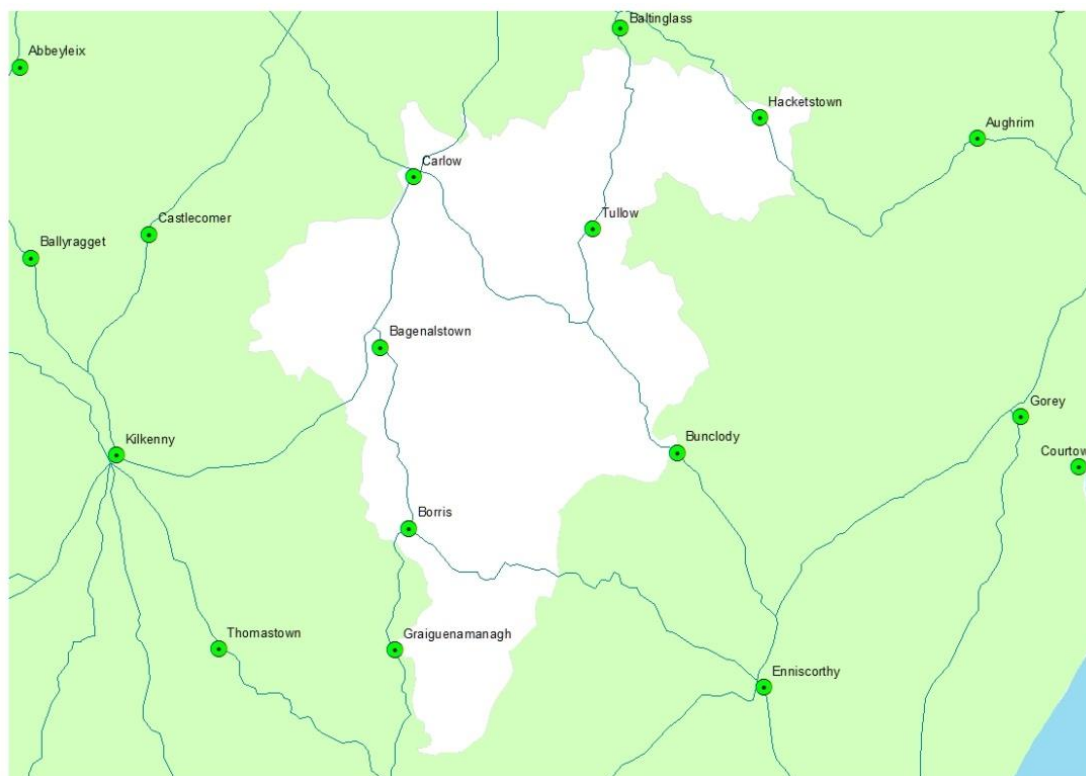
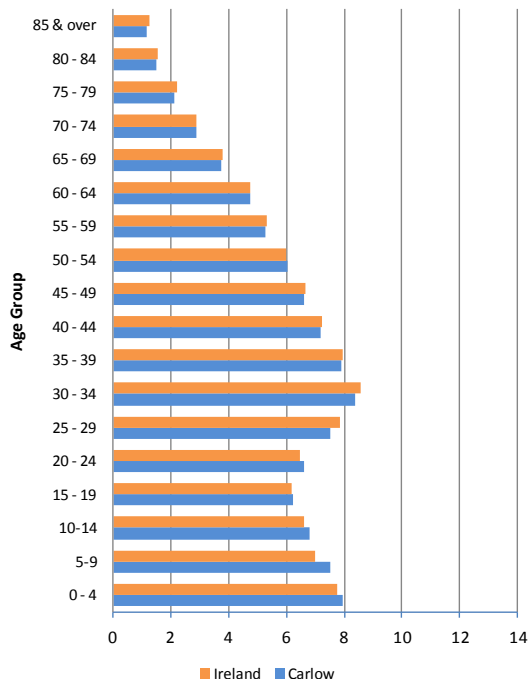


Population 2011: 54,612 • Population Change Census 2006-2011: +8.5%

This profile gives facts on health in this area. It is intended to inform health professionals, local authorities and the general public and enable them to improve health services and reduce health inequalities. Accurate health information on smoking, obesity and chronic disease data is not available at county level.



Age Comparison % of Population

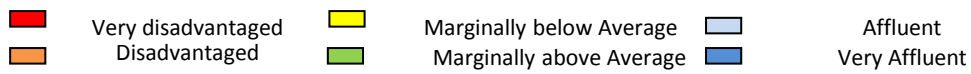
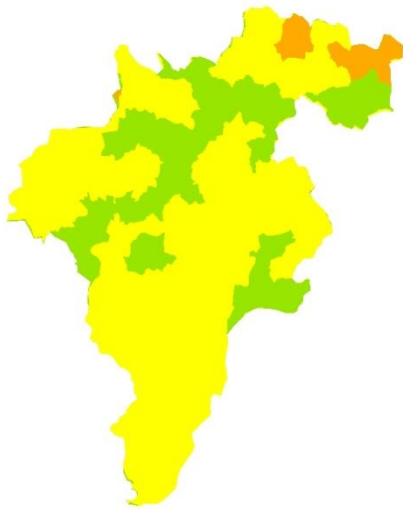


