

INFORMATION
ANALYSIS
DIRECTORATE



Health Inequalities

Annual Report 2019

A product of the NI Health and Social Care Inequalities Monitoring System



Department of
Health

An Roinn Sláinte

Mánnystrie O Poustie

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Health Inequalities

Annual Report 2019

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Information Analysis Directorate (IAD) sits within the **Department of Health (DoH)** and carries out various statistical work and research on behalf of the department. It comprises four statistical areas: Hospital Information, Community Information, Public Health Information & Research and Project Support Analysis.

IAD is responsible for compiling, processing, analysing, interpreting and disseminating a wide range of statistics covering health and social care.

The statisticians within IAD are out-posted from the Northern Ireland Statistics & Research Agency (NISRA) and our statistics are produced in accordance with the principles and protocols set out in the UK Code of Practice for Official Statistics.

About Public Health Information and Research Branch

The role of Public Health Information and Research Branch (PHIRB) is to support public health policy development through managing the public health survey function while also providing analysis and monitoring data. The head of the branch is the Principal Statistician, Mr. Bill Stewart.

In support of the public health survey function, PHIRB is involved in the commissioning, managing and publishing of results from departmental funded surveys, such as the Health Survey Northern Ireland, All Ireland Drug Prevalence Survey, Young Persons Behaviour & Attitudes Survey, Patient Experience Surveys and the Adult Drinking Patterns Survey.

The branch also houses the NI Health and Social Care Inequalities Monitoring System which covers a range of different health inequality/equality based projects conducted for both the region as well as for more localised area levels.

PHIRB provides support to a range of key DoH NI strategies including Making Life Better, a 10 year cross-departmental public health strategic framework as well as a range of other departmental strategies such as those dealing with suicide, sexual health, breastfeeding, tobacco control and obesity prevention. It also has a key role in supporting the Departmental Alcohol and Drug Strategy, by maintaining and developing key departmental databases such as, the Substance Misuse Database, Impact Measurement Tool and the Census of Drug & Alcohol Treatment Services, which are all used to monitor drug misuse and treatments across Northern Ireland. In addition to Departmental functions, PHIRB also support the executive level Programme for Government and its strategic outcomes through a series of performance indicators.

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KEY FINDINGS – REGIONAL (NI)

- Male life expectancy at birth has continued to improve in NI and its most deprived areas. However, no notable change in the least deprived areas has led to a narrowing of the most-least deprived gap from 7.5 years in 2011-13 to 7.1 years in 2015-17. Female life expectancy remained constant in NI and its most and least deprived areas with the gap remaining fairly constant at 4.5 years in 2015-17.
- Generally, Healthy Life Expectancy (HLE) and Disability Free Life Expectancy (DFLE) declined in all areas between 2011-13 and 2015-17, although Male Healthy Life Expectancy remained constant in NI overall and improved in the least deprived areas. The inequality gap in each of these indicators has widened with the exception of Female Healthy Life Expectancy where there was no change.
- For indicators of premature mortality, rates generally decreased over the period in NI and both its most and least deprived areas. Inequality gaps narrowed or remained broadly similar with the exception of death rates among under 75s due to respiratory disease where the gap widened to 264%.
- The rate of hospital admissions due to self-harm for those in the most deprived areas was three and a half times that in the least deprived areas. However the inequality gap has narrowed across the period.
- Alcohol and drug related indicators continue to show some of the largest health inequalities monitored in NI, with drug related and alcohol-specific mortality in the most deprived areas around four and a half times the rates seen in the least deprived.
- In 2017, the proportion of births where the mother reported smoking during pregnancy in the most deprived areas was almost five times the rate in the least deprived.

Most Notable Inequality Gaps		Most Notable Narrowing of Gaps	Most Notable Widening of Gaps
Female HLE	14.5 years	Male Life Expectancy at Birth	Male Healthy Life Expectancy
Male HLE	14.3 years	SDR – Avoidable: Children and Young People	Male Disability Free Life Expectancy
Smoking in Pregnancy	376%	SAR – Self-Harm	SDR – Drug Misuse
SDR – Alcohol	353%	Teenage Birth Rate U20	Smoking During Pregnancy
SDR - Drug Related	334%		

KEY FINDINGS – SUB-REGIONAL (HSC TRUST & LGD)

- Male life expectancy either increased or remained similar across the period in all Trust and Local Government Districts (LGDs) and their most deprived areas.
- Female life expectancy increased across the Causeway Coast & Glens LGD and the most deprived areas of the Newry, Mourne & Down LGD over the period. It remained constant across all other areas except to for the Fermanagh & Omagh LGD and the most deprived areas in both the South Eastern Trust and Derry & Strabane LGD, where it declined.
- Similar to the regional picture, deprivation related inequality was most prominent in indicators relating to alcohol and drugs, self-harm, smoking during pregnancy and teenage births, which were among the five largest inequality gaps for the majority of Trusts and LGDs.
- Large inequality gaps relating to suicide and lung cancer mortality were also seen in many of the LGD and Trust areas. Suicide was among the five largest inequality gaps for Belfast Trust, and Antrim & Newtownabbey and Causeway Coast & Glens LGDs.
- Deaths due to drug misuse was the largest inequality gap seen in the Northern Trust (129%), South Eastern Trust (142%) and Western Trust (171%). Within the Belfast Trust the largest inequality gap was suicide (122%) whereas the largest inequality gap in the Southern Trust was teenage births (100%).
- Drug related mortality was the largest inequality gap seen in six of the eleven LGDs, with the rate in the most deprived areas of the Lisburn & Castlereagh LGD almost three times the LGD average. In Belfast LGD the largest gap was seen with drug related admissions (97%).
- Smoking during pregnancy showed the largest gap in Ards & North Down LGD (111%); teenage births showed the largest gap in Armagh City, Banbridge & Craigavon (108%); while alcohol related admissions showed the largest gap in Derry & Strabane (141%), Fermanagh & Omagh (86%) and Mid Ulster (77%).

INTRODUCTION

This annual publication is one of a series of reports produced as part of the NI Health & Social Care Inequalities Monitoring System (HSCIMS) and presents a comprehensive analysis of health inequality gaps between the most and least deprived areas of NI, and within Health & Social Care (HSC) Trust and Local Government District (LGD) areas across a range of indicators. This report is an update of the Health Inequalities Annual Report 2018 that replaced the previous separately published biennial regional and sub-regional health inequalities reports. As an accompaniment to the 2018 Public Health NI Fact Sheet¹, which presented the latest statistics at NI, HSC Trust and Local Government District levels for a range of public health outcome statistics, this report provides a more detailed assessment of the associated trends and health inequalities gaps. The report is accompanied by downloadable data tables² which contain all figures, including urban and rural breakdowns.

FORMAT OF THE REPORT

This report is separated into two sections, the first focusing on regional health inequalities and the second presenting sub-regional analysis. The regional section contains separate chapters for each theme/topic area, with each section containing a summary of the key findings, followed by individual indicator analysis. For each indicator two charts are displayed.

ASSESSMENT OF CHANGE OVER TIME

In addition various symbols are provided that depict changes in the rates in the most deprived and least deprived areas, and in the most-least deprived inequality gap (see below). An indication of the changes observed at the NI level has also been provided for each health outcome. An improvement or decline in the rate is only indicated when the change is statistically significant, or where there is a clear and consistent trend observed over the series. For a notable change in the inequality gap to have occurred, a significant change in at least one of the areas (most/least deprived) has to have been observed, or, where no statistically significant change is apparent then a change in the gap will have deemed to have occurred if there is a clear and consistent trend in both the outcome and the gap over the analysed period. Table 3 overleaf can be used as a reference to aid the reader in understanding how the symbols indicate a change in both the health outcome over time and the resultant inequality gap in this report have been determined³.

Table 1: Indication of change to Indicator Rate

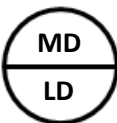






Changes to indicator rate	
	Most Deprived Areas Least Deprived Areas
	Positive Change
	No Notable Change
	Negative Change

Table 2: Indication of change in Inequality Gap over time

Changes in inequality gaps	
	Widening of the gaps
	Narrowing of the gaps
	No notable change in the gap

The sub-regional section presents a condensed summary of findings for each HSC Trust and LGD accompanied by downloadable data tables² which contain all figures and an indication of changes to rates and gaps.

It should be noted that inequality gaps for indicators can exist in either direction; however health outcomes generally tend to be worse in the most deprived areas than in the least deprived. For the purposes of this report, a positive value for the gap means that the health outcomes experienced in the most deprived areas were worse than in the least deprived.

¹ <https://www.health-ni.gov.uk/articles/public-health-statistics>

² <https://www.health-ni.gov.uk/publications/health-inequalities-annual-report-2019>

³ Indicated changes are based on a subjective assessment of the available data.

Table 3: Understanding changes in the inequality gap

Change in Health Outcome		Inequality Gap	
Most Deprived Areas	Least Deprived Areas	Symbol	
Gap Widens	Small Positive Change	Large Positive Change	
	Negative Change	Positive Change	
	Negative Change	No Notable Change	
	Large Negative Change	Small Negative Change	
	No Notable Change	Positive Change	
Gap Narrows	Large Positive Change	Small Positive Change	
	Positive Change	Negative Change	
	Positive Change	No Notable Change	
	Small Negative Change	Large Negative Change	
	No Notable Change	Negative Change	
No Notable Change	Positive Change	Positive Change	
	Negative Change	Negative Change	
	No Notable Change	No Notable Change	
	Small Negative Change (Red)/ Positive Change/(Green)	No Notable Change	
	No Notable Change	Small Negative Change (Red)/ Positive Change/(Green)	

Observed differences in the most and least deprived areas, as indicated by the symbol, does not always lead to a change in the gap. Where this has occurred an explanation has been provided where appropriate.

NOTES FOR USER

- **Regional Inequality Gaps** refer to the difference in health outcomes between the 20% most deprived and 20% least deprived areas of Northern Ireland.
- **Sub-regional inequality gaps** refer to the difference between health outcomes for
 - The 20% most deprived areas within an area and the area's average
 - The Trust or LGD and the regional average.
- **Deprivation Measure:** the 20% most and least deprived areas are defined according to the Northern Ireland Multiple Deprivation Measure (NIMDM). For each indicator, the latest three years / data points presented are newly published figures and are defined according to the 2017 NIMDM⁴, all other data points are based on the 2010 NIMDM⁵
- **Rounded Figures:** some individual figures have been rounded to either zero or one decimal place independently. As a result, the sum of component items may not therefore always add to the totals shown.
- **Additional Indicators:** figures relating to five additional indicators such as Median Fire Response Times and Median Ambulance Response Times, which form part of the HSCIMS but are not contained in the main body of the report, can be found in Appendix C. One new indicator has been introduced since the previous report of 2018; Small for gestational age.
- **Further Analysis:** The appendix section included at the back of the report provides **further analysis** regarding the Social Gradient of Health (Appendix A) and the Population Attributable Risk (PAR) of Deprivation (Appendix B).
- **Urban/Rural Analysis** In addition urban and rural figures for each indicator have been included within the accompanying downloadable tables, and a summary assessment of Rural-NI gaps has been provided in Appendix D.
- **District Electoral Areas (DEAs)** analysis is included within the accompanying downloadable tables. The most recent available health outcomes within each DEA are compared and contrasted with those in the surrounding LGD and notable differences are highlighted.
- **Data limitations** mean that not all health indicators analysed at a regional level can be analysed at Trust, LGD or DEA level. In this report, 44 health indicators have been presented at Trust and 42 at LGD level, with 25 reported at DEA level.
- For **further information** regarding the methodologies, indicator descriptions and sources of data used to produce the analyses throughout this report, please refer to Appendix E Technical Notes & Definitions.

⁴ <https://www.nisra.gov.uk/statistics/deprivation/northern-ireland-multiple-deprivation-measure-2017-nimdm2017>

⁵ <https://www.nisra.gov.uk/statistics/deprivation/northern-ireland-multiple-deprivation-measure-2010-nimdm2010>

Understanding Gaps

Regional Level:

A positive inequality gap means that the health outcomes in the most deprived areas are worse than in the least deprived areas.

Sub-regional Level:

A positive inequality gap between the Trust or LGD and its most deprived areas means that the health outcomes in the most deprived areas are worse than the Trust or LGD average.

Similarly, a positive inequality gap between the Trust or LGD and NI means that the health outcomes in the Trust or LGD are worse than the NI average.

A negative inequality gap that is widening indicates that the health outcome is experiencing a better change over time within the Trust or LGD than that seen regionally.

Other routine reports in the HSCIMS series include:

Public Health NI Fact Sheet – Presents the latest health outcome statistics at Northern Ireland, HSC Trust and LGD levels, and includes information on general health, mortality, health expectancies and more (<https://www.health-ni.gov.uk/articles/public-health-statistics>).

Life Expectancy Decomposition Report – An examination of how mortality patterns contribute to the change in life expectancy over time as well as explain the fairly persistent differentials in life expectancy between those living in the most and least deprived areas, between urban and rural areas, and between Northern Ireland, other UK countries, and the Republic of Ireland (<https://www.health-ni.gov.uk/articles/life-expectancy-decomposition-statistics>).

Making life better: monitoring the wider social determinants of health & wellbeing - key indicators – monitoring report for the key indicators of the wider social determinants of health & wellbeing, contained in the Making Life Better, the public health strategic framework for NI⁶ (<https://www.health-ni.gov.uk/articles/social-determinants-health-statistics>).

⁶ www.health-ni.gov.uk/topics/public-health-policy-and-advice/making-life-better-whole-system-strategic-framework-public

Regional Health Inequalities

Regional health inequalities refer to the difference in health outcomes between the 20% most deprived and 20% least deprived areas of Northern Ireland according to the Northern Ireland Multiple Deprivation Measure. This section contains separate chapters for each theme/topic area, with each chapter containing a summary of the key findings, followed by individual indicator analysis.

For each indicator two charts and two symbols are displayed. For ease of understanding each theme is assigned a separate colour (for example blue for 'Life Expectancy and General Health'), with a deeper tone representing the 20% most deprived areas and a lighter tone the 20% least deprived.

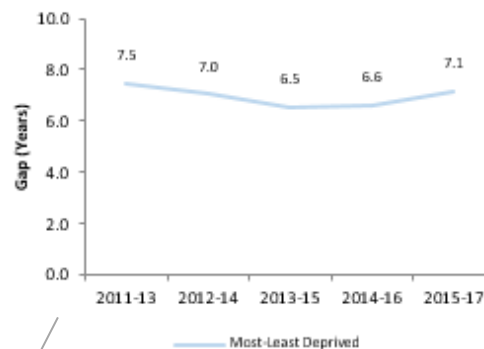
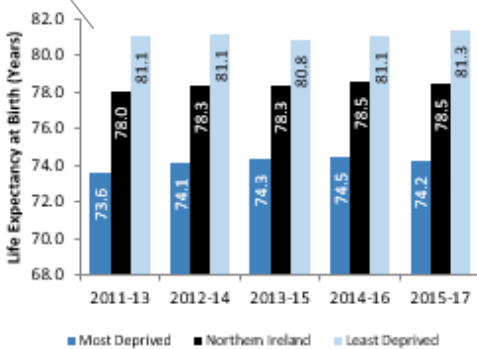
An example of the indicator analysis, with guidance, can be seen below:

This chart shows trends in rates over time for **Northern Ireland**, the **20% most deprived areas** and **20% least deprived areas**.

