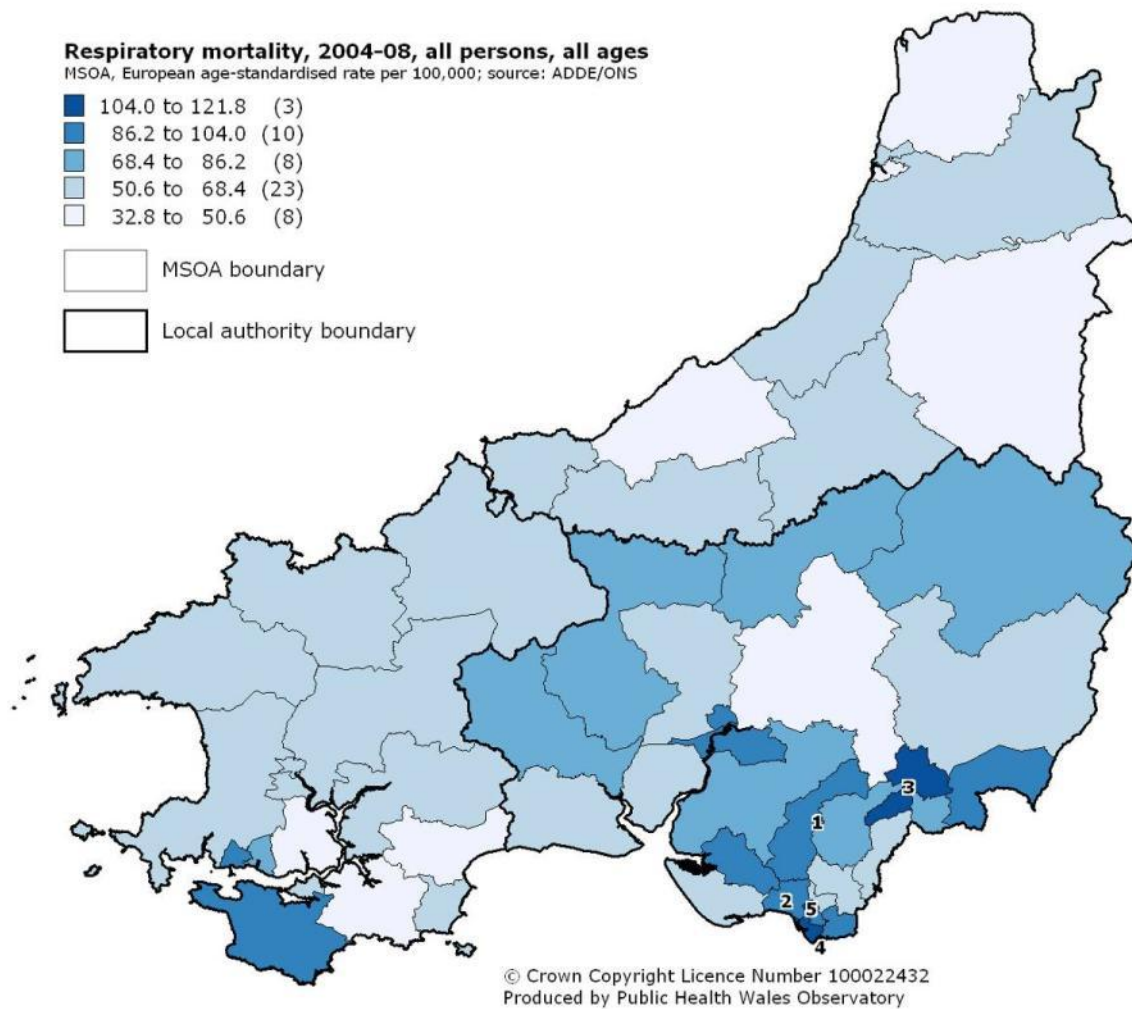
Produced by Public Health Wales Observatory, using data from ONS (ADDE, MYE)

95% confidence
interval



5.3.5 Mortality from respiratory disease

Middle super output areas



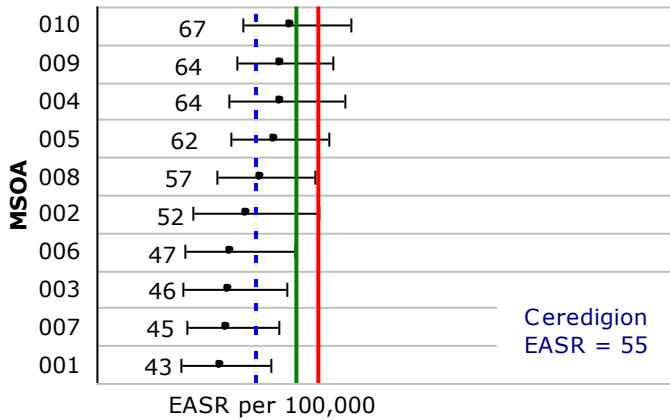
Numbers on map indicate MSOAs with a rate statistically significantly higher than the all Wales rate.