Key Facts

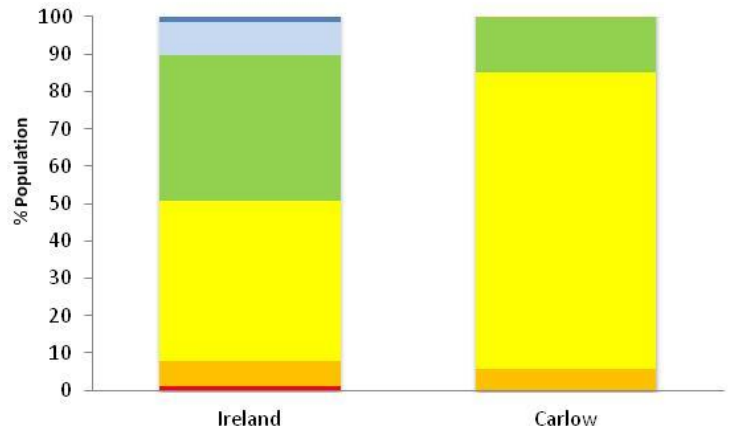
- Has above average birth rates per 1,000 for all ages of 17.3 and above average rate for those aged under 20 years of 21 compared to national rates of 15.8 and 12.3 respectively
- For males all invasive cancers, malignant melanoma, prostate and lung cancers are higher than the national average. Females have higher than the national average of lung cancer but below national average for malignant melanomas and colorectal cancers
- Deaths for all ages for cancer and respiratory disease and all deaths are higher than the national average
- Suicide rate of 13.8 per 100,000 is higher than the national rate of 11.3

Deprivation

Levels of deprivation by Electoral Divisions

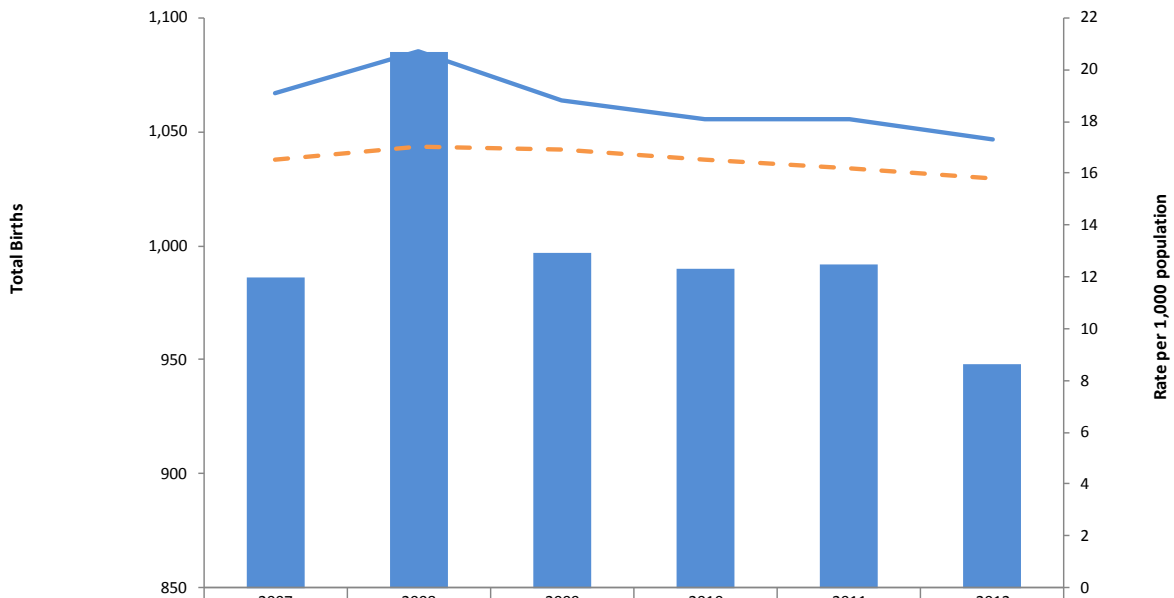


The percentage of the population in this area compared to Ireland who live within levels of deprivation and affluence.