This symbol for assessment of change over time is explained on pages 7 and 8 of this report. Also shown is an indication of change at the Northern Ireland (NI) level.

Male Life Expectancy at Birth

NI 



This chart shows the trend for the most-least deprived inequality gap over the same period. The gap between most-least deprived may be displayed as a discrete value, e.g. years for life expectancies or as a percentage difference.

SUMMARY OF CHANGES IN REGIONAL INEQUALITY GAPS OVER THE LAST 5 YEARS

< > **Most-Least Deprived Inequality Gaps that Widened over the Analysed Period**

9 indicators had inequality gaps that **widened** over the period analysed

	Change in Health Outcome		
	Northern Ireland	Most Deprived Areas	Least Deprived Areas
Male Healthy Life Expectancy	Yellow	Red	Green
Male Disability Free Life Expectancy	Red	Red	Red
Female Disability Free Life Expectancy	Red	Red	Red
Standardised Death Rate - Respiratory U75	Yellow	Yellow	Green
Crude Suicide Rate	Red	Red	Yellow
Standardised Death Rate - Drug Misuse	Red	Red	Red
Smoking During Pregnancy	Green	Yellow	Green
Year 8 BMI: Obese	Yellow	Yellow	Yellow
Year 8 BMI: Overweight or Obese	Yellow	Yellow	Yellow

Key:

- Negative Change (Red)
- No Notable Change (Yellow)
- Positive Change (Green)

> < **Most-Least Deprived Inequality Gaps that Narrowed over the Analysed Period**

11 indicators had inequality gaps that **narrowed** over the period analysed

	Change in Health Outcome		
	Northern Ireland	Most Deprived Areas	Least Deprived Areas
Male Life Expectancy at Birth	Green	Green	Yellow
Standardised Death Rate - Preventable	Green	Green	Yellow
Standardised Death Rate - Avoidable	Green	Green	Yellow
Standardised Death Rate - Avoidable: Children & Young People	Green	Green	Yellow
Standardised Admission Rate - Emergency Admissions	Green	Green	Yellow
Standardised Admission Rate - Self-Harm	Green	Green	Green
Standardised Admission Rate - Alcohol Related Causes	Yellow	Green	Red
Standardised Death Rate - Lung Cancer	Yellow	Yellow	Yellow
Teenage Birth Rate U20	Green	Green	Yellow
Breastfeeding on Discharge	Green	Green	Yellow
Healthy Birth Weight	Green	Green	Yellow

Key:

- Negative Change (Red)
- No Notable Change (Yellow)
- Positive Change (Green)

Most-Least Deprived Inequality Gaps that Showed No Notable Change over the Analysed Period

29 indicators had inequality gaps that **showed no notable change** over the period analysed

	Change in Health Outcome		
	Northern Ireland	Most Deprived Areas	Least Deprived Areas
Female Life Expectancy at Birth			
Male Life Expectancy at Age 65			
Female Life Expectancy at Age 65			
Female Healthy Life Expectancy			
Potential Years of Life Lost			
Standardised Death Rate - Amenable			
Standardised Death Rate - Circulatory U75			
Standardised Death Rate - Cancer U75			
Standardised Death Rate - All Cause U75			
Standardised Admission Rate - Circulatory			
Standardised Admission Rate - Circulatory U75			
Standardised Prescription Rate - Antihypertensive			
Standardised Prescription Rate - Statin			
Standardised Admission Rate - Respiratory			
Standardised Admission Rate - Respiratory U75			
Standardised Incidence Rate - Cancer			
Standardised Admission Rate - All Admissions			
Standardised Admission Rate - Elective Inpatient Admissions			
Standardised Admission Rate - Day Case Admissions			
Standardised Prescription Rate - Mood & Anxiety			
Standardised Death Rate - Alcohol Specific			
Standardised Death Rate - Smoking Related Causes			
Standardised Incidence Rate - Lung Cancer			
Standardised Admission Rate - Drug Related Causes			
Standardised Death Rate - Drug Related Causes			
Infant Mortality Rate			
Low Birth Weight			
Primary 1 BMI: Obese			
Primary 1 BMI: Overweight or Obese			

Key:

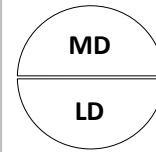
Negative Change
No Notable Change
Positive Change

Life Expectancy & General Health

In 2015-17 the life expectancy gender gap between males and females in Northern Ireland was 3.8 years. For males the deprivation gap in life expectancy at birth narrowed as a result of an improvement in life expectancy in NI and the most deprived areas, while remaining constant in the least deprived areas. For females, life expectancy remained constant across all areas. Healthy Life Expectancies and Disability Free Life Expectancies all declined with the exception of Male Healthy Life Expectancy which remained constant in NI and improved in the least deprived areas. However, the inequality gap in each of these indicators has widened with the exception of Female Healthy Life Expectancy.


Key:

Northern Ireland: NI 




MD Most Deprived Areas

LD Least Deprived Areas

 Positive Change

  Narrowing of the Gap

 No Notable Change

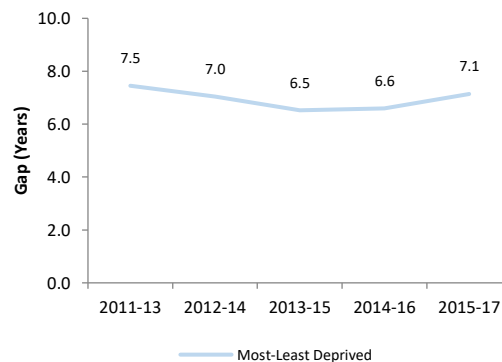
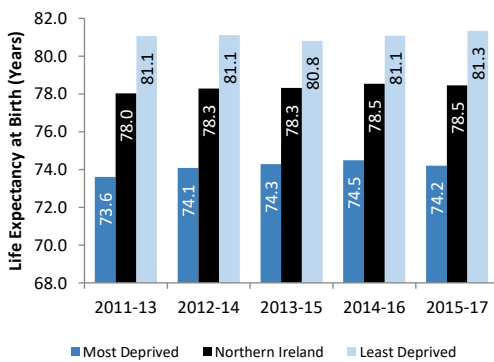
 No Notable Change in the Gap

 Negative Change

  Widening of the Gap

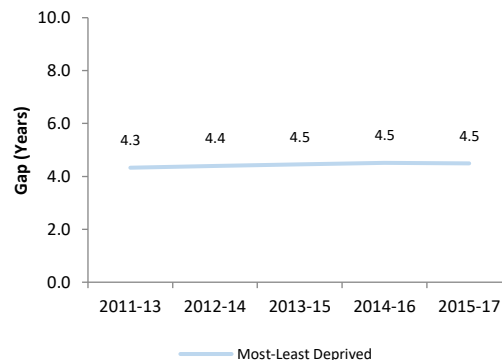
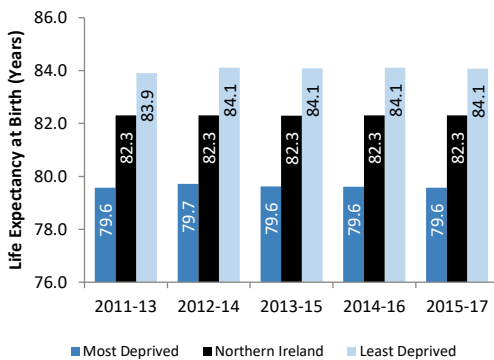
Male Life Expectancy at Birth

NI 



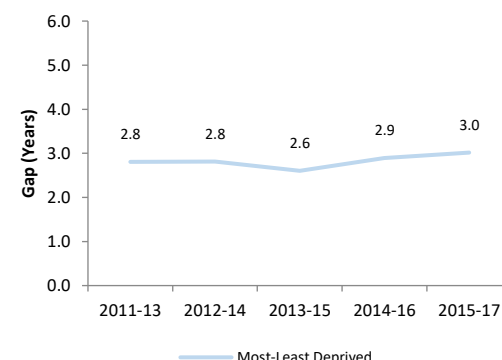
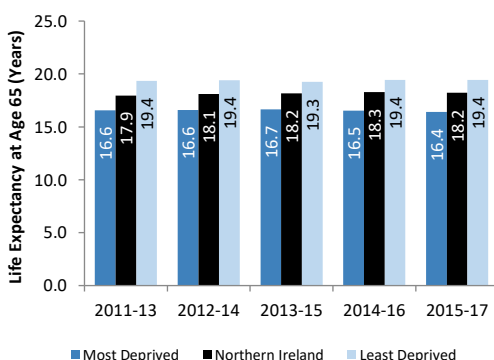
Female Life Expectancy at Birth

NI 



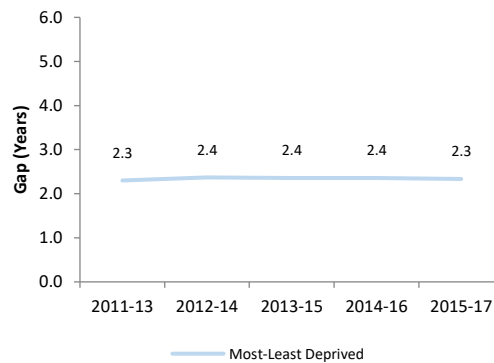
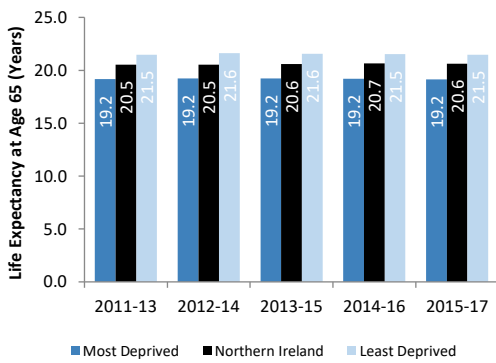
Male Life Expectancy at Age 65

NI 



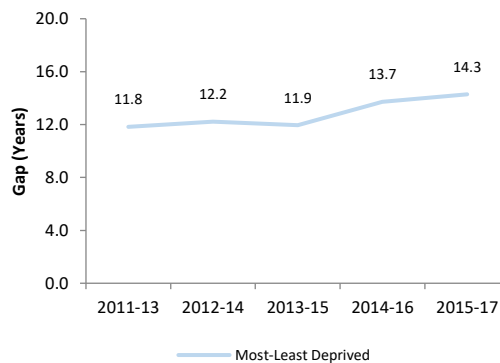
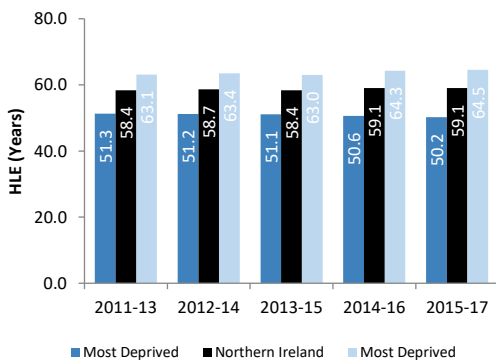
Female Life Expectancy at Age 65

NI 



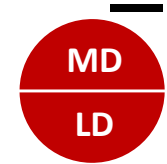
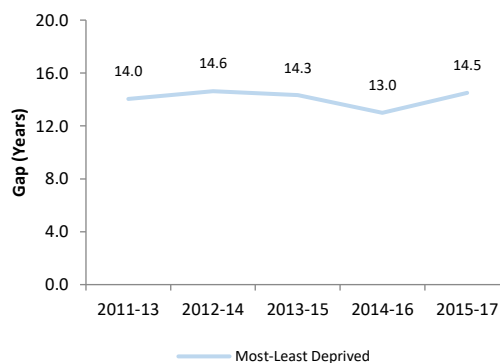
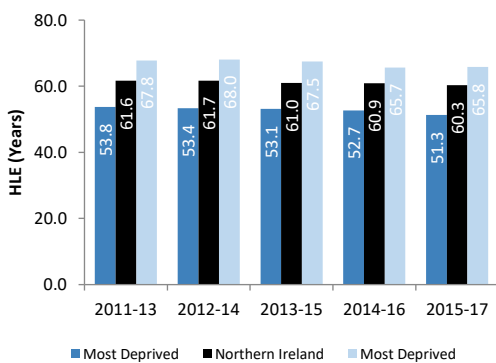
Male Healthy Life Expectancy

NI 



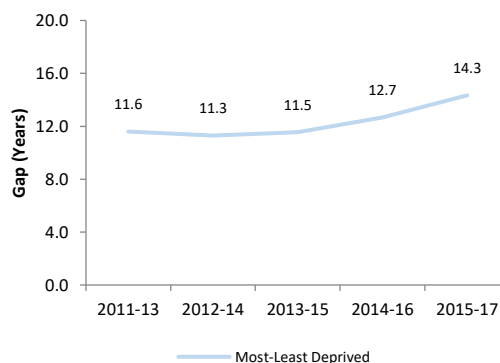
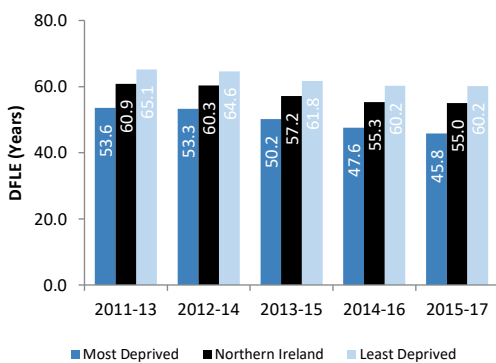
Female Healthy Life Expectancy

NI 



Male Disability Free Life Expectancy⁷

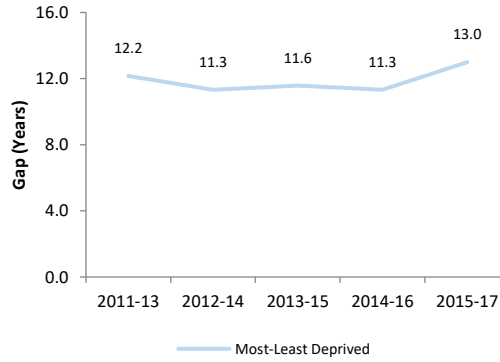
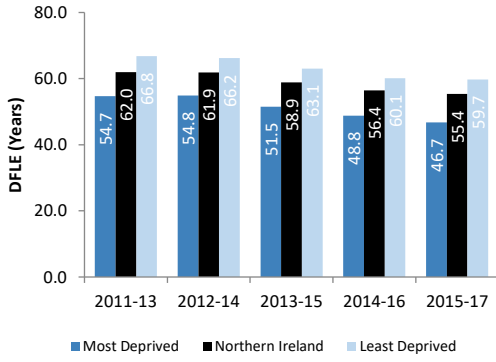
NI 



⁷ Decreases observed in male and female DFLE may be explained by a change in the wording of the Health Survey NI question from which the indicator is derived. Further information is included under 'Indicator Definitions' within the Appendices.


