

# Research and Information Service Briefing Paper

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# Health Inequalities in Northern Ireland by Constituency

# 1 Introduction

This Briefing Paper reviews the available evidence on health inequalities in Northern Ireland by Assembly Area / Parliamentary Constituency. The paper begins with a brief analysis of the Northern Ireland Multiple Deprivation Measure (NIMDM), a suite of indicators which reflect inequalities in areas such as health. This is followed by an examination of 11 key health indicators at constituency level.

# 2 Key Details

There is a well-established association between deprivation and ill-health.
 Analysis of the Northern Ireland Multiple Deprivation Measure (NIMDM) 2010 by constituency reveals that Belfast West, Belfast North and Foyle are the most deprived constituencies, while North Down, Strangford and South Antrim are the least deprived.

- In general, multiple deprivation tends to be more intense in the urban constituencies of Belfast and Derry / Londonderry than in rural constituencies.
   This is also true of health inequalities.
- In terms of health, life expectancy is lowest in three Belfast constituencies (West, North and East) and highest in Lagan Valley, North Down and South Down. The gap between Belfast West and Lagan Valley is 6.6 years for males and 3.7 for females.
- In 2010, Belfast West had the highest percentage of teenage births (8.5 per 100 live births), followed by Belfast North (8.4) and East Londonderry (7.1). North Down, Mid-Ulster (3.1) and Fermanagh and South Tyrone (2.9) had the lowest percentage.
- Belfast North and Belfast West had the highest rates for self-harm, and were
  nearly twice as likely to present to hospital than the Northern Ireland average.
   Conversely, residents of North Antrim, Lagan Valley and East Londonderry were
  around half as likely to self-harm as the Northern Ireland average.
- Belfast East had the highest suicide rate (25.4 per 100,000 population), followed by Belfast North (24.7) and Foyle (24.3). Fermanagh and South Tyrone (12.5), East Antrim (10.1) and Mid-Ulster (9.2) had the lowest rates.
- Belfast West had the highest proportion of individuals (14.0%) using prescribed medication for mood and anxiety disorders, followed by Belfast North (13.8%) and Foyle / Belfast East (12.8%).
- GP list sizes are largest in the rural constituencies, particularly in the West of Northern Ireland, and smallest in the urban constituencies of Belfast and Derry / Londonderry.
- Alcohol-related mortality was significantly higher in the urban constituencies of Belfast North, Belfast West and Foyle than in rural constituencies.
- Belfast West, Belfast North and Foyle have the highest standardised death rates for all three main causes of death (i.e. cancer, circulatory and respiratory diseases).
- Belfast West (24.0%) has the highest percentage of disability benefit recipients, followed by Belfast North (20.9%) and West Tyrone (18.8%).

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# 3 Multiple Deprivation and Urban / Rural differences

As there is a well-established association between health inequality and multiple deprivation <sup>1</sup>, it is helpful to begin by reviewing the overall extent of multiple deprivation by constituency.

Table 1 presents the overall Multiple Deprivation 2010 rank for each of the 18 Assembly Areas in Northern Ireland <sup>2</sup>. The table shows that Belfast West, Belfast North and Foyle are the most deprived constituencies while North Down is the least deprived <sup>3</sup>.

Table 1: Multiple Deprivation by Constituency

AA NAME	Extent <sup>4</sup> (%)	Multiple Deprivation Rank (1 = most deprived)
Belfast West	76	1
Belfast North	59	2
Foyle	43	3
West Tyrone	23	4
Belfast South	20	5
Belfast East	19	6
Upper Bann	18	7
Newry and Armagh	17	8
East Londonderry	14	9
East Antrim	10	10
North Antrim	9	11
Mid Ulster	9	12
South Down	7	13
Lagan Valley	7	14
South Antrim	5	15
Strangford	5	16
Fermanagh and South Tyrone	5	17
North Down	3	18
Northern Ireland	18	

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<sup>&</sup>lt;sup>1</sup> A series of official reports, beginning with the Black Report (1980), Acheson Report (1998) and Marmot Review (2010), have identified a social class gradient in health. In general, persons in the higher social classes typically live longer and enjoy better health than those from the lower social classes. Class can be considered a proxy for poverty and deprivation.