Mortality from respiratory disease in Hywel Dda Health Board area, all persons, 2004-08, European age-standardised rates per 100,000

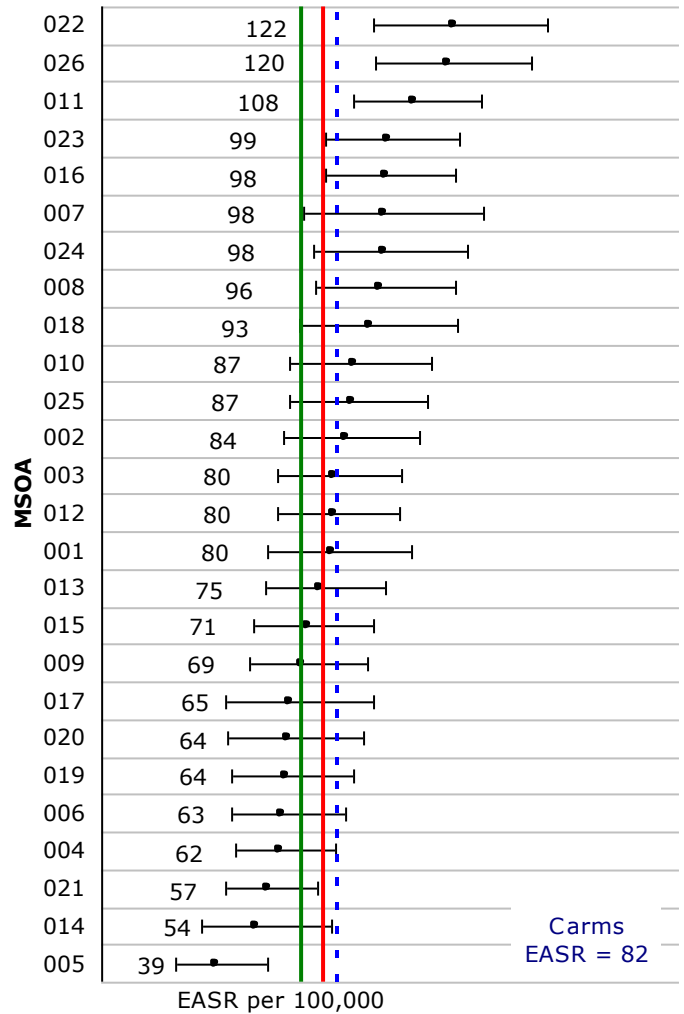
Produced by Public Health Wales Observatory, using data from ONS (ADDE, MYE)

MSOA EASR with 95% confidence interval Health Board (EASR = 69) Wales (EASR = 77) Local Authority