Female Disability Free Life Expectancy⁷

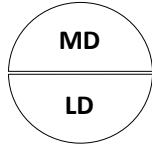
NI 

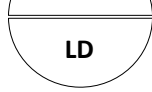





Premature Mortality



Rates of premature mortality⁸ generally decreased over the period in NI and both its most and least deprived areas. The inequality gaps narrowed or remained broadly similar except for death rates among under 75s due to respiratory disease, where the gap between the most and least deprived areas widened by over a fifth due to an improvement in the least deprived areas. The inequality gaps for premature mortality remained large with the most deprived areas continuing to experience higher mortality rates than the least deprived areas. The largest inequality gap was seen for respiratory mortality among under 75s, with rates in the most deprived areas being more than three and a half times that seen in the least deprived.




Key: Northern Ireland: NI 

 **MD** Most Deprived Areas

 **LD** Least Deprived Areas

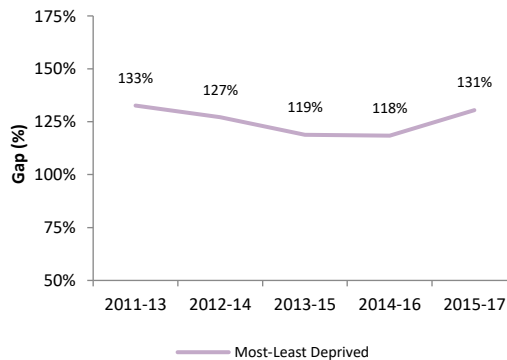
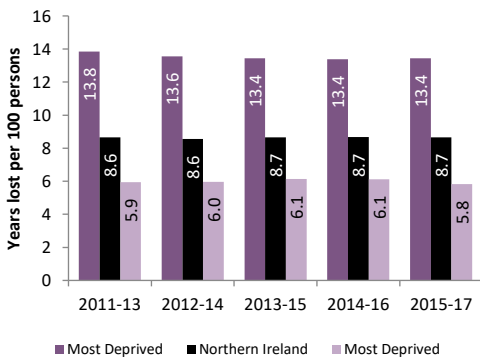
 Positive Change   Narrowing of the Gap

 No Notable Change  No Notable Change in the Gap

 Negative Change   Widening of the Gap

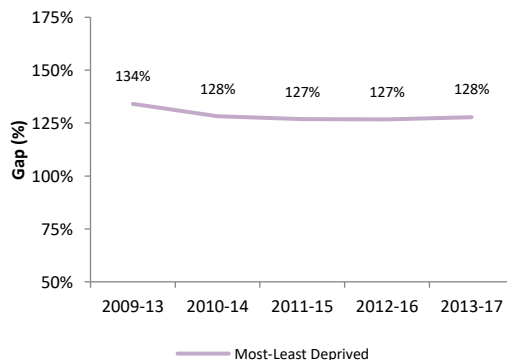
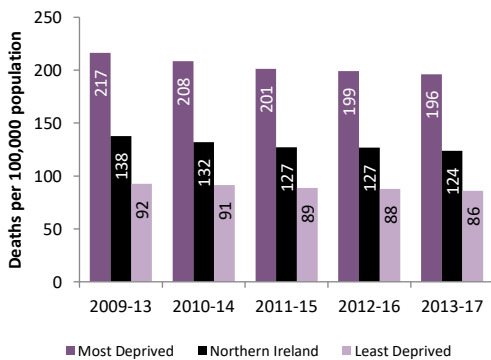
Potential Years of Life Lost

NI 



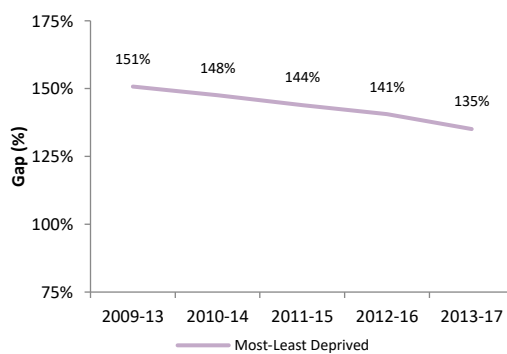
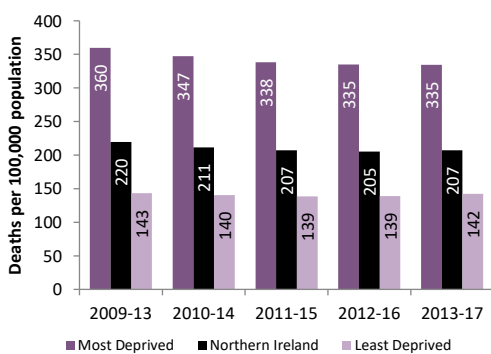
Standardised Death Rate - Amenable

NI 



Standardised Death Rate – Preventable

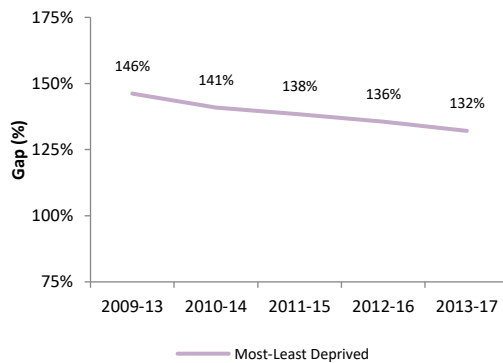
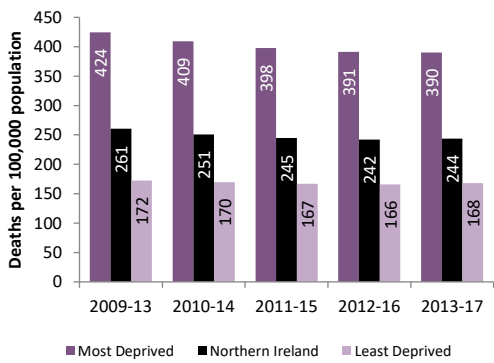
NI 



⁸ Individual indicator definitions can be found in Appendix E.

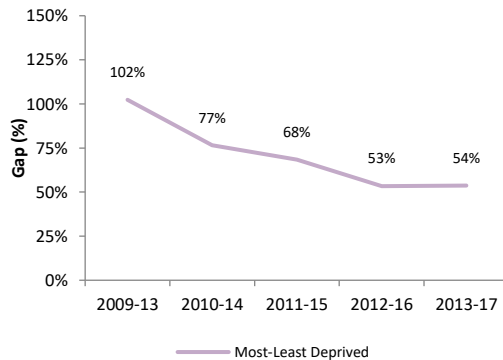
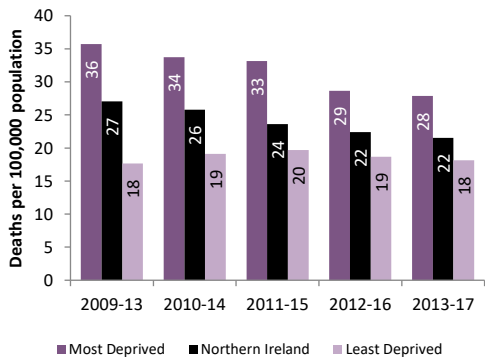
Standardised Death Rate – Avoidable

NI



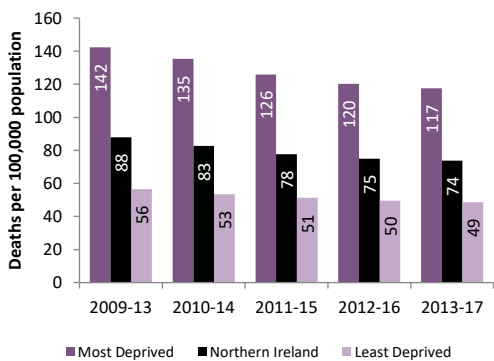
Standardised Death Rate – Avoidable: Children & Young People⁹

NI



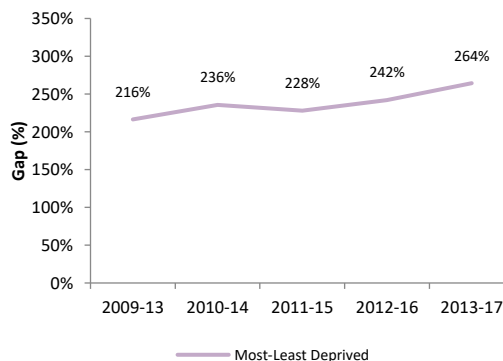
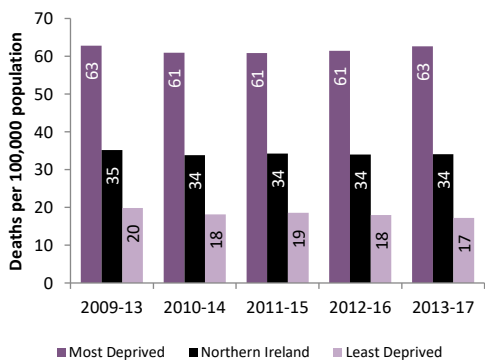
Standardised Death Rate – Circulatory U75

NI



Standardised Death Rate – Respiratory U75

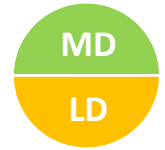
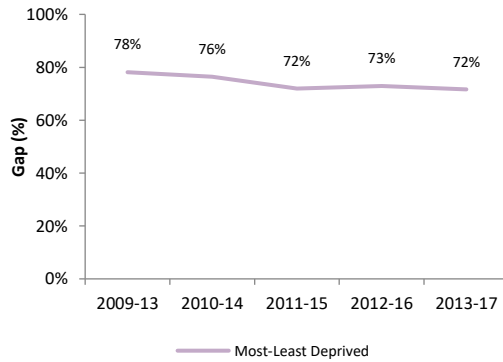
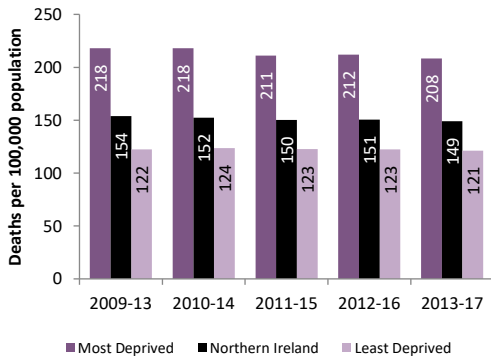
NI



⁹ This indicator should be treated as an experimental statistic, given the relatively small numbers and large variability in specific causes of childhood deaths, interpretation should be made with caution.

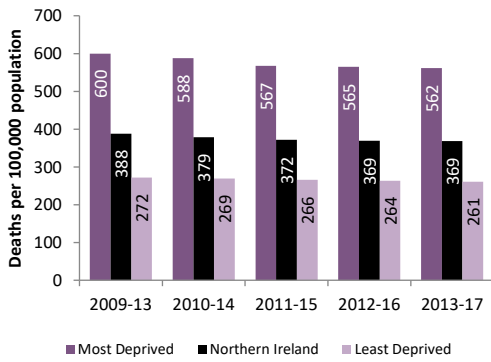
Standardised Death Rate – Cancer U75

NI



Standardised Death Rate – All Cause U75

NI

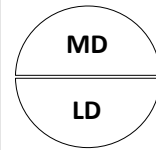


Major Diseases¹⁰

Inequality gaps for circulatory admissions, and prescriptions related to circulatory disease, remained constant over the period, with improvements seen in circulatory admission rates across NI and its most and least deprived areas. There was no notable change in the inequality gap for cancer incidence, however there was a negative change in the rate of cancer incidence across NI and its most and least deprived areas. There were negative changes in admissions for respiratory conditions with increases in the rate of admissions and a widening of the inequality gap. The respiratory admission rate in the most deprived areas was approximately double that in the least deprived for all ages and for those aged under 75 years.

Key:

Northern Ireland: NI



Most Deprived Areas

Least Deprived Areas

Positive Change

Narrowing of the Gap

No Notable Change

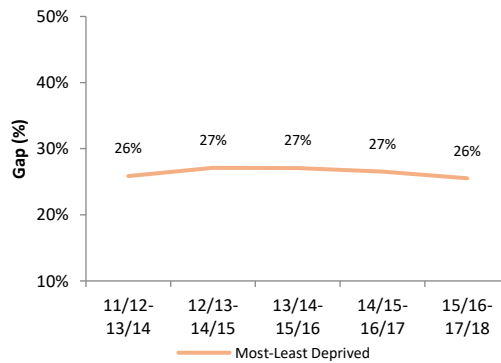
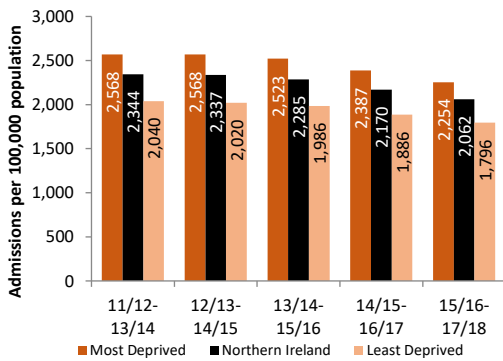
No Notable Change in the Gap

Negative Change

Widening of the Gap

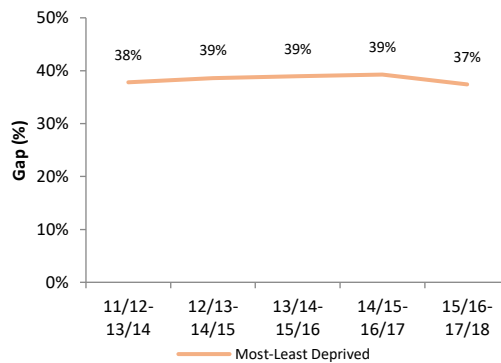
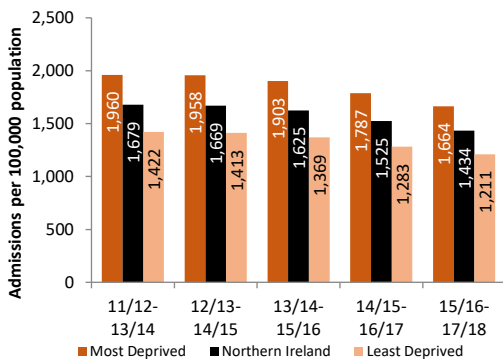
Standardised Admission Rate – Circulatory