Health Statistics

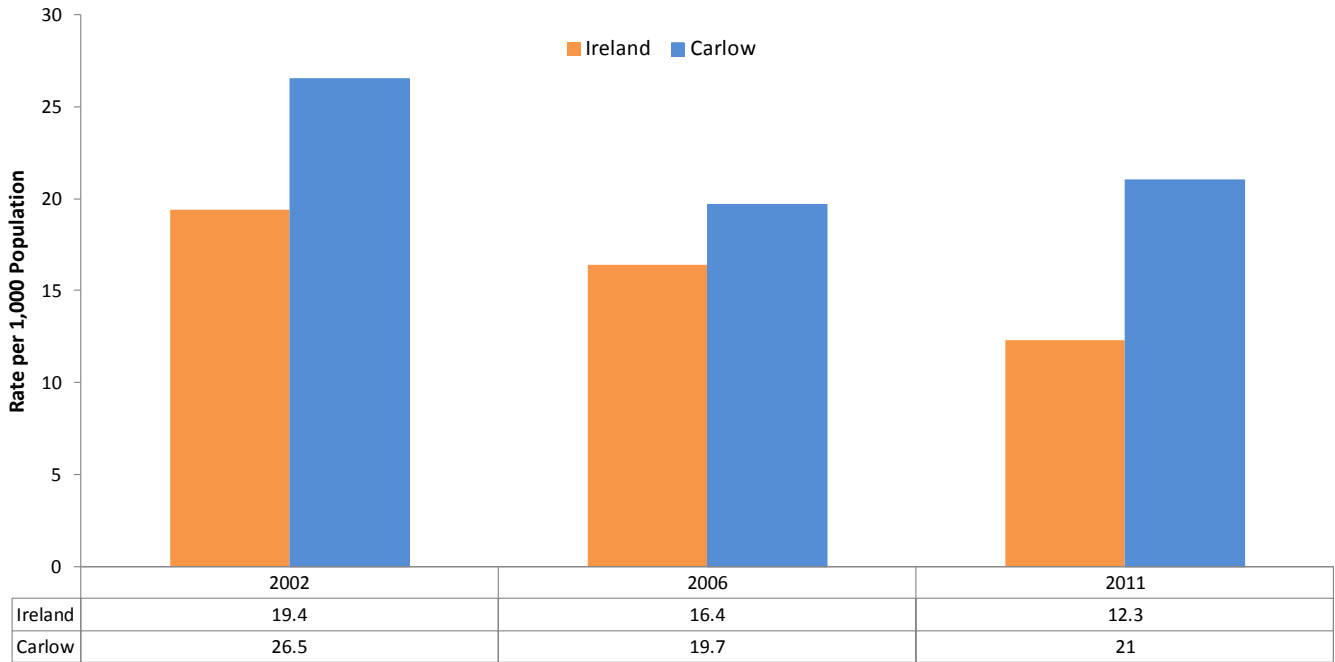
The number of live births and live birth rate per 1,000 population for the years 2007-2012 compared to Ireland rate.



	2007	2008	2009	2010	2011	2012
Total Births Carlow	986	1,085	997	990	992	948
Rate per 1,000 pop. Ireland	16.5	17	16.9	16.5	16.2	15.8
Rate per 1,000 pop. Carlow	19.1	20.7	18.8	18.1	18.1	17.3

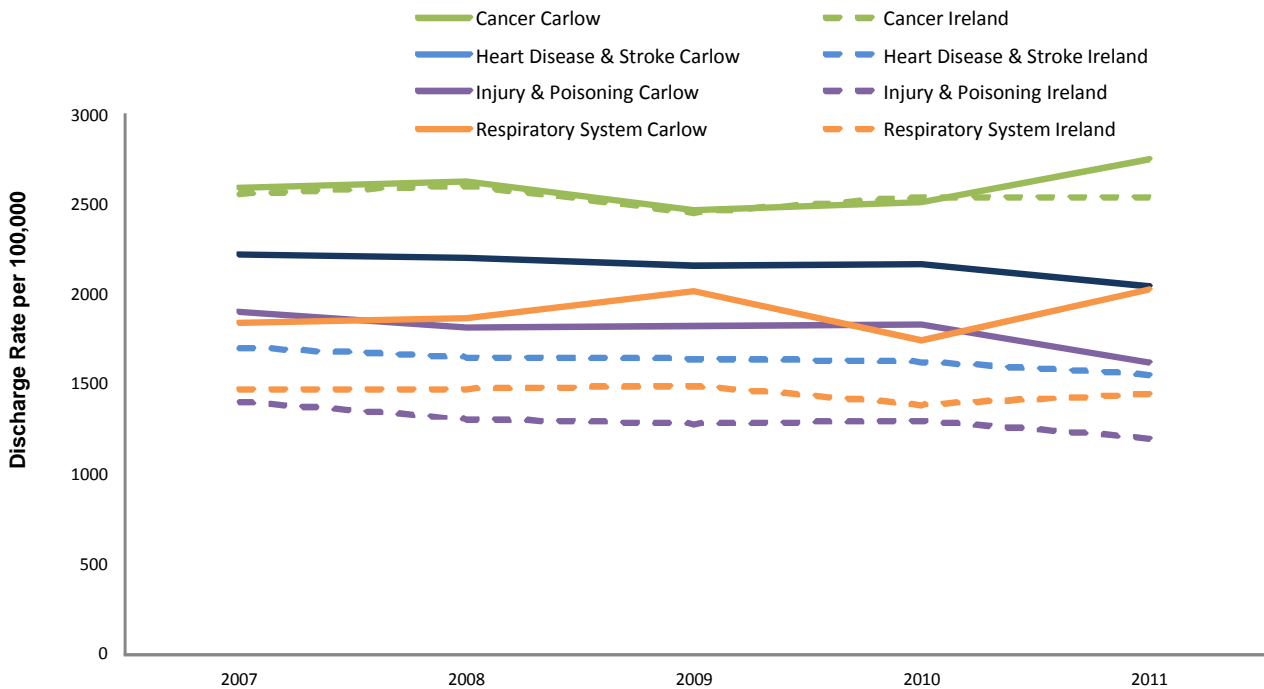
Health Statistics

Live birth rate per 1,000 for females aged less than 20 years for the census years 2002, 2006, and 2011.