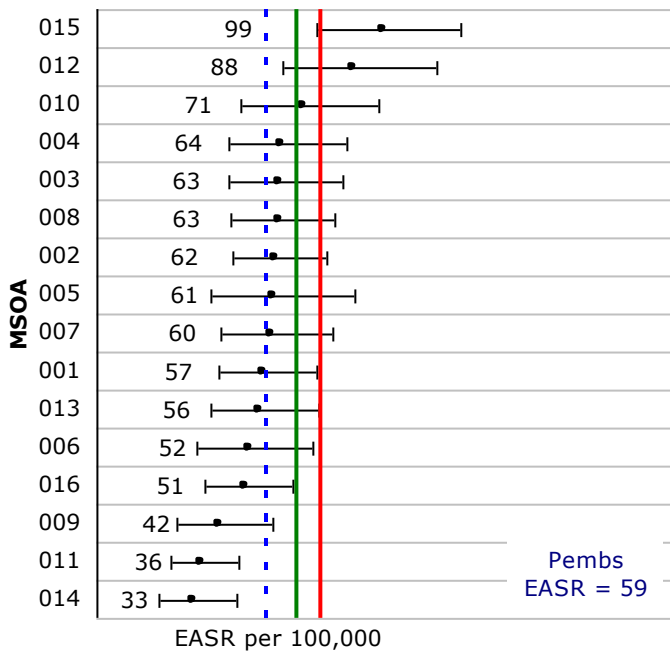
Ceredigion



Carmarthenshire



Pembrokeshire

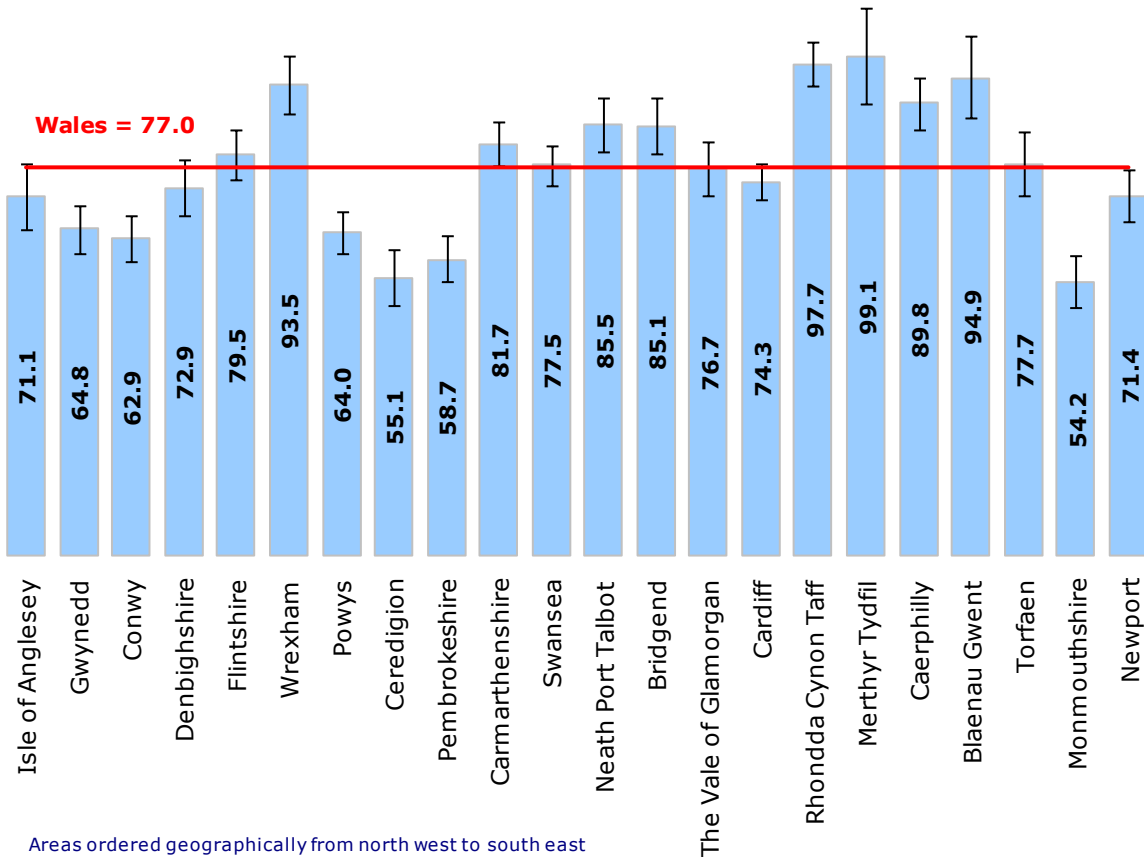


Local authorities

Mortality from respiratory disease by local authority, all persons, 2004-08, European age-standardised rates per 100,000

Produced by Public Health Wales Observatory, using data from ONS (ADDE, MYE)