<sup>&</sup>lt;sup>2</sup> The Northern Ireland Multiple Deprivation Measure (NIMDM) 2010 identifies small area concentrations of multiple deprivation across Northern Ireland. The NIMDM 2010 is constructed from 52 different indicators relating to seven types or 'domains' of deprivation, namely: Income, Employment, Health, Education, Proximity to Services, Living Environment and Crime and Disorder. See NISRA (2010) Northern Ireland Multiple Deprivation Measure 2010: Assembly Area Profiles. Available at: <a href="http://www.nisra.gov.uk/deprivation/archive/Updateof2005Measures/NIMDM">http://www.nisra.gov.uk/deprivation/archive/Updateof2005Measures/NIMDM</a> 2010 Assembly Area Profiles.pdf

<sup>&</sup>lt;sup>3</sup> When reading the table it is important to note that the NIMDM 2010 rank at Assembly Area level is a summary indicator. This obscures the fact that the degree of multiple deprivation will often vary widely within a constituency. In Belfast East, for example, the Stormont 2 Super Output Area (SOA) is ranked 889 (out of 890), while Ballymacarrett 3 SOA is raked 23rd.

<sup>&</sup>lt;sup>4</sup> "Extent" measures the percentage of the Assembly Area population living within the 30 per cent most deprived SOAs in Northern Ireland (out of 890). All of the people living in the 10 per cent most deprived SOAs are included, plus a diminishing proportion of the population of those Super Output Areas in the next two 10 per cent bands.

In general, Table 1 also reveals that multiple deprivation tends to be more pronounced in urban constituencies (such as Belfast and Derry/Londonderry) than in rural constituencies. This is also true of health inequalities.

According to the Northern Ireland Health and Social Care Monitoring System (2009), health outcomes in rural areas generally tend to be much better than in Northern Ireland overall <sup>5</sup>. In the 2009 update, it was found that:

- drug related deaths were 49 per cent lower in rural areas, admissions to hospital for self-harm (47% lower), alcohol related mortality (45% lower), and teenage births (41% lower).
- Life expectancy in rural areas was 1.3 and 0.6 years higher for males and females respectively than in Northern Ireland generally.
- Rural areas also had considerably lower mortality due to respiratory disease and lung cancer incidence than that experienced in the wider region, as well as a lower proportion of mothers that smoked during pregnancy.
- Conversely, rural areas fared worse than Northern Ireland overall for ambulance response time (which was almost double the regional average), and experienced higher elective hospital admissions and hospital admissions for circulatory disease.

In general, while health inequalities are not as pronounced as the observed differences between deprived areas and Northern Ireland, there are noticeable rural differences for many of the indicators.

# 4 Health Inequalities by Constituency

Having outlined some general points relating to health inequalities, this section will examine those inequalities in more detail.

## 4.1 Life Expectancy

Life expectancy refers to the expected years of life at birth based on the mortality rates of the period in question. Table 2 presents life expectancy data by Assembly Area for the period 2007 – 2009 <sup>6</sup>. Life expectancy values for Northern Ireland as a whole are 76.8 years for males and 81.4 for females.

The table shows that life expectancy is lowest in three Belfast constituencies (West, North and East) and highest in Lagan Valley, North Down and South Down. In Belfast

<sup>&</sup>lt;sup>5</sup> DHSSPS (2009) **Health and Social Care Inequalities Monitoring System, Third Update Bulletin 2009**. Available at <a href="http://www.dhsspsni.gov.uk/inequalities\_monitoring\_update3.pdf">http://www.dhsspsni.gov.uk/inequalities\_monitoring\_update3.pdf</a>

<sup>&</sup>lt;sup>6</sup> NINIS (2011) Life Expectancy 2007 – 2009. Available at: <a href="http://www.ninis.nisra.gov.uk/mapxtreme/viewdata/Health">http://www.ninis.nisra.gov.uk/mapxtreme/viewdata/Health</a> and Care/Health/Life Expectancy/Life Expectancy 2007-2009.xls

West, the life expectancy of males (72.3 years) is four and one half years less than the Northern Ireland average (76.8), while the life expectancy of females (78.4) is three years lower than the regional average (81.4). The gap between Belfast West and Lagan Valley (highest life expectancy) is 6.6 years for males and 3.7 for females.