The hospital age standardised discharge rate per 100,000 by area of residence for the four principal causes of disease 2007-2011 compared to Ireland.

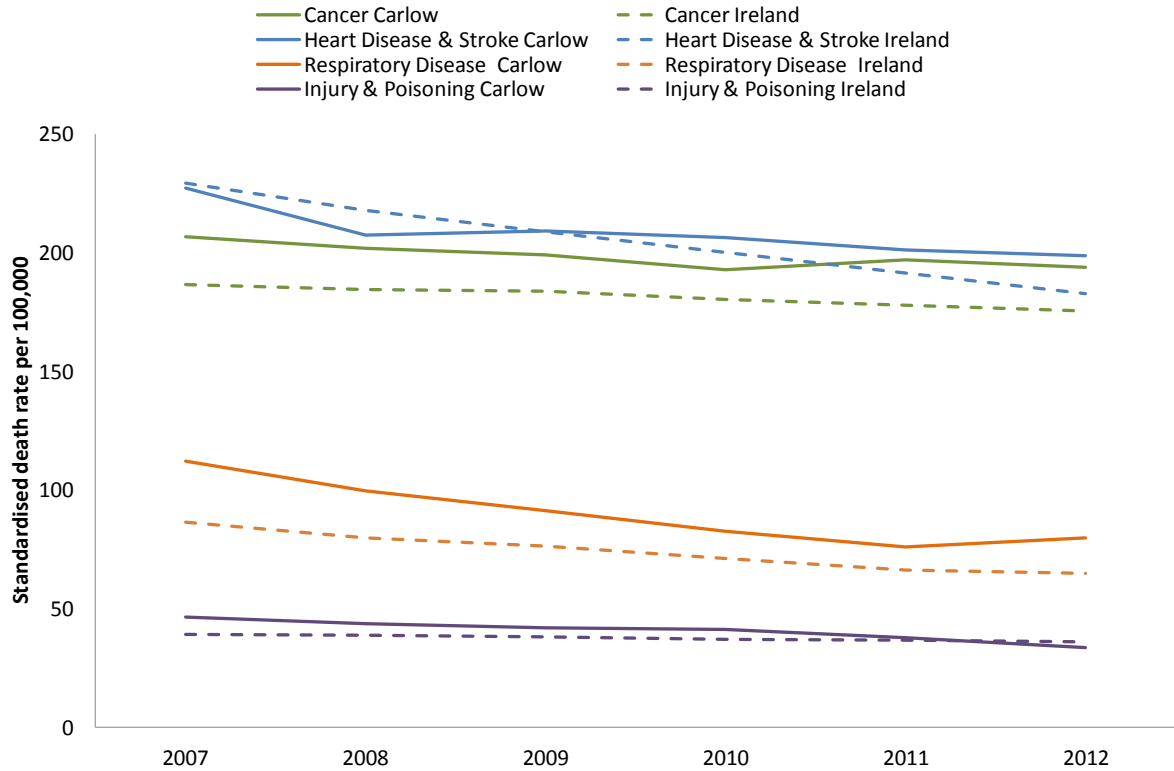
(For a more detailed explanation of what these disease categories contain see page 8)