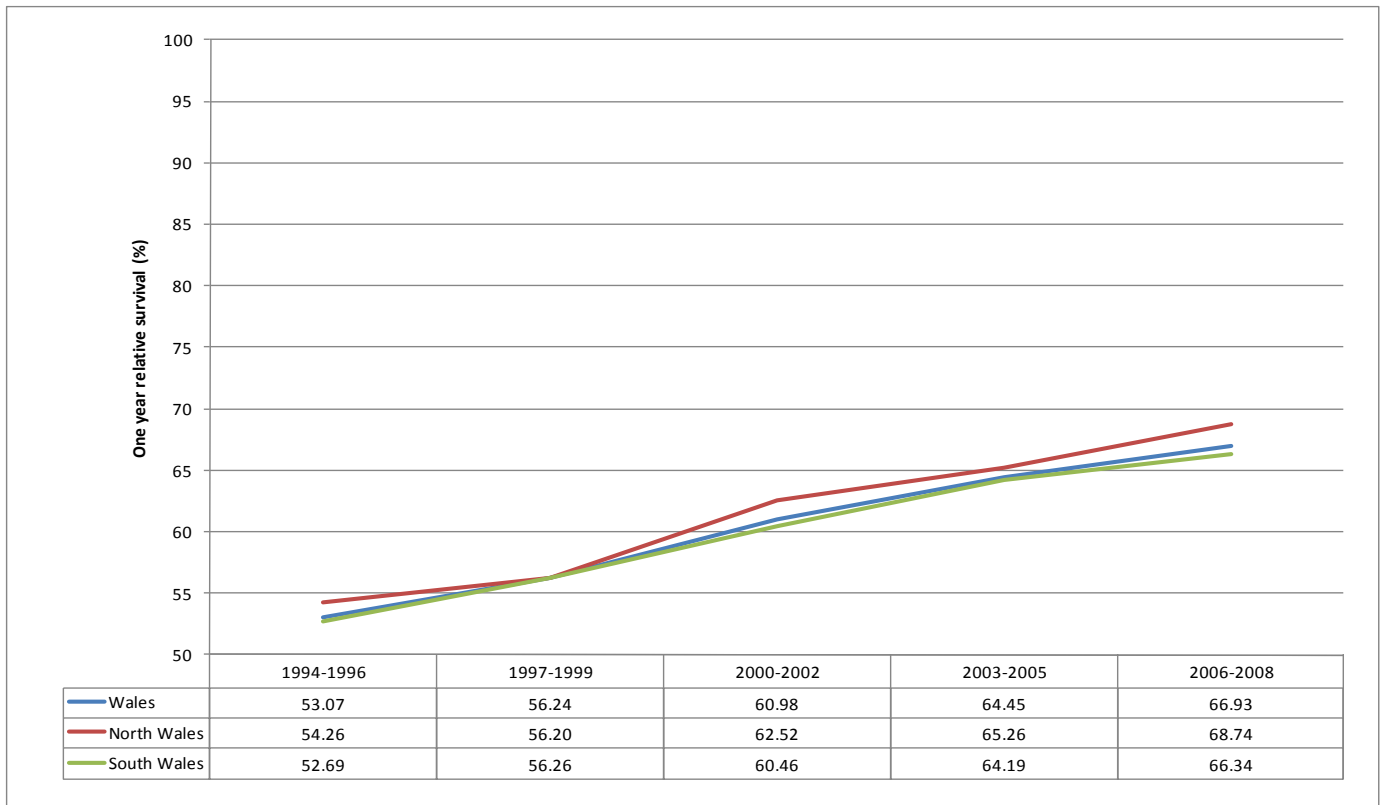
95% confidence interval



5.3.6 Cancer survival

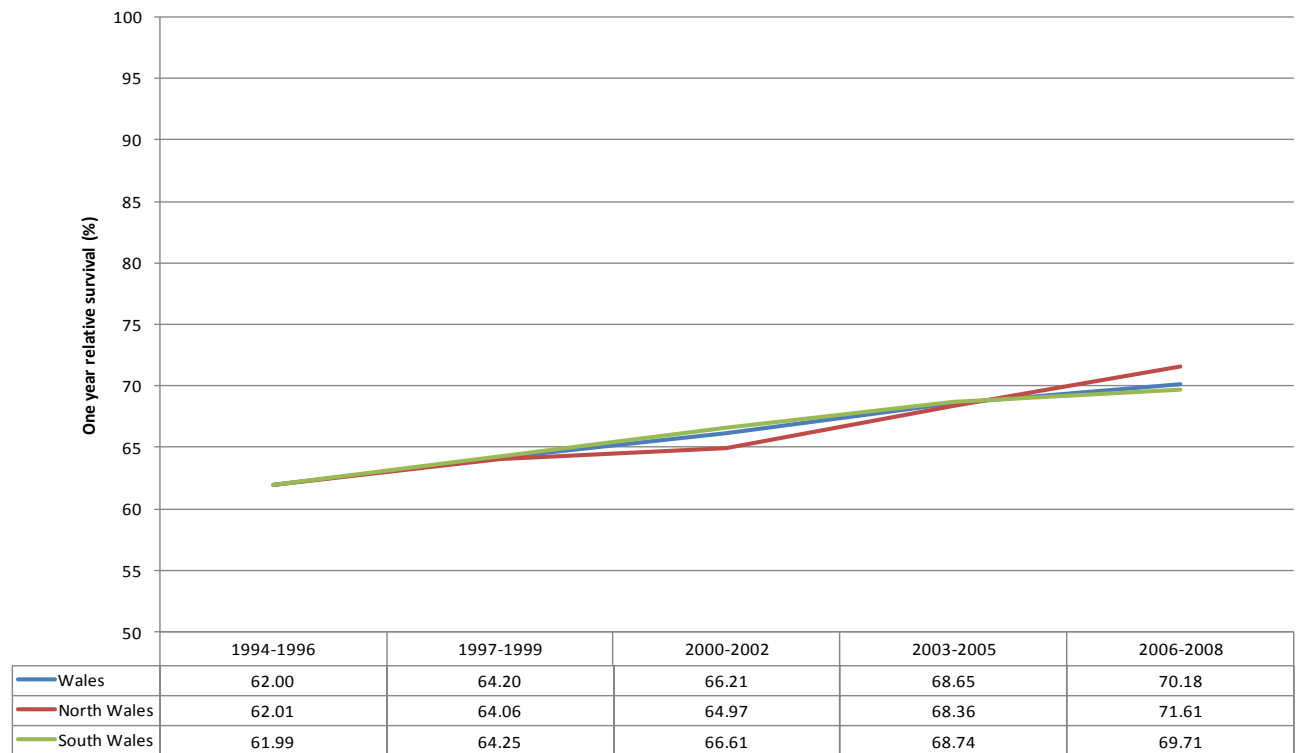
One year relative survival, all cancer (excluding non melanoma skin cancer), males, Wales regions, all persons, 1994/6-2006/8