Table 2: Life Expectancy by Constituency, 2007 – 2009

Assembly Area	Male	Female
Belfast West	72.3	78.4
Belfast North	73.0	79.5
Belfast East	75.2	80.4
Foyle	75.2	80.4
Newry and Armagh	76.4	81.1
West Tyrone	76.5	81.2
Belfast South	76.6	81.4
Mid Ulster	76.9	82.3
Fermanagh & South Tyrone	76.9	81.8
Upper Bann	77.3	82.6
East Antrim	77.7	81.2
East Londonderry	77.9	83.0
Strangford	78.2	83.1
North Antrim	78.2	82.4
South Antrim	78.4	82.8
South Down	78.5	82.1
North Down	78.5	81.5
Lagan Valley	78.9	82.1
Northern Ireland	76.8	81.4

# 4.2 Births to Teenage Mothers

Table 3 presents the number of births to teenage mothers (aged 13 - 19) by constituency in 2010. In Northern Ireland as a whole, there were 1,265 such births, representing 5 per cent of all live births <sup>7</sup>.

The table shows that Belfast West had the highest percentage of teenage births (8.5 per 100 live births), followed by Belfast North (8.4) and East Londonderry (7.1). North Down, Mid-Ulster (3.1) and Fermanagh and South Tyrone (2.9) had the lowest percentage.

Taken together, four constituencies (Belfast West, Belfast North, East Londonderry and Foyle) accounted for over a third (35.2%) of all teenage births during 2010.

<sup>&</sup>lt;sup>7</sup> NISRA / NINIS (2011) **Births 2010**. Available at:

http://www.ninis.nisra.gov.uk/mapxtreme/viewdata/Population\_and\_Migration/Population/Births/Births\_2010.xls

Provisional figures for 2011 (published in April 2012) show that the number of teenage births has fallen to 1,170 (4.6% of all live births) - the lowest number in the past 35 years 8.

Table 3: Births to Teenage Mothers by Assembly Area 2010

Assembly Area	All Births 2010	Number of births to Teenage Mothers 2010	Per cent
Belfast West	1,533	130	8.5
Belfast North	1,575	133	8.4
East Londonderry	1,217	87	7.1
Foyle	1,462	95	6.5
Belfast East	1,221	79	6.5
Upper Bann	1,915	101	5.3
South Antrim	1,409	73	5.2
East Antrim	1,050	54	5.1
Strangford	995	47	4.7
Belfast South	1,321	62	4.7
South Down	1,647	65	3.9
Lagan Valley	1,401	55	3.9
Newry and Armagh	1,781	65	3.6
North Antrim	1,361	49	3.6
West Tyrone	1,283	44	3.4
North Down	1,049	33	3.1
Mid Ulster	1,562	48	3.1
Fermanagh and South Tyrone	1,533	45	2.9
Northern Ireland	25,315	1,265	5.0

#### 4.3 **Hospital Admissions for Self-harm**

Since 2004 – 05 there has been an average of around 4,700 admissions to hospital for self-harm each year, of which females account for approximately 54 per cent 9. The Standardised Admission Ratio <sup>10</sup> for self-harm has improved relatively in deprived areas over recent years but still remains almost twice that of Northern Ireland overall.

<sup>&</sup>lt;sup>8</sup> NISRA (2012) Statistical Bulletin: Births in Northern Ireland 2011. Available at: http://www.nisra.gov.uk/archive/demography/publications/births\_deaths/births\_2011.pdf

<sup>&</sup>lt;sup>9</sup> DHSSPS (2009) Op. cit.

<sup>&</sup>lt;sup>10</sup> Standardised Admission Ratio (SAR) is a measure of how much more (or less) likely an individual is to be admitted to an acute hospital in a geographic area compared with the Northern Ireland average, having taken into account the area's age and gender profile. For example, in Table 4 the SAR for Northern Ireland is set as a baseline (100), while the SAR for Upper Bann is 137. This means that a resident of Upper Bann is 37 per cent more likely to be admitted to a local hospital for self-harming compared with Northern Ireland overall.