NI



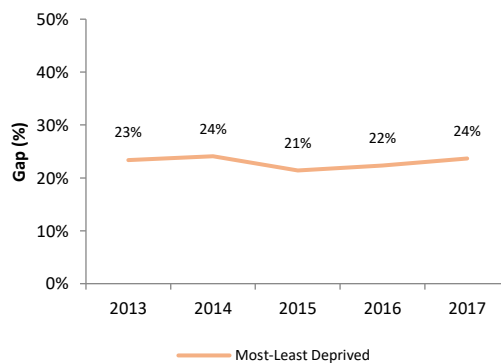
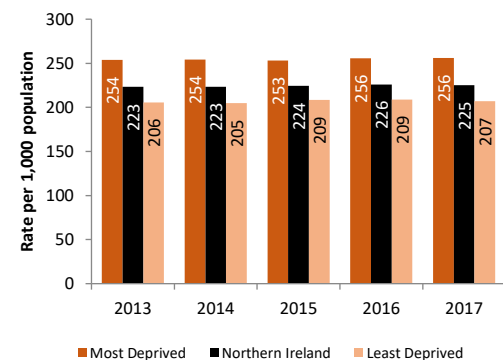
Standardised Admission Rate – Circulatory U75

NI



Standardised Prescription Rate – Antihypertensive

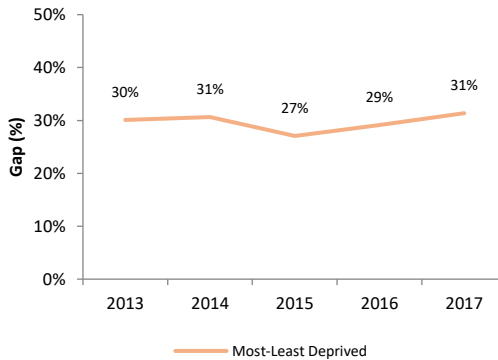
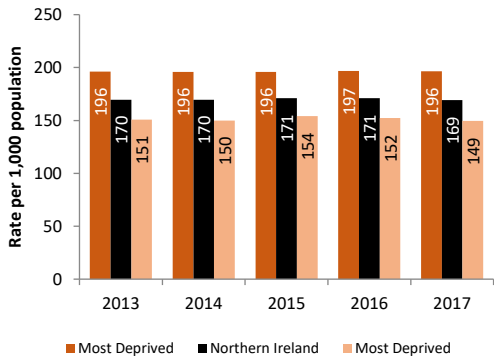
NI



¹⁰ Mental health related conditions, alcohol and drug related conditions; are considered in separate chapters.

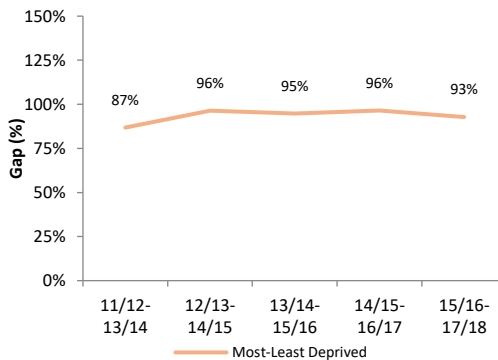
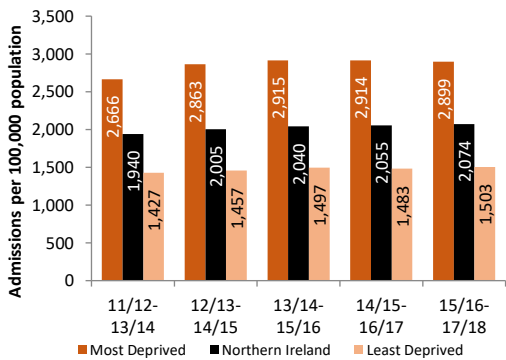
Standardised Prescription Rate – Statin

NI 



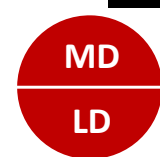
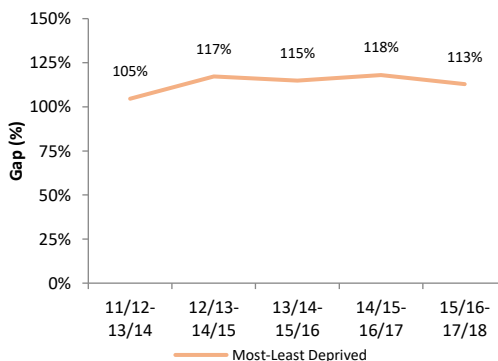
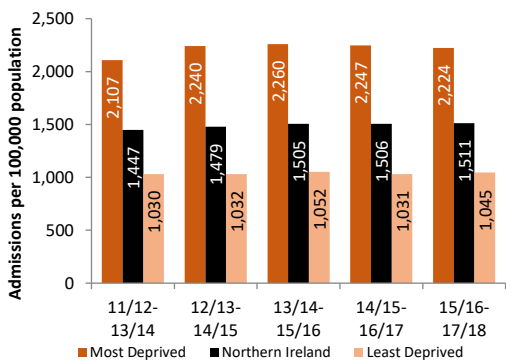
Standardised Admission Rate – Respiratory

NI 



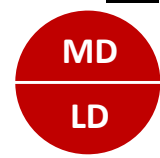
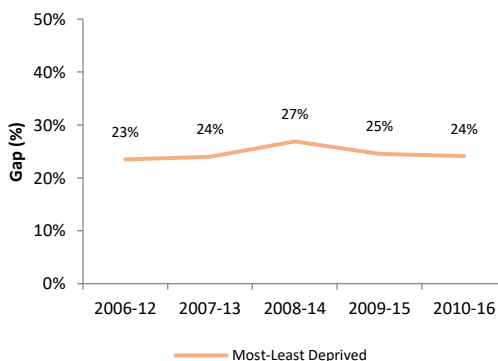
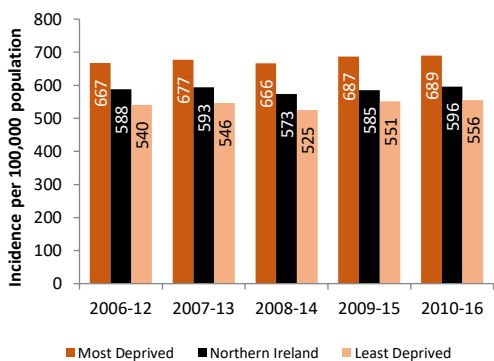
Standardised Admission Rate – Respiratory U75

NI 



Standardised Incidence Rate – Cancer

NI 

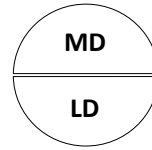


Hospital Activity

Inequality gaps for elective inpatient, day case and all admissions remained fairly constant over the period 2013/14 to 2017/18. Generally hospital admission rates improved across NI and its most and least deprived areas, with the exception of emergency admissions in the least deprived areas, which had no notable change. As a result, the inequality gap for emergency admissions narrowed. Emergency admissions continued to show the largest inequality of the four indicators analysed, with the rate among those living in the most deprived areas remaining more than three-fifths higher than that seen in the least deprived areas.


Key:


Northern Ireland: NI 






MD Most Deprived Areas


LD Least Deprived Areas


 Positive Change

 No Notable Change

 Negative Change

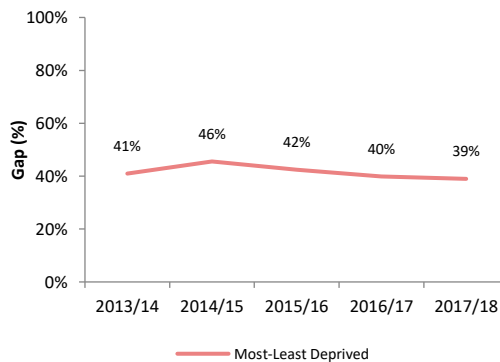
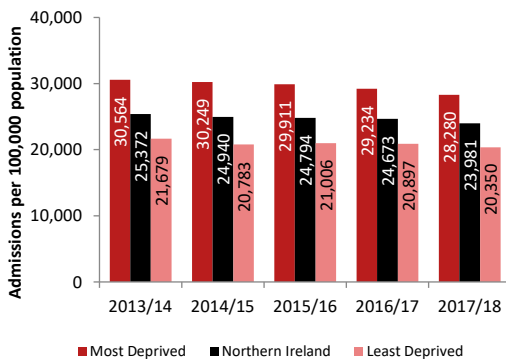
  Narrowing of the Gap

 No Notable Change in the Gap

 Widening of the Gap

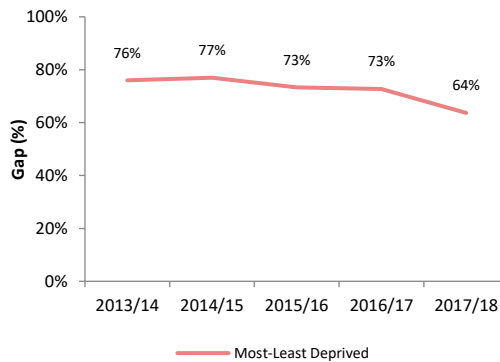
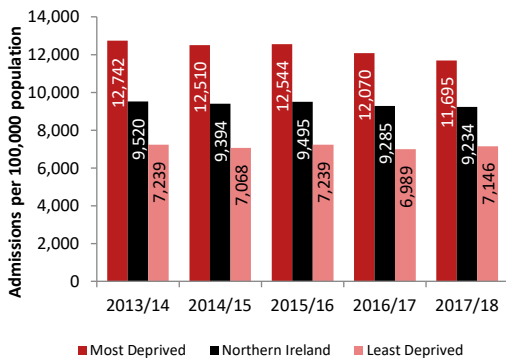
Standardised Admission Rate – All Admissions

NI 



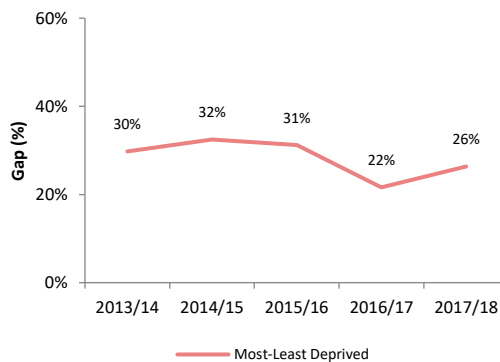
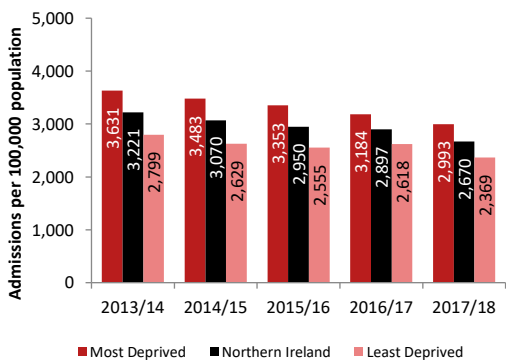
Standardised Admission Rate – Emergency Admissions

NI 



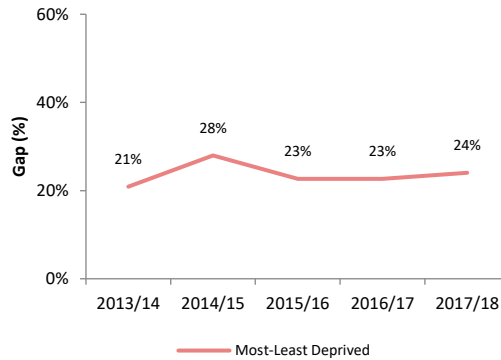
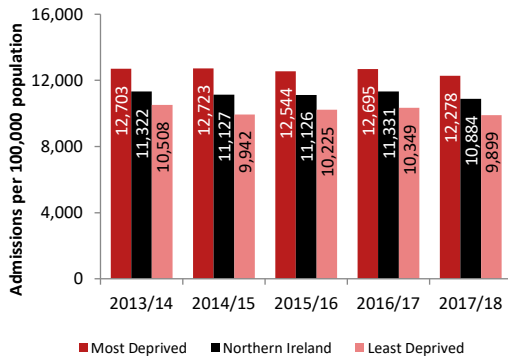
Standardised Admission Rate – Elective Inpatient Admissions

NI 



Standardised Admission Rate – Day Case Admissions

NI

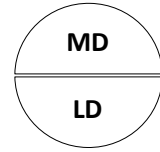


Mental Health

Large inequality gaps continue to exist for mental health indicators, with the latest position showing that rates of suicide and self-harm admissions in the most deprived areas were around three and a half times the rates seen in the least deprived areas. The inequality gap in self-harm admissions narrowed by a quarter over the period with improvements observed for NI and its most and least deprived areas. Prescription rates for mood and anxiety increased across all areas, with the rate in the most deprived areas two-thirds higher than in the least deprived in 2017.

Key:

Northern Ireland: NI



MD Most Deprived Areas

LD Least Deprived Areas

Positive Change

No Notable Change

Negative Change

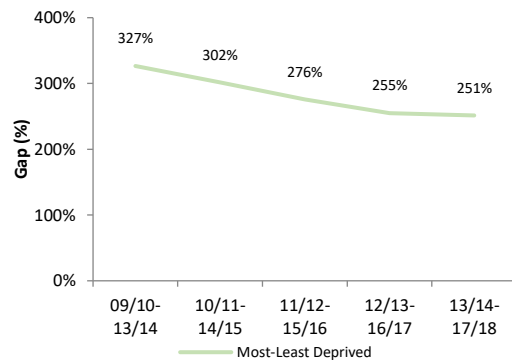
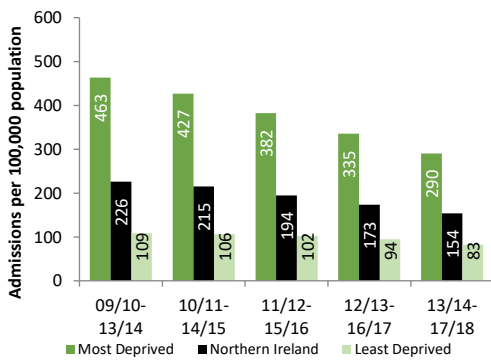
Narrowing of the Gap

No Notable Change in the Gap

Widening of the Gap

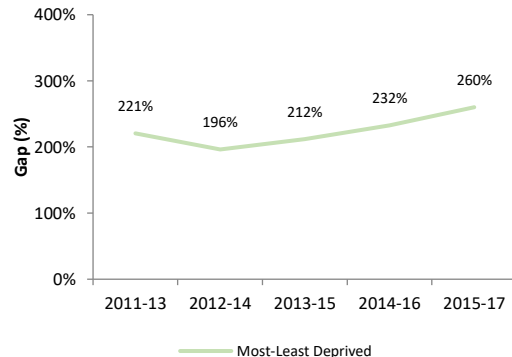
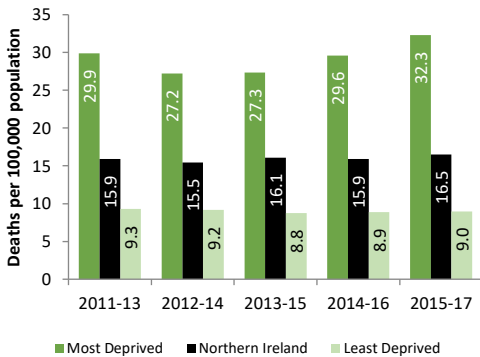
Standardised Admission Rate – Self-Harm¹¹

NI



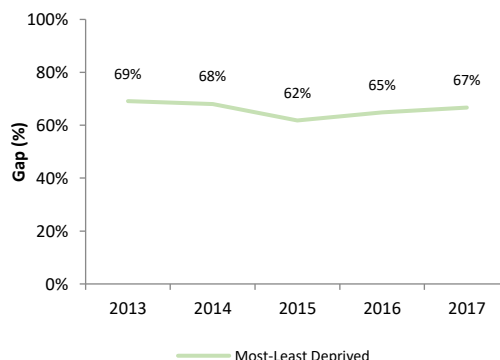
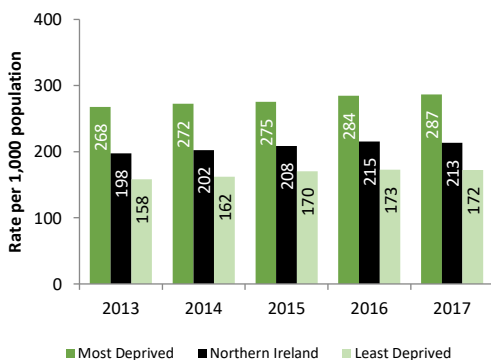
Crude Suicide Rate

NI



Standardised Prescription Rate – Mood & Anxiety

NI



¹¹ Observed decreases in the admission rate may be explained by service reconfiguration. For further information see indicator definitions on page 66.