Produced by the Welsh Cancer Intelligence and Surveillance Unit



One year relative survival, all cancer (excluding non melanoma skin cancer), females, Wales regions, all persons, 1994/6-2006/8

Produced by the Welsh Cancer Intelligence and Surveillance Unit



One year and five year relative survival, by cancer site Hywel Dda Health Board area, males and females, 2000-2004 (95% confidence intervals)

Produced by the Welsh Cancer Intelligence and Surveillance Unit

Male

Cancer Site	1 year relative survival	
	Hywel Dda	All Wales
Prostate	88.54 (86.09, 90.58)	88.80 (87.95, 89.59)
Lung	20.49 (17.47, 23.69)	22.84 (21.71, 24.00)
Colorectal	69.87 (66.06, 73.34)	71.51 (70.12, 72.85)
Bladder	83.55 (78.69, 87.39)	86.10 (84.51, 87.53)
All malignancies (excl NMSC)	61.96 (60.49, 63.39)	62.11 (61.57, 62.63)

Cancer Site	5 year relative survival	
	Hywel Dda	All Wales
Prostate	75.11 (71.14, 78.62)	77.17 (75.83, 78.45)
Lung	4.56 (3.04, 6.54)	5.36 (4.73, 6.04)
Colorectal	46.14 (41.71, 50.44)	48.59 (46.91, 50.24)
Bladder	68.15 (61.45, 73.95)	72.34 (70.04, 74.50)
All malignancies (excl NMSC)	45.27 (43.59, 46.94)	45.39 (44.79, 45.99)

Female

Cancer Site	1 year relative survival	
	Hywel Dda	All Wales
Breast	93.40 (91.72, 94.76)	93.41 (92.83, 93.94)
Lung	19.71 (15.93, 23.80)	25.53 (24.09, 26.99)
Colorectal	67.58 (63.14, 71.61)	68.80 (67.19, 70.36)
Ovary	62.52 (55.51, 68.74)	63.92 (61.50, 66.24)
Corpus Uteri	90.16 (84.38, 93.87)	89.83 (87.90, 91.46)
All malignancies (excl NMSC)	68.37 (66.91, 69.79)	67.24 (66.71, 67.76)

Cancer Site	5 year relative survival	
	Hywel Dda	All Wales
Breast	80.34 (77.71, 82.69)	82.06 (81.14, 82.94)
Lung	4.27 (2.51, 6.73)	6.85 (6.00, 7.76)
Colorectal	46.45 (41.50, 51.23)	49.18 (47.31, 51.01)
Ovary	35.68 (28.95, 42.46)	39.29 (36.78, 41.80)
Corpus Uteri	72.73 (64.36, 79.45)	77.77 (75.02, 80.25)
All malignancies (excl NMSC)	52.55 (50.88, 54.19)	52.76 (52.17, 53.36)

	Significantly higher than Wales
	Significantly lower than Wales

Excl NSCM: Excluding non melanoma skin cancer

Appendix A: Original source reports and further information

The original reports for the data included in this chart book, together with further information and, in some cases, methodological information and other guides to interpretation can be found through the producers of the charts, tables or data included:

Demography	Public Health Wales Observatory	www.publichealthwalesobservatory.wales.nhs.uk
Determinants of health	Public Health Wales Observatory	www.publichealthwalesobservatory.wales.nhs.uk
Use of prevention services: vaccination uptake	Vaccine Preventable Disease Programme	http://www.wales.nhs.uk/sitesplus/888/page/43510
Use of prevention services: screening	Public Health Wales Screening Services	http://www.screeningservices.org.uk/
Use of primary care by adults	Welsh Assembly Government, Welsh Health Survey	http://new.wales.gov.uk/
Use of secondary and tertiary care	Public Health Wales Observatory	www.publichealthwalesobservatory.wales.nhs.uk
Health status	Public Health Wales Observatory	www.publichealthwalesobservatory.wales.nhs.uk
Cancer survival	Welsh Cancer Surveillance and Intelligence Unit	http://www.wales.nhs.uk/sites3/home.cfm?OrgID=242