Table 4 presents data on hospital admissions for self-harm over the complete five year period, 2004/2005 – 2008/09 <sup>11</sup>. The table shows that residents of Belfast North and Belfast West had the highest rates over the five-year period, and were nearly twice as likely to present to hospital for self-harm as the Northern Ireland average. Conversely, residents of North Antrim, Lagan Valley and East Londonderry were around half as likely to self-harm as Northern Ireland overall.

Table 4: Standardised Admission Ratios for Self-harm, 2004/-5 - 2008/09

Assembly Area	Standardised Admissions Ratio Male	Standardised Admissions Ratio Female	Standardised Admissions Ratio All Persons
Belfast North	208	170	187
Belfast West	192	180	185
Upper Bann	145	130	137
Belfast East	123	138	131
Foyle	126	113	119
Belfast South	107	93	99
South Down	96	96	96
Newry and Armagh	93	93	93
North Down	77	102	90
Strangford	79	96	88
West Tyrone	74	87	80
Mid Ulster	76	77	77
Fermanagh and South Tyrone	73	77	75
East Antrim	68	73	70
South Antrim	68	70	69
North Antrim	66	65	65
Lagan Valley	64	66	65
East Londonderry	57	58	58
Northern Ireland	100	100	100

## 4.4 Suicide Rates

Since 2005, the number of suicides registered in Northern Ireland has grown substantially, from 213 to 313 in 2010, an increase of 47 per cent<sup>12</sup>. This has meant that the crude suicide rates in both deprived areas and Northern Ireland as a whole have also risen sharply.

Personal Communication (2012) Self-harm Admissions by Westminster Parliamentary Constituency, 2004/5 – 2008/9.
Project Support Analysis Branch, DHSSPS, 2 May 2012

NINIS (2007) Death by suicide and undetermined intent 2005. Available at:
<a href="http://www.ninis.nisra.gov.uk/mapxtreme/viewdata/Health">http://www.ninis.nisra.gov.uk/mapxtreme/viewdata/Health</a> and Care/Health/Deaths By Cause/Deaths by Suicide Unde termined Intent 2005.xls

Table 5 presents the latest published suicide data by Assembly Area (2010) <sup>13</sup>. The crude suicide rate for Northern Ireland as a whole was 17.4 per 100,000 population. The table shows that Belfast East had the highest rate (25.4), followed by Belfast North (24.7) and Foyle (24.3). Fermanagh and South Tyrone (12.5), East Antrim (10.1) and Mid-Ulster (9.2) had the lowest rates.

Table 5: Deaths from Suicide and Suicide Rates, 2010

Assembly Asse	Deaths from suicide and undetermined	Crude Suicide Rate per
Assembly Area	intent 2010	100,000 pop
Belfast East	23	25.4
Belfast North	25	24.7
Foyle	25	24.3
Lagan Valley	23	22.9
Belfast West	20	22.0
East Londonderry	19	19.5
Belfast South	20	19.3
North Antrim	20	18.7
South Down	20	18.2
Strangford	16	17.7
North Down	13	14.4
Upper Bann	17	14.4
Newry and Armagh	16	14.1
South Antrim	13	13.1
West Tyrone	12	12.9
Fermanagh and South Tyrone	13	12.5
East Antrim	9	10.1
Mid Ulster	9	9.2
Northern Ireland	313	17.4

# 4.5 Mood and Anxiety Disorders

The number of individuals suffering from mood or anxiety disorders in Northern Ireland can be estimated using prescription data by GP practice for anxiolytic and anti-depressant drugs. This data is then attributed to geographical area using the GP practice list.

 $<sup>^{13}</sup>$  NINIS (2011) **Death by suicide and undetermined intent 2010**. Available at:

http://www.ninis.nisra.gov.uk/mapxtreme/viewdata/Health and Care/Health/Deaths By Cause/Deaths by Suicide Unde termined Intent 2010.xls

Table 6 presents an estimate of the percentage of the population in each Assembly Area in April 2009 <sup>14</sup> who were receiving prescribed drugs for mood and anxiety disorders.