Health Statistics

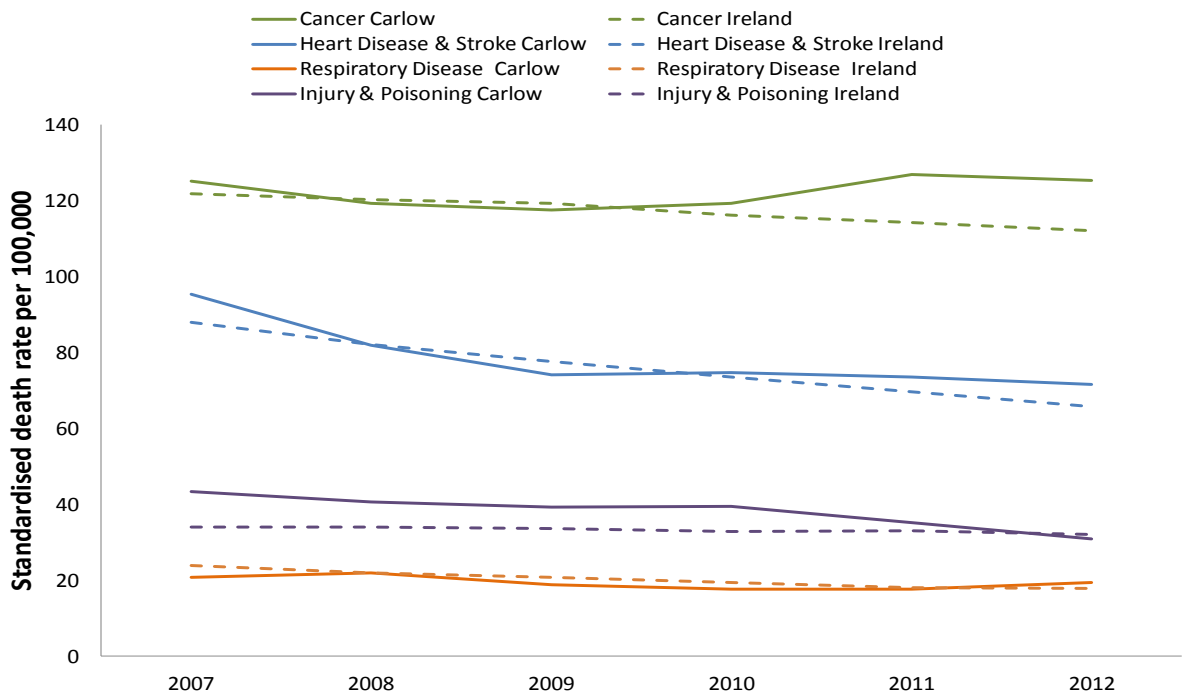
Trends in death rates per 100,000 for the four principal causes of death over the period 2007-2012 for all ages compared to Ireland.

(For a more detailed explanation of what these disease categories contain see page 8)



Trends in death rates per 100,000 for the four principal causes of death over the period 2007-2012 for under 75 years (premature mortality) compared to Ireland.

(For a more detailed explanation of what these disease categories contain see page 8)



Facts and Health Summary

The following charts show how people in this area compare with the rest of Ireland for key indicators. The black circle shows the score for this area and the black line shows the average for Ireland. For some indicators, being above average is preferable, whereas for others the opposite is the case. A more detailed interpretation is given on page 7.

Note: Indicators with * are for Carlow/ Kilkenny Local Health Office. N/A: not available. – : number <5.

Carlow

Key:

● Local Measure

Ireland Key:

	Ireland Average			
Lowest				Highest
	25th	Percentile	75th	

Indicator	Local Number	Local Rate/%	Irl Rate	Irl Low	Ireland Range	Irl High
POPULATION INDICATORS CENSUS 2011 %						
1 Population number and % of National	54,612	1.2	2.9	0.7		11.5
2 5 year population change 2006-2011	4,263	8.5	8.2	-4.5		20.1
3 Deprivation relative score	n/a	-3.4	0.2	-6.7		10.6
4 Dependency population ratio	18,360	50.6	49.3	34.9		57.3
5 Persons aged 0-4 years	4,345	8.0	7.8	5.1		9.7
6 Persons aged 5-14 years	7,804	14.3	13.6	9.4		15.7
7 Persons 65 years and older	6,211	11.4	11.7	7.2		15.1
8 Lone parent households	2,174	11.2	10.9	9.1		13.8
9 Persons with no formal or primary education only	5,748	16.3	15.2	8.1		24.9
10 Semi, unskilled or agricultural workers	7,218	13.2	11.7	5.3		16.0
11 Unemployment	5,908	23.3	19.0	11.2		28.6
12 Households local authority rented	1,701	8.8	7.8	4.2		16.0
13 White Irish	46,586	86.0	84.5	73.9		90.6
14 White Irish Traveller	413	0.8	0.7	0.2		2.3
15 All other ethnic backgrounds	7,186	13.3	14.9	9.0		24.5
SELF HEALTH REPORTING CENSUS 2011 %						
16 Persons whose health is bad or very bad	867	1.6	1.5	1.1		2.6
17 Total persons with a disability (PD)	7,482	13.7	13.0	10.2		18.2
18 PD with blindness or a serious vision impairment	595	8.0	8.7	7.7		9.7
19 PD with deafness or a serious hearing impairment	1,087	14.5	15.5	13.3		17.5
20 PD with a condition that limits basic physical activities	3,064	41.0	41.1	34.4		47.8
21 PD with an intellectual disability	721	9.6	9.7	7.4		11.5
22 PD with a difficulty in learning, remembering or concentrating	1,685	22.5	23.0	20.8		25.0
23 PD with psychological or emotional condition	1,125	15.0	16.1	13.4		19.5
24 PD with other disability including chronic illness	3,440	46.0	46.2	43.5		48.4
25 PD with a difficulty in dressing/bathing/getting around the home	1,489	19.9	21.1	18.0		26.1
26 PD with a difficulty in working or attending school/college	2,579	34.5	32.7	28.0		37.4
27 PD with a difficulty in going outside home alone	1,977	26.4	27.8	24.4		33.5
28 PD with a difficulty in participating in other activities	2,500	33.4	34.8	31.7		39.8
BIRTH AND NEONATAL STATISTICS						
29 Neonatal mortality by area of residence of mother 2012	–	2.1	2.7	0.0		9.4
30 Infant mortality by area of residence of mother 2012	–	2.1	3.5	1.1		9.4
31 Live births per 1,000 females aged under 20 by area of residence 2011	34	21.0	12.3	5.2		24.1
32 Births rate per 1,000 population registered in 2012	948	17.3	15.8	12.2		20.2
33 Breast feeding rates at time of discharge 2012	448	47.9	46.6	32.4		54.4