Alcohol, Smoking & Drugs

Alcohol, smoking and drug related indicators continue to show some of the largest health inequalities monitored in NI. For alcohol specific mortality and alcohol related admissions the rate in the most deprived areas is approximately four and a half times that seen in the least deprived areas. Although there has been no change in the lung cancer incidence inequality gap, the rate has increased in NI and its most and least deprived areas. However, there has been no notable change in both the rate and inequality gap for lung cancer mortality. Across all areas there was a positive change with the drug related admission rate decreasing, however there was a negative change in drug related mortality. The inequality gap for both of these indicators remained constant across the period.

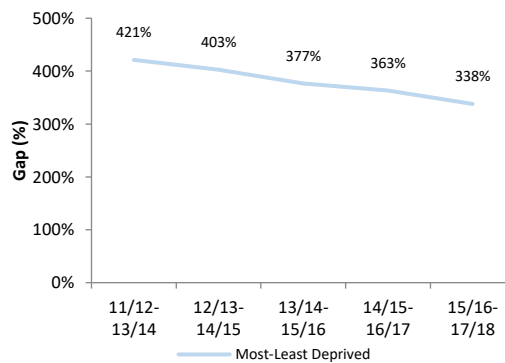
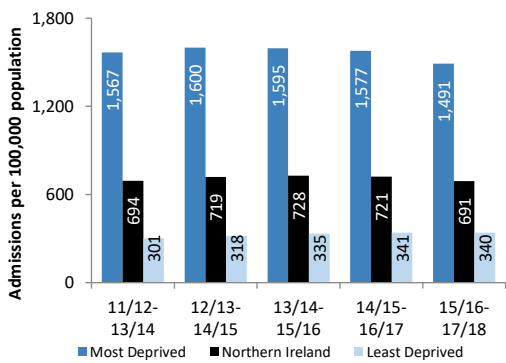
Key: Northern Ireland: NI

MD Most Deprived Areas
LD Least Deprived Areas

Positive Change Narrowing of the Gap
 No Notable Change No Notable Change in the Gap
 Negative Change Widening of the Gap

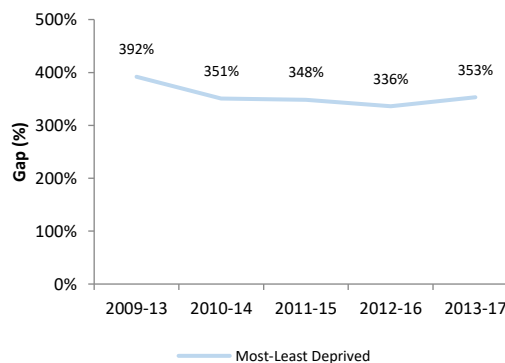
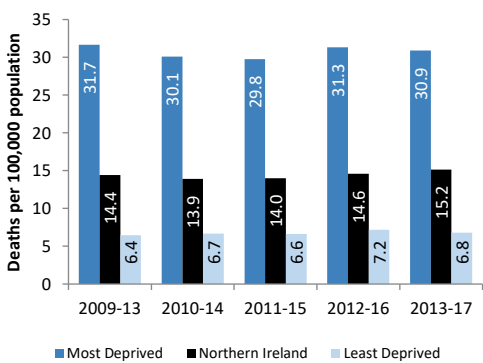
Standardised Admission Rate – Alcohol Related Causes

NI



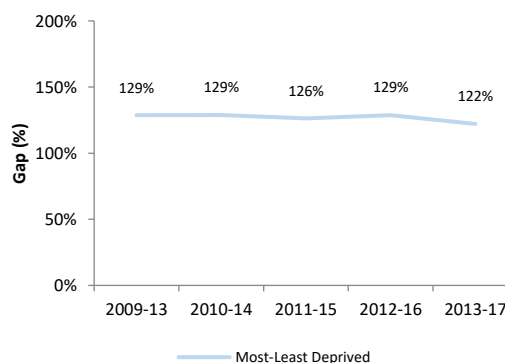
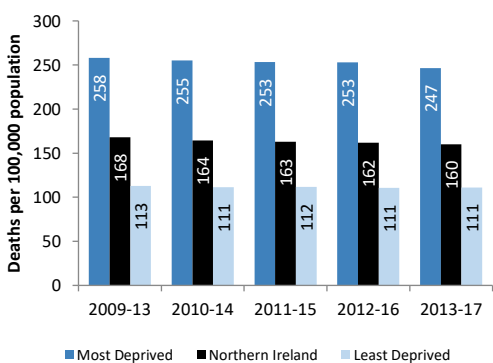
Standardised Death Rate – Alcohol Specific

NI



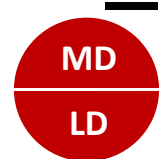
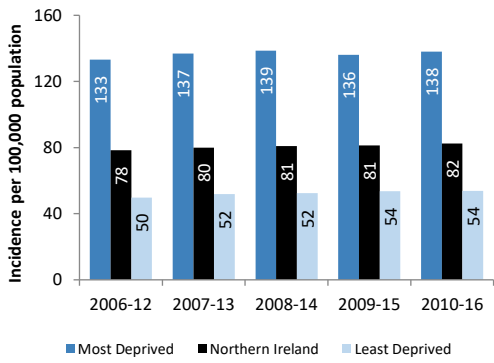
Standardised Death Rate – Smoking Related Causes

NI



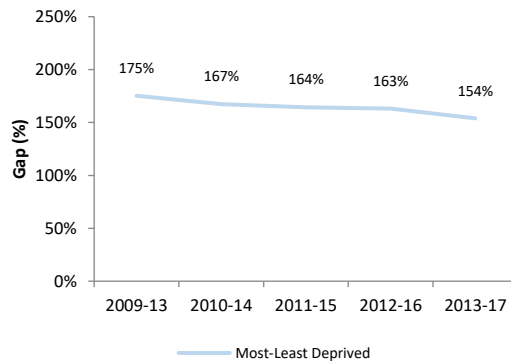
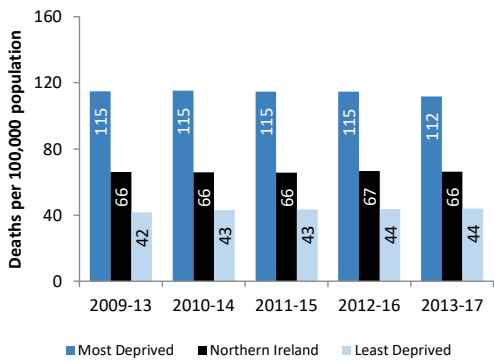
Standardised Incidence Rate – Lung Cancer

NI 



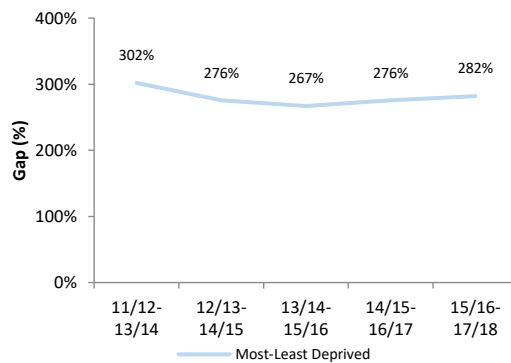
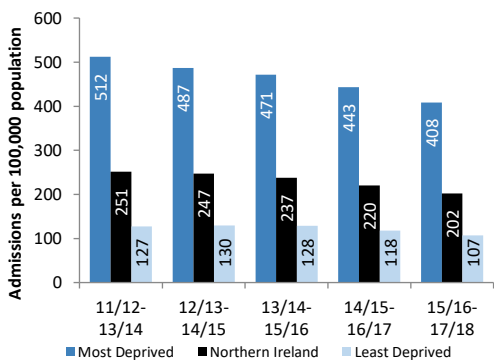
Standardised Death Rate – Lung Cancer

NI 



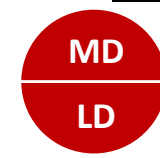
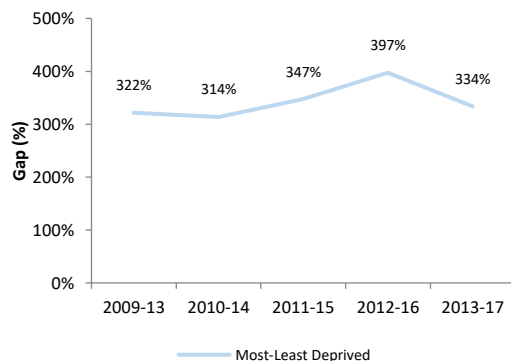
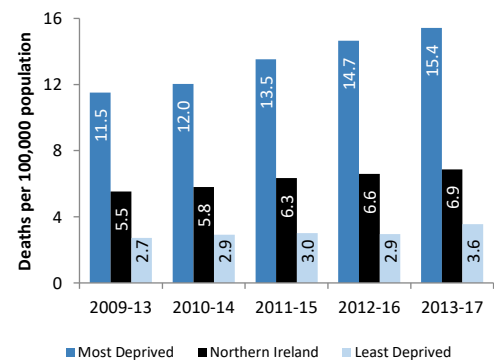
Standardised Admission Rate – Drug Related Causes

NI 



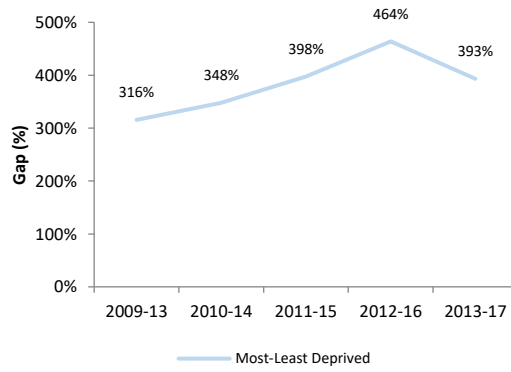
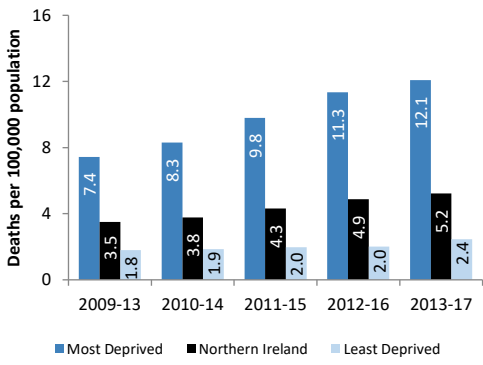
Standardised Death Rate – Drug Related Causes

NI 



Standardised Death Rate – Drug Misuse

NI 

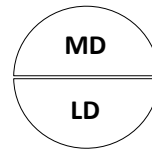


Pregnancy & Early Years

Changes in inequality gaps for health outcomes related to pregnancy and early years tended to vary over the period analysed. The under 20 teenage birth rate and breastfeeding on discharge gaps narrowed over the period, due to improvements in the most deprived areas. In 2017, the proportion of mothers smoking in the most deprived areas was more than five times the rate in the least deprived. A new indicator, small for gestational age¹², was introduced this year. A full assessment will be made when five years of trend information is available.