Table 6: Estimated Percentage of Population with Mood and Anxiety Disorders , April 2009

Assembly Areas	Per cent on Prescribed Drugs for Mood and Anxiety Disorders
Belfast West	14.0%
Belfast North	13.8%
Foyle	12.8%
Belfast East	12.8%
Upper Bann	11.9%
East Londonderry	11.1%
North Antrim	10.9%
East Antrim	10.7%
South Antrim	10.7%
West Tyrone	10.6%
South Down	10.4%
Strangford	10.3%
Mid Ulster	10.2%
Belfast South	10.1%
North Down	10.0%
Newry and Armagh	9.9%
Lagan Valley	9.8%
Fermanagh and South Tyrone	9.3%
Northern Ireland	11.1%

The table shows that Belfast West had the highest proportion of individuals (14.0%) using prescribed medication for mood and anxiety disorders, followed by Belfast North (13.8%) and Foyle / Belfast East (12.8%). Newry and Armagh (9.9%), Lagan Valley (9.8%) and Fermanagh and South Tyrone (9.3%) had the lowest proportion. In Northern Ireland as a whole, an estimated one-in-nine (11.1%) of the population were using anti-anxiety and anti-depressant drugs in 2009.

# 4.6 General Practitioners (GPs)

Table 7 presents data on the number of GPs and the average list size by Assembly Area in April 2011 <sup>15</sup>. The table shows that GP list sizes are largest in the rural

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<sup>&</sup>lt;sup>14</sup> Personal Communication (2012) Mood and Anxiety Disorders by Westminster Parliamentary Constituency, April 2009. Project Support Analysis Branch, DHSSPS, 2 May 2012. Mood and Anxiety drugs are identified using the British National Formulary (BNF) codes 4.1.2 and 4.

constituencies, particularly in the West of Northern Ireland, and smallest in the urban constituencies of Belfast and Derry / Londonderry. A notable exception is North Antrim, which has the second smallest list size (1,461 patients per GP).

Table 7: Number of GPs and Average List Size , April 2011

Assembly Area	Number of GPs	Number of Registered Patients	Average GP List Size
Mid Ulster	47	86,745	1,846
Upper Bann	71	130,352	1,836
West Tyrone	54	98,187	1,818
South Down	60	102,558	1,709
South Antrim	48	81,620	1,700
East Londonderry	59	99,687	1,690
Lagan Valley	52	87,744	1,687
Fermanagh and South Tyrone	72	120,886	1,679
North Down	53	86,310	1,628
Newry and Armagh	78	126,150	1,617
Belfast North	92	148,237	1,611
Strangford	50	78,879	1,578
East Antrim	46	72,469	1,575
Foyle	75	117,683	1,569
Belfast West	77	117,280	1,523
Belfast South	78	115,961	1,487
North Antrim	77	112,532	1,461
Belfast East	75	106,049	1,414
Northern Ireland	1,164	1,889,329	1,623

Source: Business Services Organisation (2011)

# 4.7 Alcohol-related Deaths

Alcohol-related deaths have been increasing in Northern Ireland since 2005 when mortality stood at 246. By 2010, crude deaths had risen to 284. Despite some minor fluctuations, death rates in deprived constituencies have been consistently higher than in less deprived areas.

<sup>&</sup>lt;sup>15</sup> NINIS (2012) **Number of GPs 2011**. Available at: http://www.ninis.nisra.gov.uk/mapxtreme/viewdata/Health\_and\_Care/Health/GP\_Numbers/Number\_of\_GPs\_2011.xls

Table 8 contains data on alcohol-related deaths by constituency for the full period 2001 -2010. A total of 2,533 persons died in Northern Ireland from alcohol-related causes during this period, a crude death rate of 14.6 per 100,000 population <sup>16</sup>.

An examination of crude death rates during the full period reveals that alcohol-related mortality was significantly higher in the urban constituencies of Belfast North, Belfast West and Foyle than in rural constituencies. In Belfast North, for example, the death rate during this period (27.9) was almost twice the regional average and three times higher than the corresponding rate in Fermanagh and South Tyrone (9.2) <sup>17</sup>.