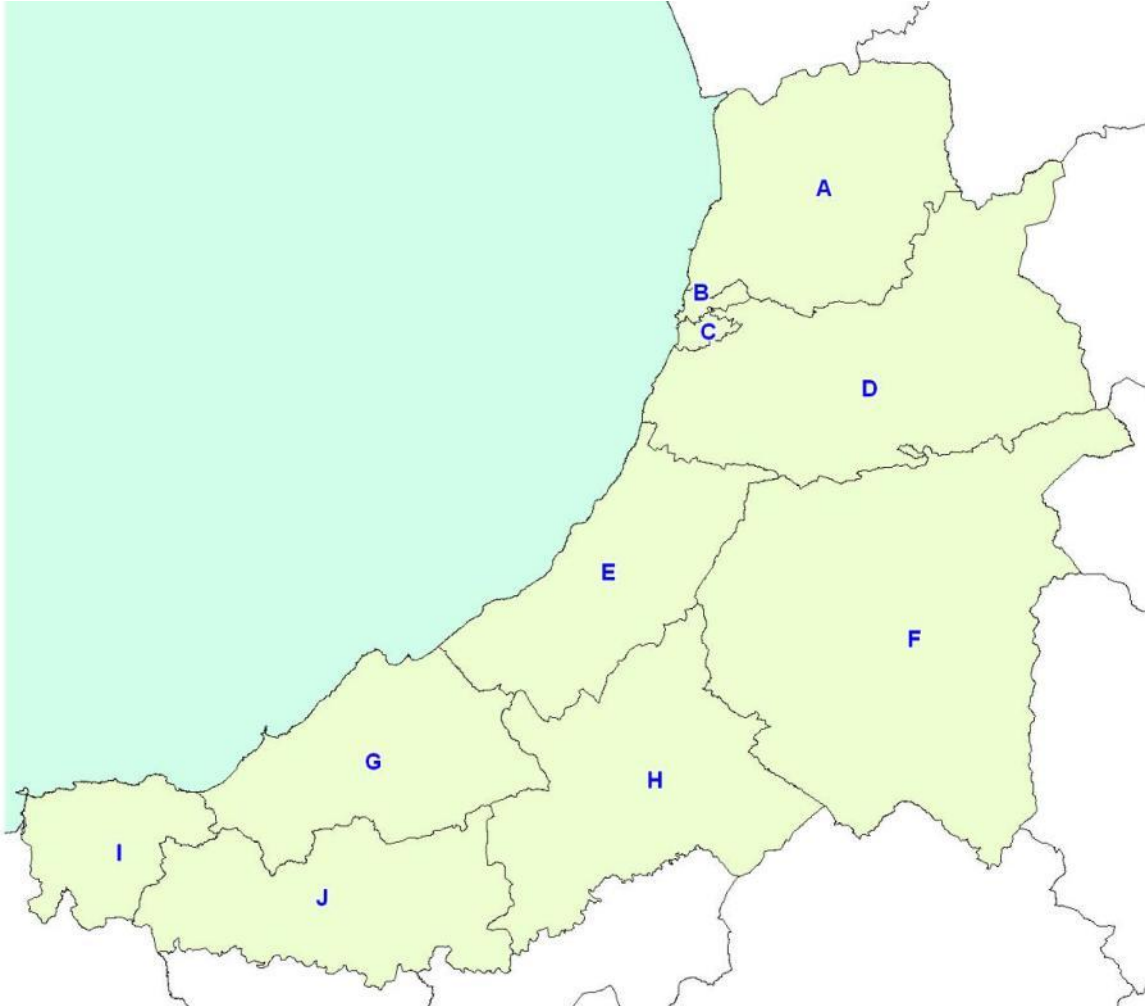
Appendix B: Glossary

Middle Super Output Areas	<p>Middle super output areas (MSOAs) were released by the Office for National Statistics (ONS) in 2004. In contrast with administrative boundaries such as electoral divisions (wards), super output areas were created for the purpose of showing statistical data.</p> <p>MSOAs have a mean population of 7,500 and a minimum of 5,000. There are 413 MSOAs in Wales and 52 MSOAs in the Hywel Dda Health Board area. These are shown on the maps in Appendix 2.</p> <p>The ONS have stated that super output area geographies will be fixed for at least 10 years. The advantage of using these statistical geographies is stability and homogeneity. However, the main drawback is that they do not conform to known administrative boundaries such as electoral divisions (wards); this makes them less amenable to the public and local government.</p>
Age-standardised rate	<p>Age-standardisation allows comparison of rates across different populations while taking account of the different age structures of those populations.</p> <p>This chart book uses the direct standardisation method, which produces the rate you would get if the population had the same age-structure as a particular 'standard' population.</p> <p>The Wales standard population has been used for the Welsh Health Survey indicators and the theoretical European standard population (ESP) has been used for all other age-standardised indicators included in this chart book.</p> <p>An age-standardised rate only allows for comparison between the rates which have been standardised to the same standard population.</p>
Confidence intervals	<p>Confidence intervals are indications of the random variation that would be expected around a rate. Confidence intervals must be considered when assessing or interpreting a rate. The 95% confidence interval represents a range which has a 95% probability of including the underlying population rate.</p> <p>The range of the confidence interval is dependent on the size of the population from which the events came. Rates based on small populations are likely to have wider confidence intervals and rates based on large populations are likely to have narrower confidence intervals.</p>
Statistical significance	<p>A result may be deemed statistically significant if it is considered unlikely to have occurred by chance alone. The basis for such judgements is a predetermined and arbitrary cut-off, usually taken as 5% or 0.05. A result may be clinically significant whilst not being statistically significant and vice versa.</p>

Appendix C: Maps showing Middle Super Output Areas in the Hywel Dda Health Board area