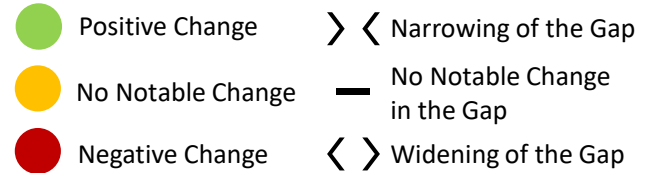
Key:

Northern Ireland: NI



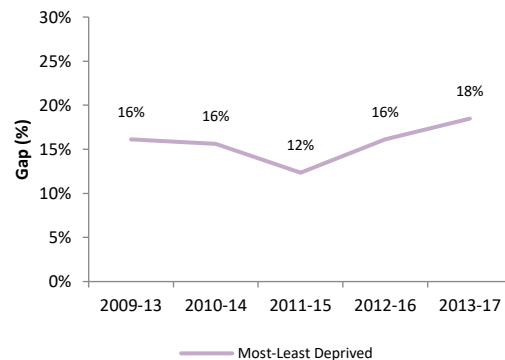
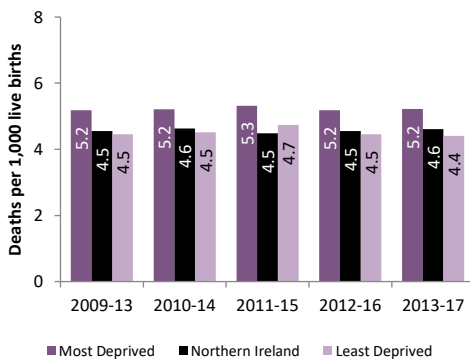
Most Deprived Areas

Least Deprived Areas



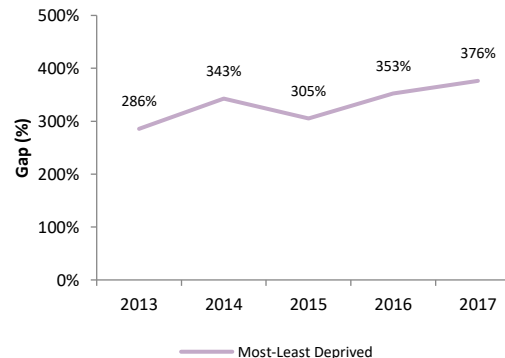
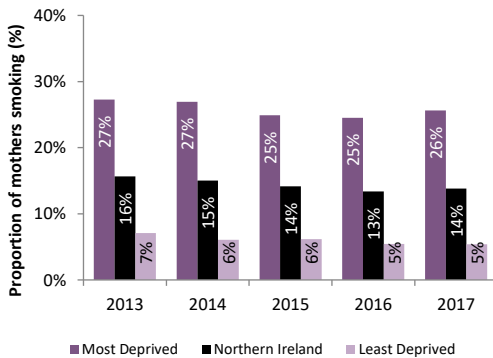
Infant Mortality Rate

NI



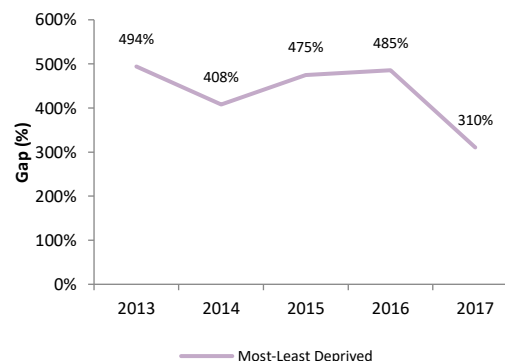
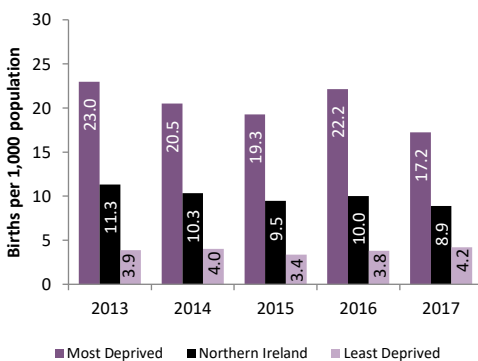
Smoking During Pregnancy

NI



Teenage Birth Rate U20

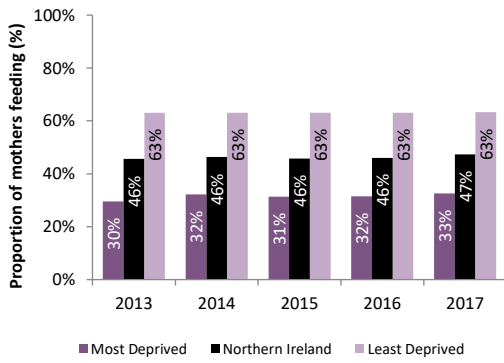
NI



¹² A full definition can be found in [Appendix E: Technical Notes & Definitions](#).

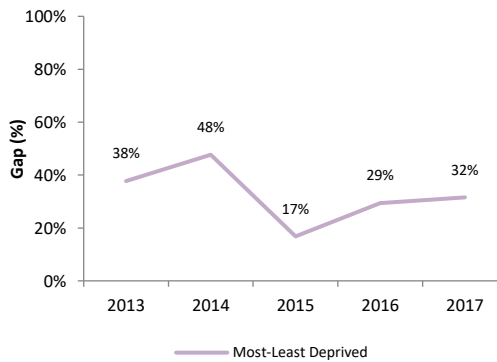
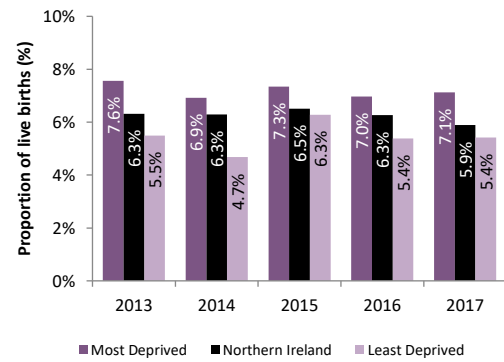
Breastfeeding on Discharge

NI 



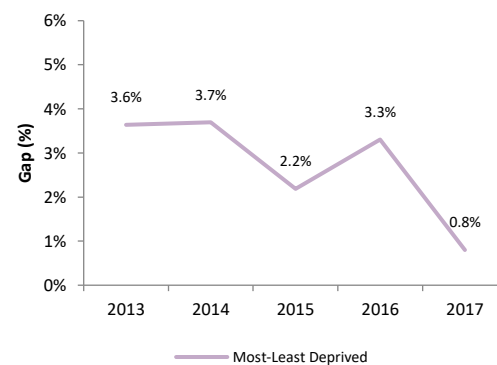
Low Birth Weight

NI 



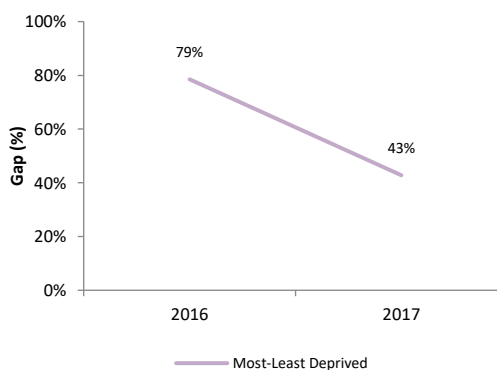
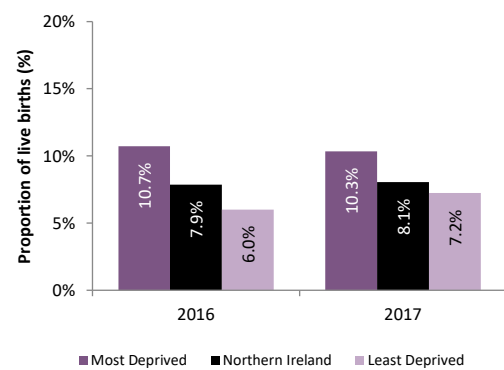
Healthy Birth Weight

NI 



Small for Gestational Age ^{NEW, 13}

NI 



¹³ As this is a new indicator, no assessment of the inequality gap trend will be made until 5 years of data are available.

Childhood Obesity

Over the period analysed there was no notable change in the proportion of Primary 1 and Year 8 children classified as obese and those considered overweight or obese across all areas of Northern Ireland. While there was also no notable change in the inequality gaps, the proportion of obese Year 8 children in the most deprived areas more than was double that of the least deprived areas. As proportions are quite low this can mean that small annual changes in childhood obesity can have a large impact on the observed inequality gap.

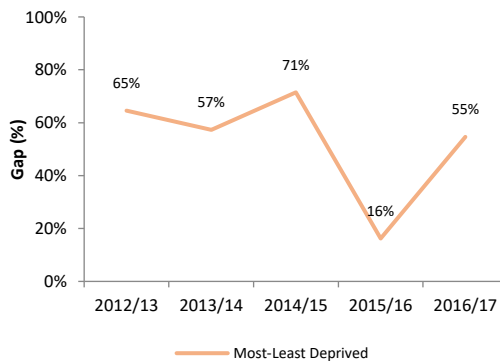
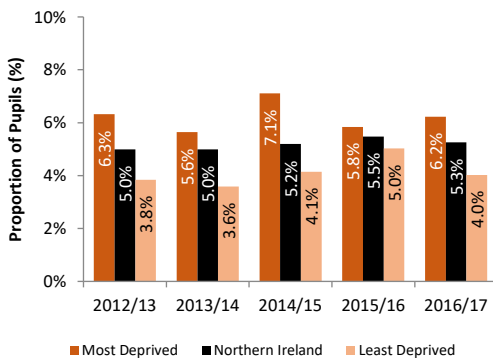
Key: Northern Ireland: NI

MD Most Deprived Areas
LD Least Deprived Areas

Positive Change > < Narrowing of the Gap
 No Notable Change — No Notable Change in the Gap
 Negative Change < > Widening of the Gap

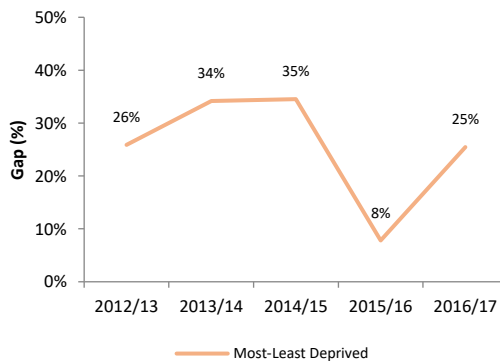
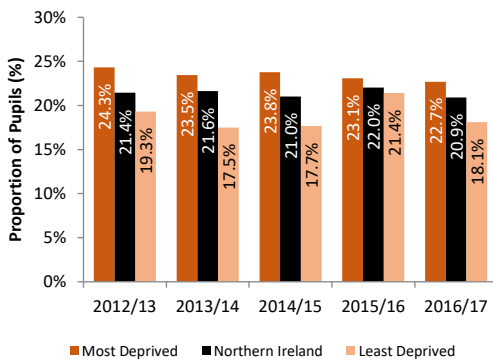
Primary 1 BMI: Obese

NI



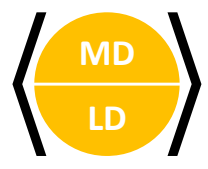
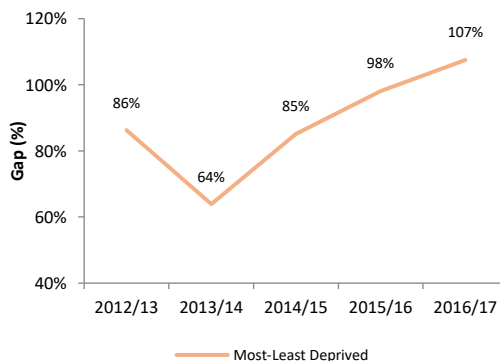
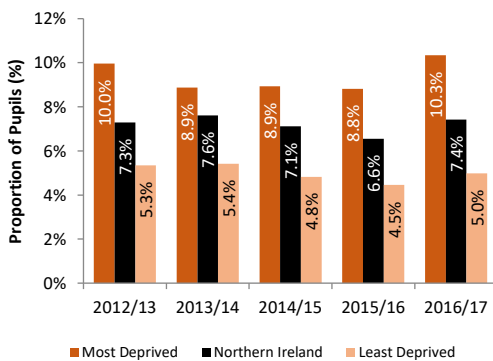
Primary 1 BMI: Overweight or Obese

NI



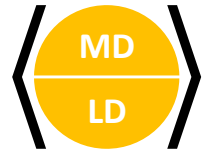
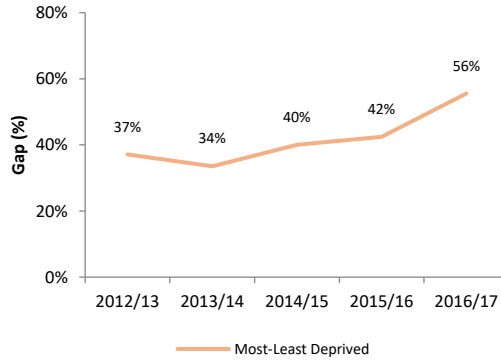
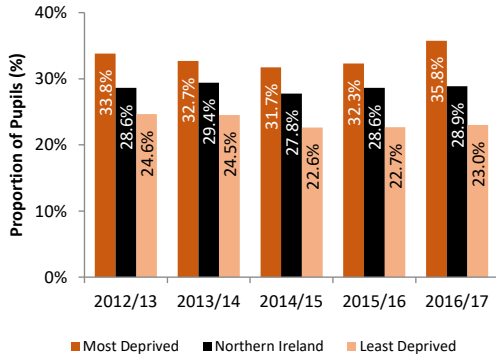
Year 8 BMI: Obese

NI



Year 8 BMI: Overweight or Obese

NI 



Sub-regional Health Inequalities

There are two aspects to the analysis of sub-regional health inequalities in this section. The analysis for each sub-regional area will either relate to the difference in health outcomes between the **Trust or LGD and the regional average** or to the **20% most deprived areas within an area and the area's average**.

Each chapter is a summary of findings only. For a full assessment of the HSC Trust and LGD figures, including a range of indicators that are also available at District Electoral Area (DEA), see downloadable tables at:

<https://www.health-ni.gov.uk/articles/health-inequalities-statistics>

An example of a sub-regional analysis, with guidance, can be seen below:

Each chapter contains a comparison of the area's health outcomes against the regional average including a summary of the most notable indicators that were better or worse.

There is also a comparison of the Inequality Gap between the area average and its most deprived areas in respect of:

Life Expectancy

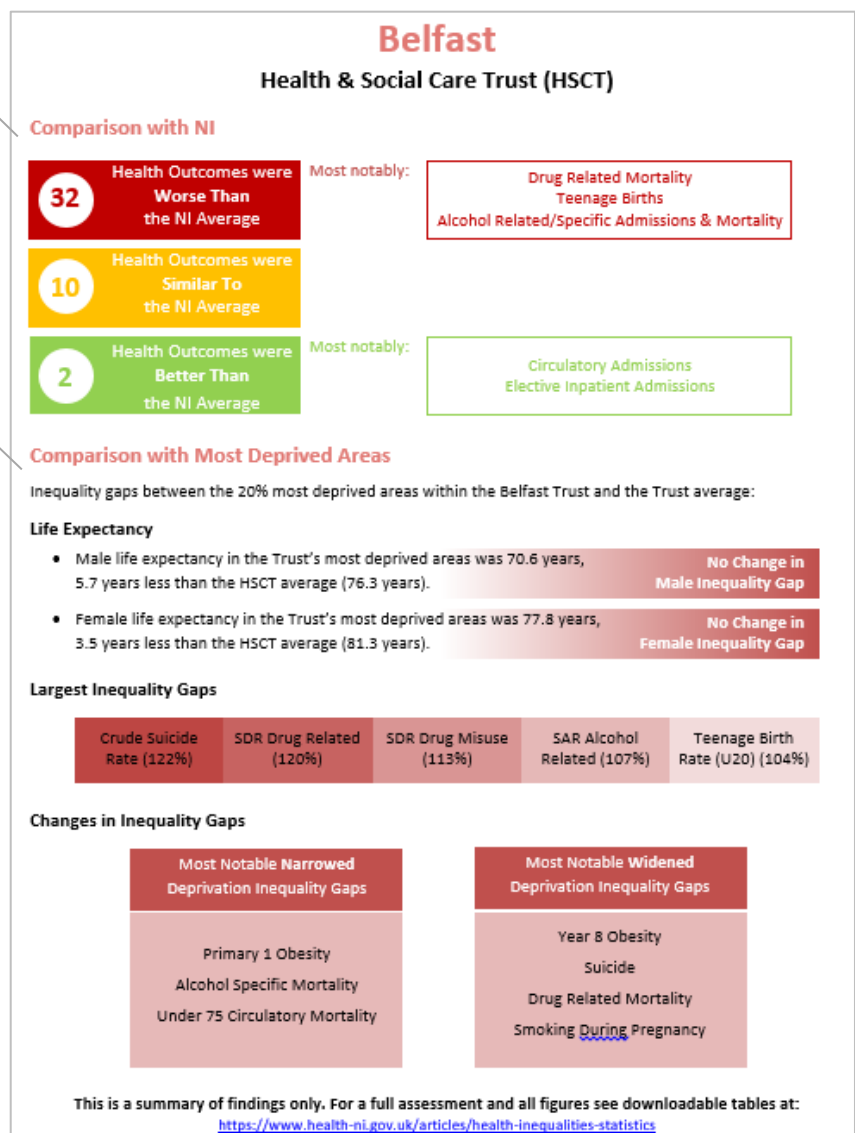
Analysis of the male and female life expectancy gap within the area and if this gap has changed.