Table 8: Alcohol-related Mortality by Constituency 2001 - 2010

Assambly Avec	Total Alcohol- related Deaths	Crude Death Rate per 100,000 pop
Assembly Area	2001 - 2010	(2001 – 2010)
Belfast North	261	27.9
Belfast West	219	23.8
Foyle	187	20.2
Strangford	149	19.8
Belfast South	163	17.1
Belfast East	166	15.3
East Antrim	140	15.1
North Down	134	13.7
Newry and Armagh	128	12.9
North Antrim	116	12.7
South Down	118	11.6
East Londonderry	103	11.2
Upper Bann	119	10.9
West Tyrone	106	10.4
South Antrim	117	10.4
Mid Ulster	93	10.4
Lagan Valley	106	10.0
Fermanagh and South Tyrone	108	9.2
Northern Ireland	2,533	14.6

Source: General Registrar Office Death Files

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<sup>&</sup>lt;sup>16</sup> The Crude Alcohol death rate per constituency is calculated by diving the total number of alcohol-related deaths (2001 – 2009) by the total population mid-year estimates (2001 – 2009), then multiplying by 100,000. For details of methodology, see DHSSPS (2009), page 1, *Op. Cit.* 

NINIS (2011) Alcohol Related Deaths 2001 – 2010. Available at:
<a href="http://www.ninis.nisra.gov.uk/mapxtreme/viewdata/Health">http://www.ninis.nisra.gov.uk/mapxtreme/viewdata/Health</a> and Care/Health/Alcohol/Alcohol Related Deaths 2001-2010.xls

## 4.8 Disease Prevalence

GP practices throughout Northern Ireland maintain clinical registers (lists of patients with various conditions) as part of the payments procedure under the Quality and Outcomes Framework (QOF) system.

Table 8 presents the most recent published data (31 March 2011) concerning prevalence rates (per 1,000 patients) for seven clinical areas. The prevalence rate for **chronic heart disease** (CHD) is highest in Belfast East (48), followed by East Antrim and North Down (46). Belfast South (32), Foyle and Newry and Armagh (33) have the lowest rates. The overall Northern Ireland rate is 40. For **chronic obstructive pulmonary disease** (COPD), often associated with smoking, the highest rates are found in Belfast North / Belfast West (23) and Foyle (20). The Northern Ireland prevalence rate is 17 per 1,000 patients.

North Down has the highest **cancer** prevalence rate (18), followed by Belfast East (17). The lowest rates are found in Foyle (12) and Belfast West / Mid-Ulster / Newry and Armagh (13). The Northern Ireland cancer rate is 14 per 1,000 patients. Prevalence rates for **mental health** are relatively high in Belfast East and Belfast South (10), with Strangford and Lagan Valley having the lowest rates (6).

**Asthma** prevalence rates are highest in East Antrim (69), Strangford (65) and Belfast West (64) and lowest in Fermanagh and South Tyrone (51), North Antrim / Newry and Armagh / and West Tyrone (55). The Northern Ireland rate is 59. **Obesity** rates (per 1,000 patients aged 16+) are highest in West Tyrone (142), East Londonderry (135) and East Antrim (131). Belfast South (84) and North Down (96) have the lowest rates. The overall Northern Ireland rate is 114.

Prevalence rates for **diabetes mellitus** are highest in East Antrim (59) and Belfast East (55), while the lowest rates can be found in Belfast South (40) and Mid-Ulster / Newry and Armagh (43). The Northern Ireland rate is 49 per 1,000 patients.