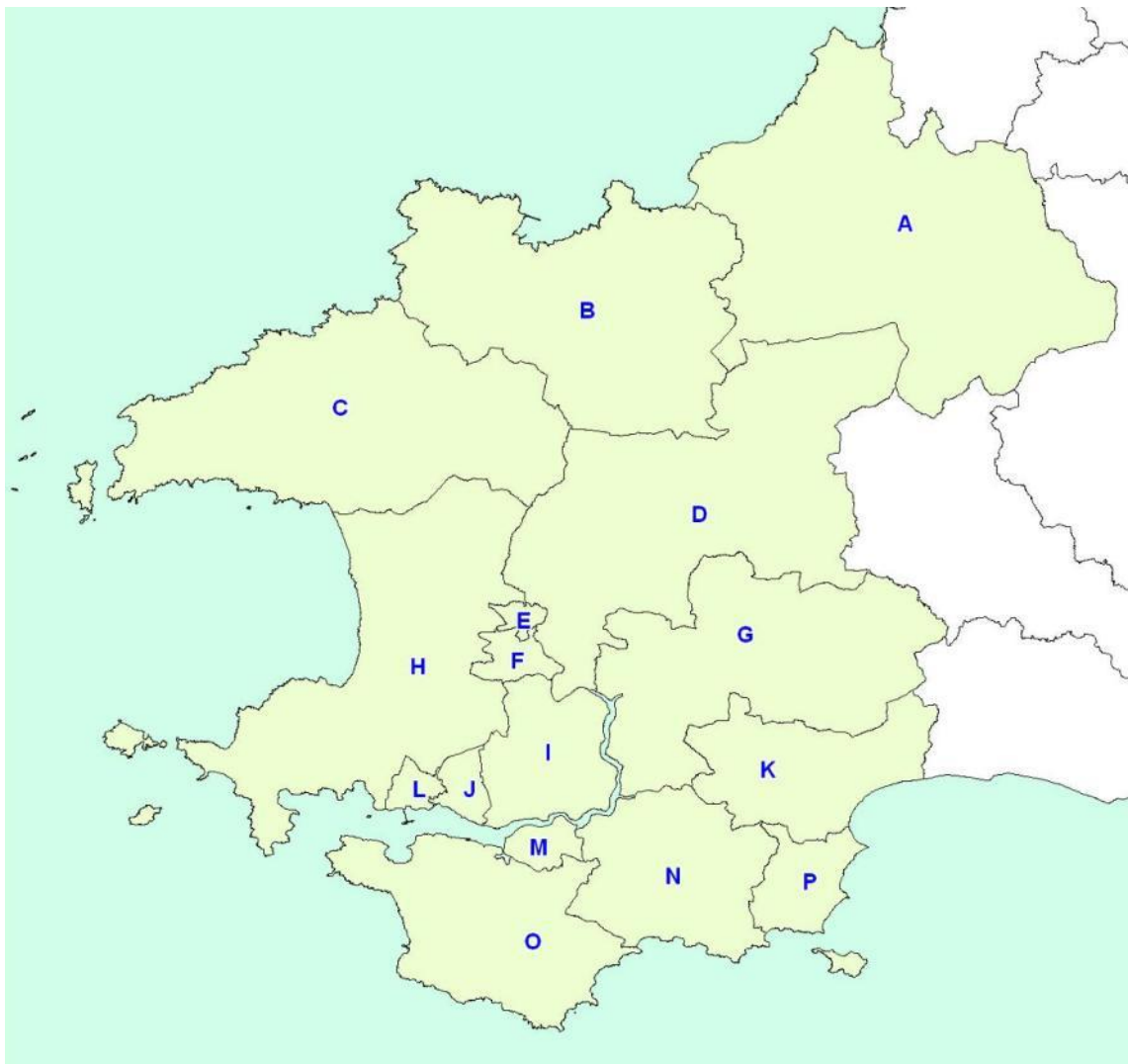
The Public Health Wales Observatory has also produced a web-based interactive map showing MSOA boundaries, with the added facility of background Ordnance Survey mapping. Follow this link: <http://www2.nphs.wales.nhs.uk/InstantAtlas/GeographyTool/atlas.html>