Facts and Health Summary

Carlow

Ireland Key:

	Ireland Average			
Lowest				Highest
	25th	Percentile	75th	

Key:

● Local Measure

Indicator	Local Number	Local Rate/%	Irl Avg	Irl Low	Ireland Range	Irl High
CANCER INCIDENCE AGE STANDARDISED RATES 2011						
34 Female all invasive except non malignant skin cancer	102	371.1	370.4	292.0		463.8
35 Male all invasive except non malignant skin cancer	147	561.4	480.1	370.3		561.4
36 Female incidence of malignant melanoma	-	11.8	19.7	4.9		29.0
37 Male incidence of malignant melanoma	6	24.0	18.3	3.2		25.9
38 Male incidence of malignant prostate cancer	52	203.0	159.8	110.9		211.2
39 Female incidence of malignant breast cancer	29	114.1	122.3	87.6		174.5
40 Female incidence of malignant colorectal cancer	9	29.4	40.0	24.7		63.7
41 Male incidence of malignant colorectal cancer	17	65.4	63.1	38.0		74.8
42 Female incidence of malignant lung cancer	13	46.2	37.2	12.9		58.5
43 Male incidence of malignant lung cancer	19	68.6	56.5	23.8		75.4
5 YEAR AGE STANDARDISED DEATHS 2008-2012						
44 Deaths heart disease and stroke - all ages	569	198.6	182.8	162.6		252.6
45 Deaths heart disease and stroke - under 65 years	82	37.4	32.7	26.0		37.4
46 Deaths heart disease and stroke - under 75 years	168	71.5	65.7	53.4		78.7
47 Deaths cancer - all ages	524	193.8	175.6	156.2		204.6
48 Deaths cancer - under 65 years	142	65.0	62.1	51.1		70.2
49 Deaths cancer - under 75 years	294	125.4	112.0	87.8		127.5
50 Deaths injuries and poisoning all ages	92	33.4	35.8	25.3		46.1
51 Deaths injuries and poisoning - under 65 years	76	31.4	30.8	22.3		43.4
52 Deaths injuries and poisoning - under 75 years	80	30.9	32.1	21.8		42.6
53 Deaths respiratory disease - all ages	232	79.6	64.9	51.8		84.6
54 Deaths respiratory disease - under 65 years	15	6.9	6.4	3.3		9.6
55 Deaths respiratory disease - under 75 years	45	19.3	17.8	12.3		25.4
56 All deaths - all ages	1,709	608.4	563.6	508.1		669.7
57 All deaths - under 65 years	383	170.3	163.9	133.8		192.3
58 All deaths - under 75 years	690	289.5	274.0	229.0		316.1
MENTAL HEALTH AND SELF HARM RATES PER 100,000						
59 Suicide by area of residence 2007-2013	n/a	13.8	11.3	5.6		17.8
60 Deliberate self harm males 2012	47	168.3	195.1	107.4		469.2
61 Deliberate self harm females 2012	62	233.6	228.0	141.4		527.8
62 Psychiatric In-patient all admission rate 2011	n/a	507.2	413.9	150.5		631.0
63 Psychiatric In-patient first time admission rate 2011	n/a	179.4	133.6	51.3		199.6
HOSPITAL IN-PATIENT DISCHARGE RATE PER 1,000 2012						
64 All discharges	18,185	333.0	334.8	244.3		508.9
65 Discharges malignant cancers	948	17.4	17.8	10.3		30.5
66 Discharges cardiovascular disease	1,073	19.7	16.9	12.3		25.6
67 Discharges respiratory disease	1,341	24.6	17.2	13.4		26.3
68 Discharges injuries and poisoning	896	16.4	12.2	10.2		17.7
IMMUNISATION UPTAKE 2012*						
69 Immunisation uptake at 24 months: 3rd 6 in 1	n/a	97.0	95.6	92.0		99.0
70 Immunisation uptake at 24 months: MMR1	n/a	96.0	93.3	90.0		98.0

Information

How to interpret the Spine tool

This user guide is designed to aid interpretation of the spine charts on pages 5 and 6 in the health profiles (2015). The spine charts were developed utilising a spine tool developed by the West Midlands Public Health Observatory which is now part of Public Health England. The following explanation on how to interpret these charts is adapted from a document published by the West Midlands Public Health Observatory.