Table 9: Disease Prevalence Rates (per 1,000 patients) for Seven Clinical Areas by Constituency, 31 March 2011

Assembly Area	CHD Prevalence	COPD Prevalence	Cancer Prevalence	Mental Health Prevalence	Asthma Prevalence	Obesity Prevalence (per 1,000 patients aged 16+)	Diabetes Prevalence (per 1,000 patients aged 17+)
Belfast East	48	18	17	10	58	111	55
Belfast North	45	23	14	9	60	121	53
Belfast South	32	14	14	10	57	84	40
Belfast West	40	23	13	9	64	105	48
East Antrim	46	19	16	7	69	131	59
East Londonderry	39	16	14	8	57	135	53
Fermanagh and South Tyrone	37	16	15	8	51	116	49
Foyle	33	20	12	9	62	117	44
Lagan Valley	39	14	15	6	60	110	51
Mid Ulster	39	15	13	8	61	106	43
Newry and Armagh	33	14	13	9	55	108	43
North Antrim	42	17	15	7	55	122	51
North Down	46	14	18	7	59	96	48
South Antrim	38	15	14	8	60	108	50
South Down	38	14	14	8	63	112	49
Strangford	46	15	16	6	65	115	54
Upper Bann	39	15	15	7	56	113	48
West Tyrone	39	17	14	9	55	142	51
Northern Ireland	40	17	14	8	59	114	49

# 4.9 Standardised Death Rates (SDR)

The standardised death rate (SDR) is a crude death rate (per 100,000 population) that has been adjusted for differences in age composition between the local area (constituency) and a standard population. Standardisation enables robust comparisons to be made across constituencies.

Table 10 lists the standardised death rates by constituency (per 100,000 population) for those under 75 years in respect of cancer, circulatory and respiratory diseases during the five year period, 2005 – 2009 <sup>18</sup>. The table shows that, for the under-75s, the overall Northern Ireland SDRs were as follows: cancer (117 per 100,000), circulatory diseases (80) and respiratory disease (27).

Over the five-year period, Belfast West, Belfast North and Foyle had the highest standardised death rates for all three main causes of death (i.e. cancer, circulatory and respiratory diseases). For example, Belfast West had a standardised death rate for cancer of 168 per 100,000 compared with the overall Northern Ireland rate of 117.

At the other end of the scale, Lagan Valley, North Down and North Antrim (among others) had SDRs well below the respective Northern Ireland values.

<sup>&</sup>lt;sup>18</sup> Cancer, all circulatory diseases, and all respiratory diseases remain the three largest causes of death in Northern Ireland, and accounted for 70 per cent of all deaths in 2011 (General Registrar Office).

Table 10: Standardised Death Rates for Under-75s (per 100,000 pop.) by Constituency, 2005 – 2009

	Cancer			Circulatory Diseases			Respi	ratory D	iseases
Assembly Areas	All	Male	Female	All	Male	Female	All	Male	Female
Belfast West	168	191	147	119	159	83	45	56	35
Belfast North	147	161	135	103	135	73	39	46	32
Foyle	134	135	131	100	134	65	42	45	39
Belfast East	122	145	101	81	109	56	30	35	24
Newry and Armagh	121	124	117	82	112	50	25	29	20
Upper Bann	121	129	112	81	103	58	25	30	19
East Antrim	118	127	108	76	98	53	27	26	28
Mid Ulster	116	118	112	80	103	53	17	16	17
South Antrim	114	125	100	68	88	46	26	26	26
West Tyrone	112	121	100	83	101	63	24	25	23
Fermanagh Sth. Tyrone	111	118	102	77	101	51	26	29	23
South Down	110	105	114	73	89	55	21	24	19
East Londonderry	109	110	108	73	95	50	20	19	21
Belfast South	108	123	95	71	91	52	23	27	20
Strangford	106	118	92	72	93	50	25	23	26
North Antrim	102	108	95	74	97	51	22	26	18
Lagan Valley	99	107	90	62	73	51	22	25	19
North Down	99	100	98	67	87	47	24	26	21
Northern Ireland	117	125	108	80	103	56	27	29	24

Note: cells with red borders indicate constituencies with either the highest or lowest values.

## 4.10 Standardised Mortality Ratio (SMR)

The Standardised Mortality Ratio (SMR) for the under-75s, which is based on five years data (2005-2009), is a measure of how much more or less likely a person aged under 75 is to die in a constituency compared with the Northern Ireland average, having taken account of the area's age and gender profile.

Local mortality rates can vary for many reasons, such as deprivation, health behaviours, or the socio-economic make up of the local population. These local factors can vary from the Northern Ireland picture and thus influence overall mortality rates.