Largest Inequality Gaps

The five largest inequality gaps in the area.

Changes in Inequality Gaps

A summary of the most notable indicators that have either narrowed or widened across the analysed period.

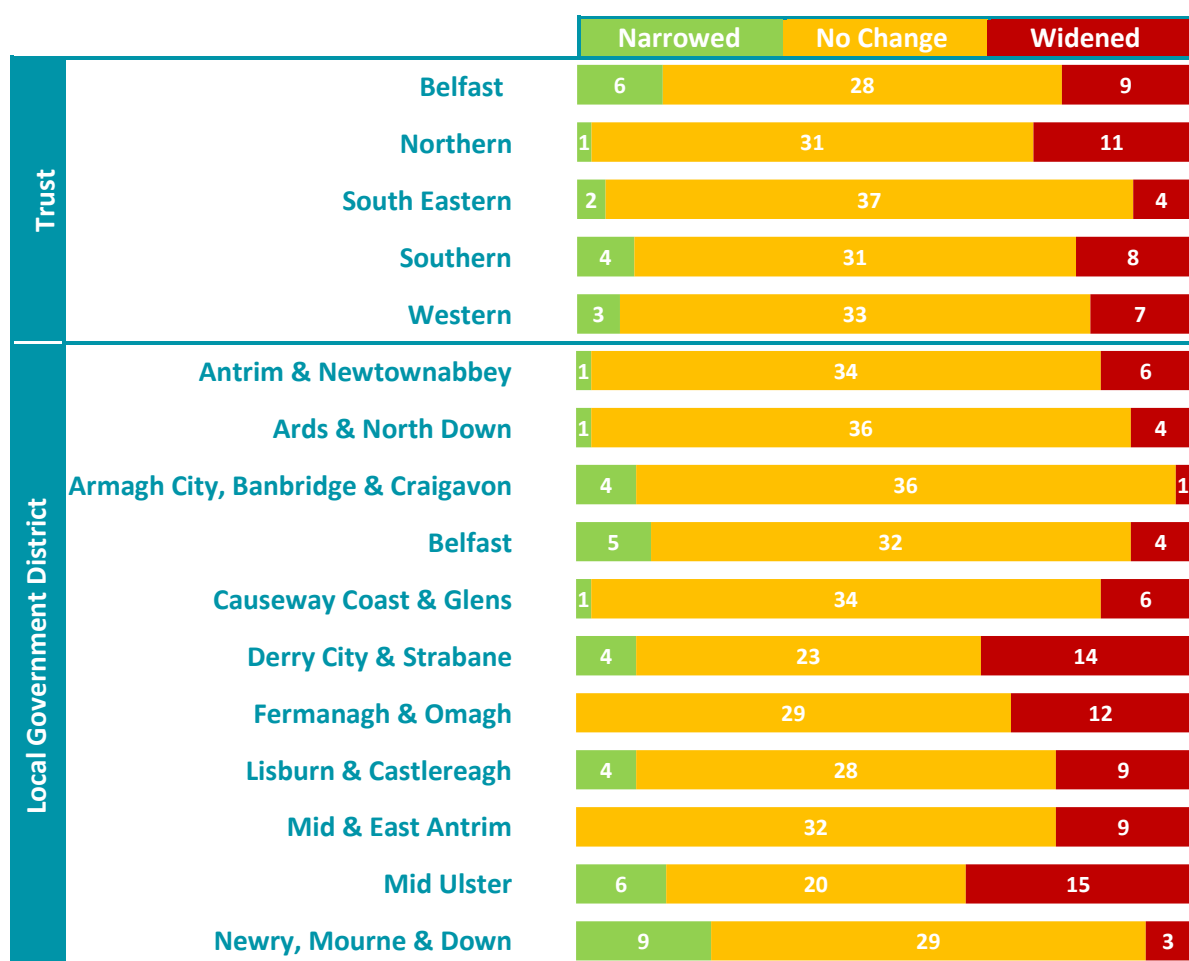


SUMMARY OF CHANGES IN SUB-REGIONAL INEQUALITY GAPS OVER THE LAST 5 YEARS

Changes in Deprivation Related Inequality Gaps

Over the period analysed, within each HSC Trust there were more inequality gaps that widened than narrowed. This was also true for the majority of LGDs with the exception of Armagh City, Banbridge & Craigavon, Belfast and Newry, Mourne & Down.

For each area analysed, the chart below shows the number of indicators that widened, narrowed or did not show a notable change across the period.



* For the purposes of this graphic, gaps which reversed direction, but remained similar in magnitude have been included in the “No Change” category.

Largest Deprivation Inequality Gaps in Each Area

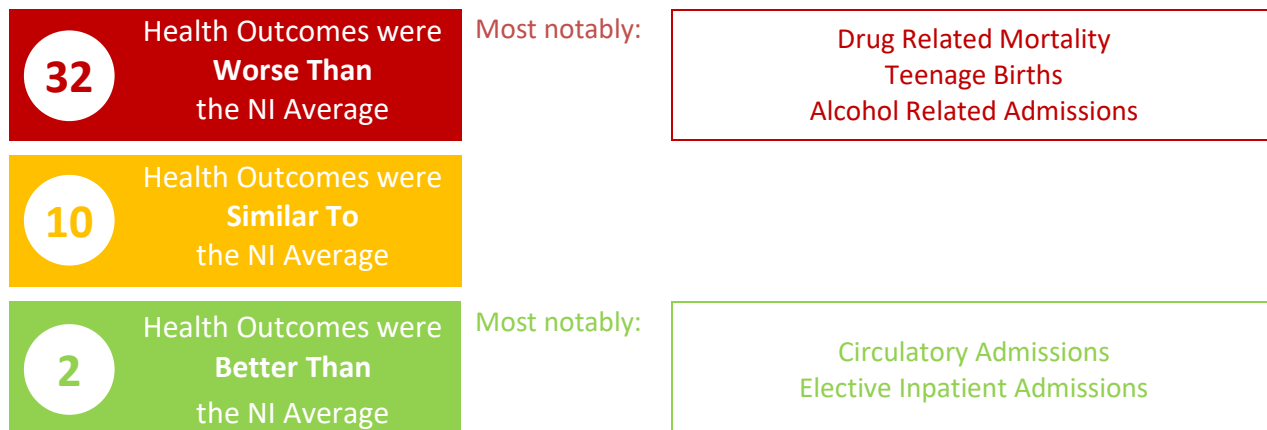
The table below indicates the five largest deprivation inequality gaps in each Health & Social Care Trust (HSCT) and Local Government District (LGD).

Belfast HSCT	Crude Suicide Rate (122%)	SDR Drug Related (120%)	SDR Drug Misuse (113%)	SAR Alcohol Related (107%)	Teenage Birth Rate (U20) (104%)
Northern HSCT	SDR Drug Misuse (129%)	SDR Drug Related (128%)	SAR Self-Harm (106%)	SAR Alcohol Related (101%)	SAR Drug Related (101%)
South Eastern HSCT	SDR Drug Misuse (142%)	SDR Drug Related (142%)	SDR Alcohol Specific (115%)	Smoking During Pregnancy (108%)	SAR Alcohol Related (94%)
Southern HSCT	Teenage Birth Rate (U20) (100%)	SAR Self-Harm (97%)	SAR Alcohol Related (95%)	SAR Drug Related (88%)	Smoking During Pregnancy (80%)
Western HSCT	SDR Drug Misuse (171%)	SDR Drug Related (142%)	SAR Alcohol Related (140%)	SAR Drug Related (113%)	Teenage Birth Rate (U20) (102%)
Antrim & Newtownabbey LGD	SDR Drug Related (142%)	SDR Alcohol Specific (97%)	SAR Self-Harm (96%)	SAR Alcohol Related (94%)	Crude Suicide Rate (90%)
Ards & North Down LGD	Smoking During Pregnancy (111%)	SDR Drug Related (111%)	SDR Alcohol Specific (101%)	Teenage Birth Rate (U20) (100%)	SAR Alcohol Related (90%)
Armagh City, Banbridge & Craigavon LGD	Teenage Birth Rate (U20) (108%)	SAR Self-Harm (102%)	Smoking During Pregnancy (96%)	SAR Alcohol Related (95%)	SAR Drug Related (88%)
Belfast LGD	SAR Drug Related (97%)	SAR Alcohol Related (93%)	SDR Drug Related (92%)	Teenage Birth Rate (U20) (83%)	SAR Self-Harm (83%)
Causeway Coast & Glens LGD	SDR Drug Related (143%)	SDR Alcohol Specific (117%)	Crude Suicide Rate (109%)	SAR Self-Harm (103%)	SAR Alcohol Related Causes (98%)
Derry City & Strabane LGD	SAR Alcohol Related (141%)	SAR Drug Related (121%)	SDR Alcohol Specific (118%)	SAR Self-Harm (107%)	SDR Lung Cancer (97%)
Fermanagh & Omagh LGD	SAR Alcohol Related (86%)	SDR Drug Related (75%)	SDR Alcohol Specific (71%)	SAR Self-Harm (63%)	SAR Drug Related (63%)
Lisburn & Castlereagh LGD	SDR Drug Related (187%)	Smoking During Pregnancy (160%)	SDR Alcohol Specific (146%)	SAR Alcohol Related (110%)	Teenage Birth Rate (U20) (107%)
Mid & East Antrim LGD	SDR Drug Related (164%)	SAR Drug Related (145%)	SAR Self-Harm (143%)	SAR Alcohol Related (138%)	SDR Alcohol Specific (131%)
Mid Ulster LGD	SAR Alcohol Related (77%)	SDR Drug Related (70%)	SAR Drug Related (68%)	SDR Lung Cancer (58%)	SDR Alcohol Specific (57%)
Newry, Mourne & Down LGD	SDR Drug Related (85%)	SDR Alcohol Specific (69%)	SAR Self-Harm (64%)	SAR Drug Related (55%)	Teenage Birth Rate (U20) (54%)

Belfast

Health & Social Care Trust (HSCT)

Comparison with NI



Comparison with Most Deprived Areas

Inequality gaps between the 20% most deprived areas within the Belfast Trust and the Trust average:

Life Expectancy

- Male life expectancy in the Trust’s most deprived areas was 70.6 years, 5.7 years less than the HSCT average (76.3 years). No Change in Male Inequality Gap
- Female life expectancy in the Trust’s most deprived areas was 77.8 years, 3.5 years less than the HSCT average (81.3 years). No Change in Female Inequality Gap

Largest Inequality Gaps

Crude Suicide Rate (122%)	SDR Drug Related (120%)	SDR Drug Misuse (113%)	SAR Alcohol Related (107%)	Teenage Birth Rate (U20) (104%)
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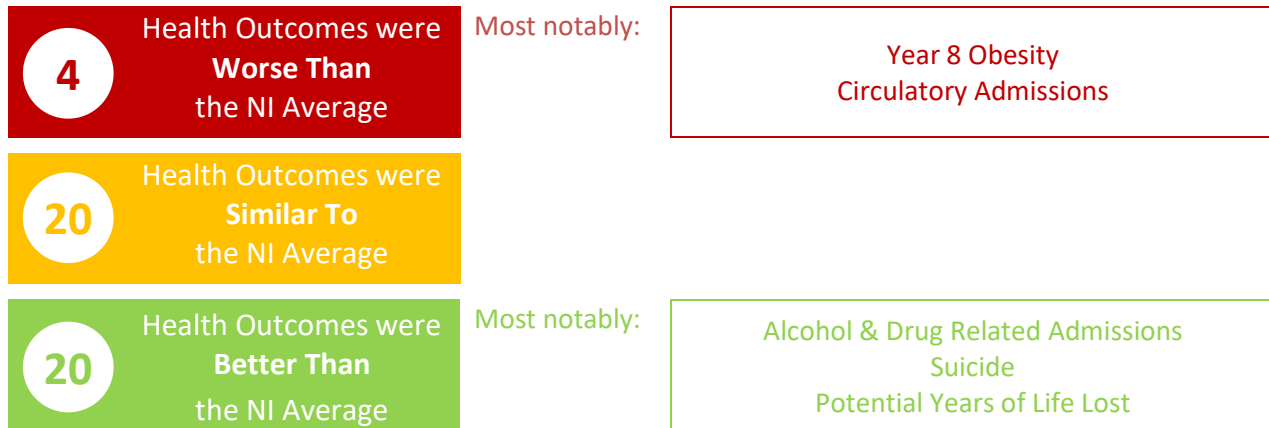
Changes in Inequality Gaps

Most Notable Narrowed Deprivation Inequality Gaps	Most Notable Widened Deprivation Inequality Gaps
Primary 1 Overweight & Obese Alcohol Specific Mortality Under 75 Circulatory Mortality	Year 8 Obesity Suicide Drug Related Mortality Smoking During Pregnancy

This is a summary of findings only. For a full assessment and all figures see downloadable tables at: <https://www.health-ni.gov.uk/articles/health-inequalities-statistics>

Northern Health & Social Care Trust (HSCT)

Comparison with NI



Comparison with Most Deprived Areas

Inequality gaps between the 20% most deprived areas within the Northern Trust and the Trust average:

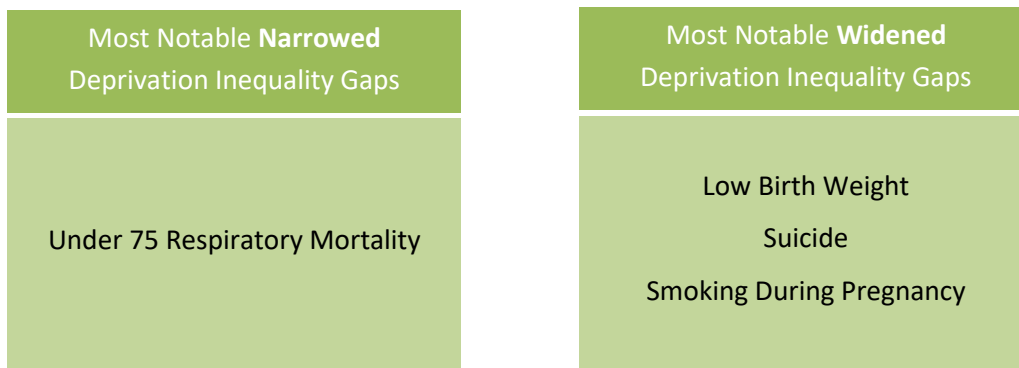
Life Expectancy

- Male life expectancy in the Trust’s most deprived areas was 75.8 years, 3.4 years less than the HSCT average (79.2 years). No Change in Male Inequality Gap
- Female life expectancy in the Trust’s most deprived areas was 80.3 years, 2.4 years less than the HSCT average (82.7 years). No Change in Female Inequality Gap