A spine chart is a data visualisation technique to present a number of indicators for an area. Each indicator's statistics are scaled so that the indicator's Ireland average (mean) value forms one dark vertical central line on the chart. An area's value for each indicator is presented as a circle against a shaded background showing the range and inter-quartile range of the local authority values across Ireland.

Range and Inter-quartile range

Behind each local authority indicator value there is a shaded bar representing the range of values for local authorities across Ireland. The darker grey inner area of this bar represents the interquartile range. If areas were put in order of worst to best, the interquartile range would represent the worst and best values of the middle 50% of areas, i.e. those that are neither in the 25% worst nor the 25% best in all of Ireland. If the frequency distribution was a perfect normal distribution then the centre of the dark grey band (the median) would overlap the Ireland value (the mean) and the light grey tails would be equal length. The symmetry of the grey bars can give you a general indication of:

- where there is skew or outliers in a particular direction: the light grey tail will be greater on one side than the other and the dark grey band may also be off-centre. In extreme cases the dark grey band (the interquartile range) may not overlap the mean Ireland value as the centre of the interquartile range is the median rather than the mean average.
- If the majority of areas are very close to the Ireland value but others are more spread out (central dark grey band is much narrower than the length combined of the light grey tails).
- **Mean:** This is another word for the average. It is defined as the sum of the observations divided by the number of observations.
- **Median:** This is the middle value in a range of values which have been put in order of lowest to highest. It is used instead of the mean if the data is skewed.
- **Range:** The range is described as the smallest and largest observations.
- **Interquartile range:** This is the range where the middle 50% of the observations lie.
- **Normal distribution:** This describes data which have a symmetrical distribution, with a characteristic 'bell' shape. If you were to depict the data on a chart the chart would look symmetrical.

- **Skew:** This is used to describe data which does not have a symmetrical distribution. If you were to depict the data on a chart the chart would look lopsided or "skewed".

To watch a training video on Spine Tool interpretation click the link below:

<http://www.youtube.com/watch?v=480Mswgcg8M>

West Midlands Public Health Observatory (now Public Health England). Tools: Spine Chart Creator. Available online at <http://www.wmpho.org.uk/tools/>

West Midlands Public Health Observatory. The Older People's Health and Wellbeing Atlas: User Guide (November 2012 update). Available online at http://www.wmpho.org.uk/olderpeopleatlas/Atlas/UserGuide_OlderPeopleAtlas.pdf

Definitions adapted from Public Health textbook on <http://www.healthknowledge.org.uk/>:

Additional information:

National Suicide Research Foundation further information on suicide and self harm is available at www.nsrif.ie

Infectious Disease Data for all notifiable diseases can be obtained from Health Protection Surveillance Centre

<http://www.hpsc.ie/AboutHPSC/AnnualReports/>

Further information on health determinants from Census data, such as housing, water supply, time to travel to work, pc ownership, car ownership etc. are available at www.cso.ie.

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Public Health England - Public Health England Health Profiles <http://www.apho.org.uk/>

West Midlands Public Health Observatory and to Jo Watson (SEPHO) and Doris Hain (ERPHO) for Spine Chart Tool V. 4 obtained at

<http://www.wmpho.org.uk/tools/>

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Definitions and References

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Population, Population Change, Population Age Comparison - data is taken from the Census of Ireland 2011. www.cso.ie

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Deprivation by Electoral Division, Trutz Haase Deprivation Index 2011. This is a composite measure based on the Census of Ireland 2011 – for more detailed information on composition data see www.pobal.ie.

Live Births and birth rate per 1,000 population for years 2007-2012. Sources: Report of Vital Statistics 2007, May 2010 Table 2.19. Report on Vital Statistics 2008, Feb 2011 Table 2.19. Report on Vital Statistics 2009, May 2012 Table 2.21. Report on Vital Statistics 2010, Nov 2012 Table 2.21. Report on Vital Statistics 2011, Oct 2013 Table 2.21. Vital Statistics 4th Quarter & Yearly Summary 2012, May 2013 Table 2.2. www.cso.ie.

Page 3-4

Live birth rate per 1,000 population to females under 20 years of age for years 2002, 2006, and 2011 census years. Note: 2011* is based on single year of age for census year 2011. Sources: Report on Vital Statistics 2002, Jan 2005 Table 2.2. Report on Vital Statistics 2006, June 2009 Table 2.2. Report on Vital Statistics 2011, Oct 2013 Table 2.2 www.cso.ie.

Age standardised hospital discharge rate per 100,000 population for the principal causes of disease – the number of in-patient & day case hospital discharges by area of residence for the years 2007-2011 per 100,000 population for the four principal diagnoses: Neoplasms (ICD 10 (C00-D48)); Diseases of the circulatory system (ICD 10 (I00-I99)); Diseases of the respiratory system (ICD 10 (J00-J99)); External causes (ICD 10 (S00 - T98 & V01 - Y89)). PHIS2013 H1. Age-standardised Data for Principal Diagnoses 1994-2011. Data Tools at Health Well <http://www.thehealthwell.info/data-resources>.