Table 11 shows the SMR (provisional) for all deaths by constituency and gender over the period  $2005 - 2009^{19}$ . Belfast West had the largest SMR (149) in the under-75s, with mortality levels 49 per cent higher than the overall Northern Ireland level (100). Belfast North (132) and Foyle (123) also had SMRs which were substantially higher than the Northern Ireland average.

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<sup>&</sup>lt;sup>19</sup> Personal Communication (2012) Standardised Mortality Ratios by Constituency and Gender, 2005 – 2009. Project Support Analysis Branch, DHSSPS, 4 May 2012.

Table 11: Standardised Mortality Ratio by Constituency and Gender, 2005 - 2009

	Under 75 SMR (All deaths)					
Assembly Area	Male	Female	All			
Belfast West	156	140	149			
Belfast North	134	128	132			
Foyle	122	126	123			
Newry and Armagh	107	101	105			
Belfast East	110	94	103			
Fermanagh and South Tyrone	102	96	100			
West Tyrone	99	99	99			
Mid Ulster	97	96	97			
East Antrim	93	101	96			
Upper Bann	94	97	95			
Belfast South	95	90	93			
East Londonderry	90	94	92			
South Antrim	88	95	91			
South Down	83	101	90			
Strangford	91	89	90			
North Antrim	89	85	88			
North Down	82	86	84			
Lagan Valley	80	86	82			
		'				
Northern Ireland	100	100	100			

In contrast, the constituencies of North Antrim, North Down and Lagan Valley had the lowest SMRs. Lagan Valley, for example, had a standardised death rate18 per cent lower than the Northern Ireland average.

## 4.11 Disability Benefits

One indicator of health inequality, is the number of persons in receipt of disability benefits. Table 12 presents data on those receiving one or more disability benefits as a proportion of the constituency population at February 2011<sup>20</sup>.

Belfast West (24.0% of estimated resident population) has the highest percentage of disability benefit recipients, followed by Belfast North (20.9%) and West Tyrone (18.8%). The constituencies of Lagan Valley (12.4%), South Antrim (12.1%) and North Down (11.9%) had the lowest proportion <sup>21</sup>.

The range of disability benefits included is as follows: Attendance Allowance, Disability Living Allowance, Incapacity Benefit, Severe Disablement Allowance and Employment and Support Allowance. The estimated resident population of each constituency is drawn from the 2010 Mid-year population estimates.

http://www.ninis.nisra.gov.uk/mapxtreme/viewdata/Social and Welfare/Social Security/Multiple Disability Benefits Recipients/MDB Recip\_2011.xls

<sup>&</sup>lt;sup>21</sup> NINIS (2011). Multiple Disability Benefit Recipients 2011. Department for Social Development, February 2011. Available at:

Table 12: Per cent of population in receipt of one or more disability benefits by constituency, Feb 2011

Assembly Area	Per cent of Population
Belfast West	24.0
Belfast North	20.9
West Tyrone	18.8
Foyle	17.7
Mid Ulster	15.9
Upper Bann	15.8
Newry and Armagh	15.7
Belfast East	15.5
South Down	14.8
Fermanagh and South Tyrone	14.5
East Londonderry	14.2
North Antrim	13.2
East Antrim	13.1
Strangford	12.9
Belfast South	12.5
Lagan Valley	12.4
South Antrim	12.1
North Down	11.9
Northern Ireland	15.2

# 5 Summary

Section 3 showed that the constituencies of Belfast North, Belfast West and Foyle have high rates of multiple deprivation, while North Down, Lagan Valley, Strangford, South Antrim and Fermanagh and South Tyrone have considerably lower rates. A similar pattern emerged when health inequalities are examined.

A review of 11 health-related indicators in Section 4, which ranged from life expectancy to suicide rates, from the prevalence of mood and anxiety disorders to disability benefit uptake, shows that health inequalities are most pronounced in the urban constituencies of Belfast North, Belfast West and Foyle. With the exception of General Practitioner list size, the rural constituencies generally fare much better. This is particularly true of North Down, Lagan Valley, North Antrim, Strangford and Fermanagh and South Tyrone, where indicator rates are generally well below the regional average.