Ceredigion



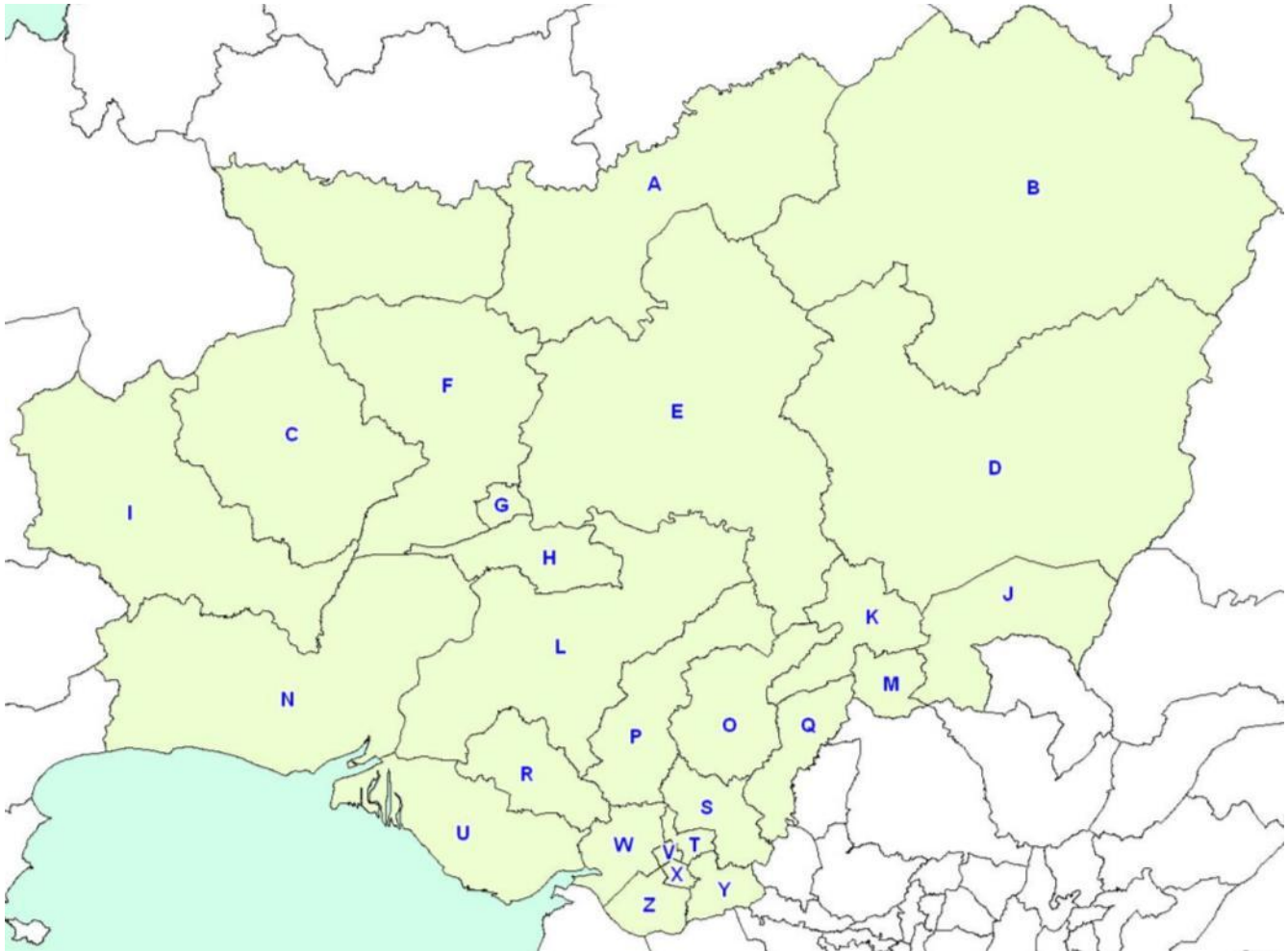
- A Ceredigion 001
- B Ceredigion 002
- C Ceredigion 003
- D Ceredigion 004
- E Ceredigion 005
- F Ceredigion 006
- G Ceredigion 007
- H Ceredigion 008
- I Ceredigion 009
- J Ceredigion 010

Pembrokeshire



- A Pembrokeshire 001
- B Pembrokeshire 002
- C Pembrokeshire 003
- D Pembrokeshire 004
- E Pembrokeshire 005
- F Pembrokeshire 006
- G Pembrokeshire 007
- H Pembrokeshire 008
- I Pembrokeshire 009
- J Pembrokeshire 010
- K Pembrokeshire 011
- L Pembrokeshire 012
- M Pembrokeshire 013
- N Pembrokeshire 014
- O Pembrokeshire 015
- P Pembrokeshire 016

Carmarthenshire



A	Carmarthenshire 001	N	Carmarthenshire 014
B	Carmarthenshire 002	O	Carmarthenshire 015
C	Carmarthenshire 003	P	Carmarthenshire 016
D	Carmarthenshire 004	Q	Carmarthenshire 017
E	Carmarthenshire 005	R	Carmarthenshire 018
F	Carmarthenshire 006	S	Carmarthenshire 019
G	Carmarthenshire 007	T	Carmarthenshire 020
H	Carmarthenshire 008	U	Carmarthenshire 021
I	Carmarthenshire 009	V	Carmarthenshire 022
J	Carmarthenshire 010	W	Carmarthenshire 023
K	Carmarthenshire 011	X	Carmarthenshire 024
L	Carmarthenshire 012	Y	Carmarthenshire 025
M	Carmarthenshire 013	Z	Carmarthenshire 026