Age standardised mortality data for all ages and those aged under 75 males and females 2007-2012 for the principal causes of death. <http://www.thehealthwell.info/phis-tables>.

(Age-standardisation adjusts rates to take into account how many old or young people are in the population being looked at. When rates are age-standardised differences in the rates over time (in this case 5 years) or between geographical areas do not simply reflect variations in the age structure of the populations. If rates are not age-standardised, a higher rate in one county is likely to reflect the fact that it has a greater proportion of older people).

Page 5.

(1-28) Data taken from the Census of Ireland 2011. www.cso.ie

- (1) Percentage of population of this area as a percentage of the national population.
- (2) Percentage of population change between the Census of Ireland years 2006-2011.
- (3) Deprivation relative score. The calculated deprivation level for this area. A scoring is given to the area based on a national average of zero and ranging from roughly -40 (being most disadvantaged) to +40 (most affluent). For more information see www.pobal.ie.
- (4) Dependency ratio – the proportion of the population in the 0-14 and 65 years and over age groups as a proportion of the 15-64 age group.
- (5-7) Percentage of the population of this area in the 0-4, 5-14 and 65 years plus age groups.
- (8) Percentage of lone parent households over the total number of households.
- (9) Percentage of persons aged 15 and over who have either no formal education or whose highest level of education is at primary school level over the number of persons aged 15 and over who have ceased education.
- (10) Percentage of persons in labour force who are semi, unskilled or agricultural workers.
- (11) Percentage of persons aged 15-64 available in the labour force who are unemployed including first time job seekers.

- (12) Percentage of households which are local authority rented over the total number of households.
- (13-15) The percentage of persons of white Irish, Traveller and all "other ethnicity".
- (16) Percentage of persons who reported that their health is either bad or very bad.
- (17) Percentage of persons in this area who state they have a disability.
- (18-28) Percentage of persons with this type of disability out of all disabilities.
- (29) Neonatal mortality 2012 rates: Deaths of infants, under 28 days, per 1,000 live births, classified by area of residence of mother. Fourth Quarter and Yearly Summary 2012, May 2013 page 52 Table 2.14. www.cso.ie. Note: Neonatal mortality rates in some areas are based on very small numbers, which means they are subject to considerable fluctuation and caution should be exercised in their interpretation.
- (30) Infant mortality rates 2012: Deaths of infants under one year, per 1,000 live births, classified by area of residence of mother. Vital Statistics Fourth Quarter and Yearly Summary 2012, May 2013 Table 2.2. www.cso.ie. Note: Infant mortality rates in some areas are based on very small numbers, which means they are subject to considerable fluctuation and caution should be exercised in their interpretation.
- (31) Age standardised rate live births per 1,000 females under 20 for 2011. Note: based on single year of age for Census year 2011. Report on Vital Statistics 2011, Oct 2013 Table 2.2 www.cso.ie.
- (32) Births registered within the year of 2012 by area of residence of mother - Rate per 1,000 population. Note: Annual Rates based on 2012 population. Vital Statistics 2012 4th Quarter & Yearly Summary, May 2013 Table 2.2 www.cso.ie.
- (33) Breast feeding rates by Infant's type of feeding on discharge, numbers and percentages of Total live births. Perinatal Statistics Report 2012, Health Research and Information Division, ESRI November 2013 www.esri.ie.

Page 6.

- (34-43) Cancer European age standardised incidence rates per 100,000 for 2011. National Cancer Registry Ireland – Data and Statistics. www.ncri.ie/. Note: NMSC -Non Malignant Skin Cancers.
- (44-58) 2008-2012 5 year age standardised mortality rate per 100,000 for the principal causes of death. <http://data.thehealthwell.info/NTI/indicators/tables>.
- (59) Suicide rate per 100,000 by area of residence Ireland and Counties for 2007-2013 -National Suicide Research Foundation www.nsrif.ie.
- (60-61) Male and female deliberate self harm age standardised rate per 100,000 by city and county per registry report, 2012. www.nsrif.ie.
- (62-63) Psychiatric Inpatient Admission rates per 100,000 and Psychiatric Inpatient first time admission rate per 100,000 2011. Data Tools at Health Well <http://www.thehealthwell.info/data-resources>
- (64-68) Number of Patients discharged by area of residence by principal diagnosis crude rate per 1,000 population 2012. : Neoplasms (ICD 10 (C00-D48)); Diseases of the circulatory system (ICD 10 (I00-I99)); Diseases of the respiratory system (ICD 10 (J00-J99)); External causes (ICD 10 (S00 - T98 & V01 - Y89)). Data Tools at Health Well <http://www.thehealthwell.info/data-resources>.
- (69-70) Immunisation uptake at 24 months for 3rd dose of 6 in 1 and 1st dose of MMR for 2012. Health Protection Surveillance Centre <http://www.hpsc.ie/A-Z/VaccinePreventable/Vaccination/immunisationUptakeStatistics>