Largest Inequality Gaps

SDR Drug Misuse (129%)	SDR Drug Related (128%)	SAR Self-Harm (106%)	SAR Alcohol Related (101%)	SAR Drug Related (101%)
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Changes in Inequality Gaps

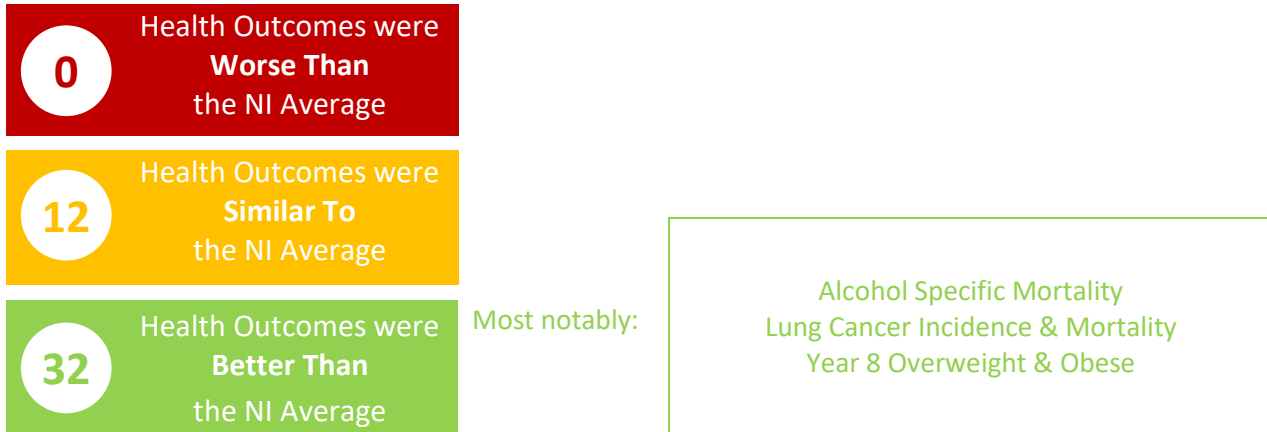


This is a summary of findings only. For a full assessment and all figures see downloadable tables at:

<https://www.health-ni.gov.uk/articles/health-inequalities-statistics>

South Eastern Health & Social Care Trust (HSCT)

Comparison with NI



Comparison with Most Deprived Areas

Inequality gaps between the 20% most deprived areas within the South Eastern Trust and the Trust average:

Life Expectancy

- Male life expectancy in the Trust’s most deprived areas was 75.5 years, **3.8 years** less than the HSCT average (79.3 years). **No Change in Male Inequality Gap**
- Female life expectancy in the Trust’s most deprived areas was 80.6 years, **2.1 years** less than the HSCT average (82.8 years). **Female Inequality Gap Widened**

Largest Inequality Gaps

SDR Drug Misuse (142%)	SDR Drug Related (142%)	SDR Alcohol Specific (115%)	Smoking During Pregnancy (108%)	SAR Alcohol Related (94%)
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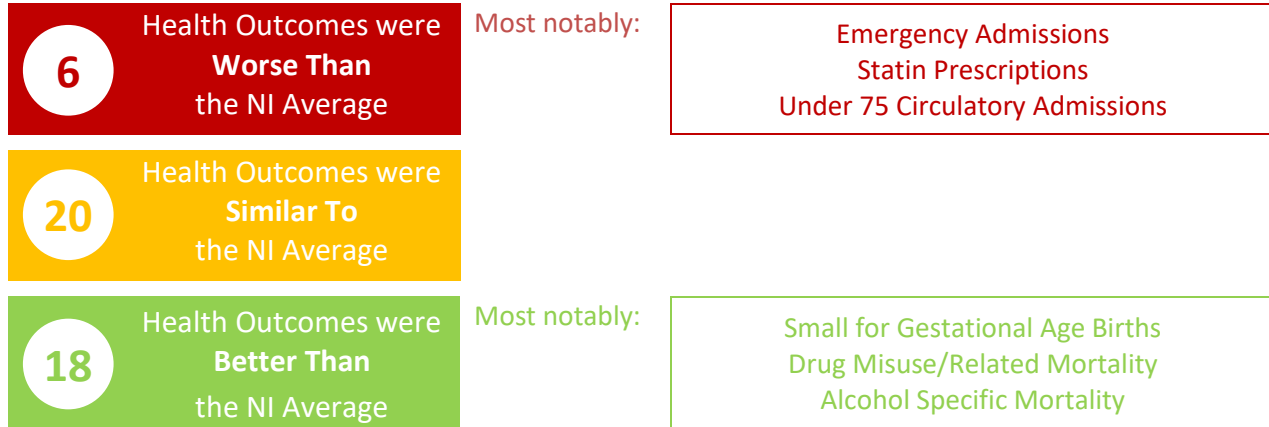
Changes in Inequality Gaps

<p>Most Notable Narrowed Deprivation Inequality Gaps</p> <p>Suicide Self-Harm Admissions</p>	<p>Most Notable Widened Deprivation Inequality Gaps</p> <p>Male Life Expectancy at 65 Year 8 Obesity Smoking During Pregnancy</p>
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This is a summary of findings only. For a full assessment and all figures see downloadable tables at: <https://www.health-ni.gov.uk/articles/health-inequalities-statistics>

Southern Health & Social Care Trust (HSCT)

Comparison with NI



Comparison with Most Deprived Areas

Inequality gaps between the 20% most deprived areas within the Southern Trust and the Trust average:

Life Expectancy

- Male life expectancy in the Trust’s most deprived areas was 76.0 years, 2.9 years less than the HSCT average (78.9 years).

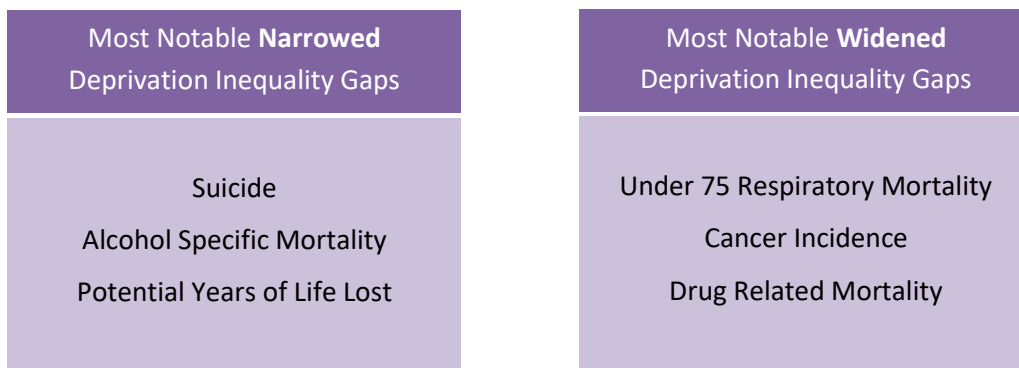
No Change in Male Inequality Gap
- Female life expectancy in the Trust’s most deprived areas was 81.5 years, 1.1 years less than the HSCT average (82.5 years).

No Change in Female Inequality Gap

Largest Inequality Gaps

Teenage Birth Rate (U20) (100%)	SAR Self-Harm (97%)	SAR Alcohol Related (95%)	SAR Drug Related (88%)	Smoking During Pregnancy (80%)
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Changes in Inequality Gaps



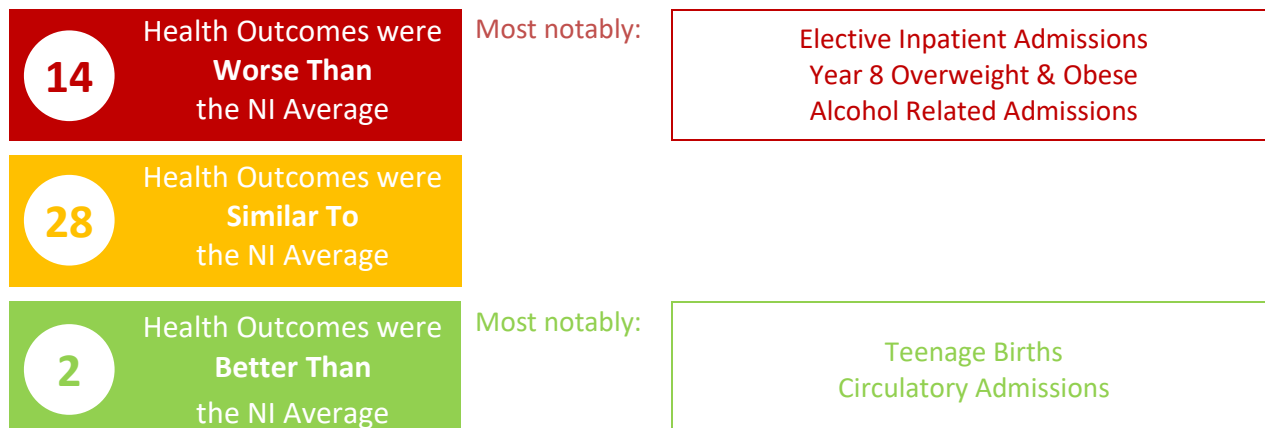
This is a summary of findings only. For a full assessment and all figures see downloadable tables at:

<https://www.health-ni.gov.uk/articles/health-inequalities-statistics>

Western

Health & Social Care Trust (HSCT)

Comparison with NI



Comparison with Most Deprived Areas

Inequality gaps between the 20% most deprived areas within the Western Trust and the Trust average:

Life Expectancy

- | | |
|--|---|
| Male life expectancy in the Trust’s most deprived areas was 73.7 years,
4.6 years less than the HSCT average (78.3 years). | No Change in
Male Inequality Gap |
|--|---|
- | | |
|--|---|
| Female life expectancy in the Trust’s most deprived areas was 78.6 years,
3.3 years less than the HSCT average (82.0 years). | No Change in
Female Inequality Gap |
|--|---|

Largest Inequality Gaps

SDR Drug Misuse (171%)	SDR Drug Related (142%)	SAR Alcohol Related (140%)	SAR Drug Related (113%)	Teenage Birth Rate (U20) (102%)
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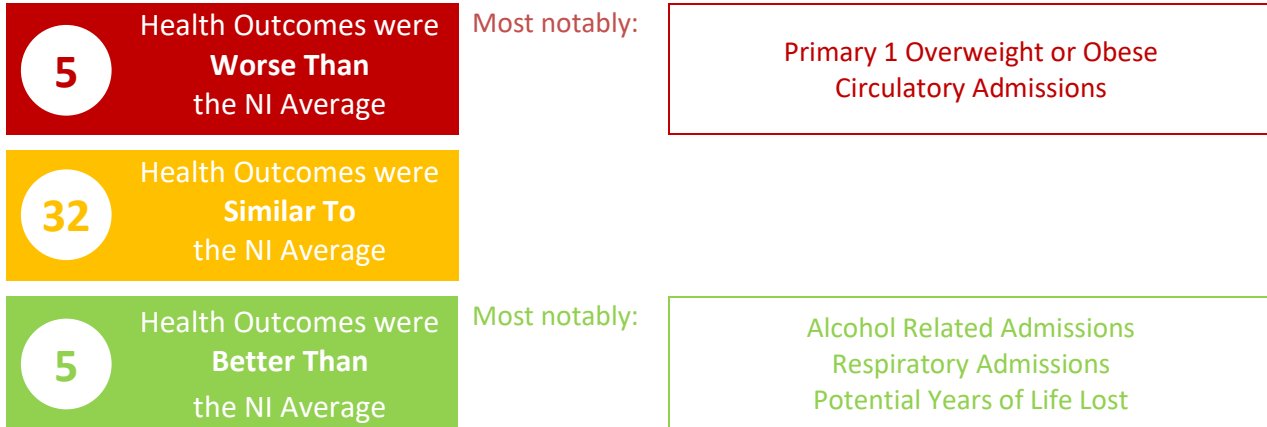
Changes in Inequality Gaps

Most Notable Narrowed Deprivation Inequality Gaps	Most Notable Widened Deprivation Inequality Gaps
Year 8 Obesity Alcohol Specific Mortality Emergency Admissions	Primary 1 Overweight & Obese Cancer Incidence Drug Related Mortality

This is a summary of findings only. For a full assessment and all figures see downloadable tables at:
<https://www.health-ni.gov.uk/articles/health-inequalities-statistics>

Antrim & Newtownabbey Local Government District (LGD)

Comparison with NI



Comparison with Most Deprived Areas

Inequality gaps between the 20% most deprived areas within the Antrim & Newtownabbey LGD and the LGD average:

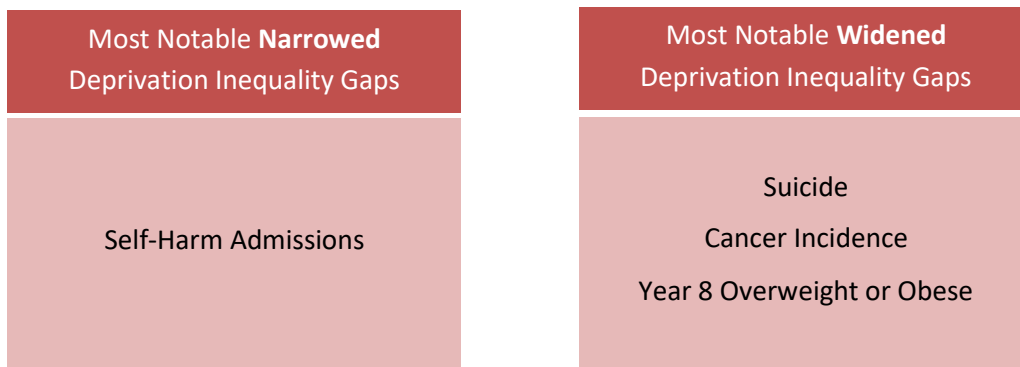
Life Expectancy

- Male life expectancy in the LGD's most deprived areas was 74.7 years, **4.4 years** less than the LGD average (79.1 years). No Change in Male Inequality Gap
- Female life expectancy in the LGD's most deprived areas was 77.7 years, **4.3 years** less than the LGD average (82.0 years). No Change in Female Inequality Gap

Largest Inequality Gaps

SDR Drug Related (142%)	SDR Alcohol Specific (97%)	SAR Self-Harm (96%)	SAR Alcohol Related (94%)	Crude Suicide Rate (90%)
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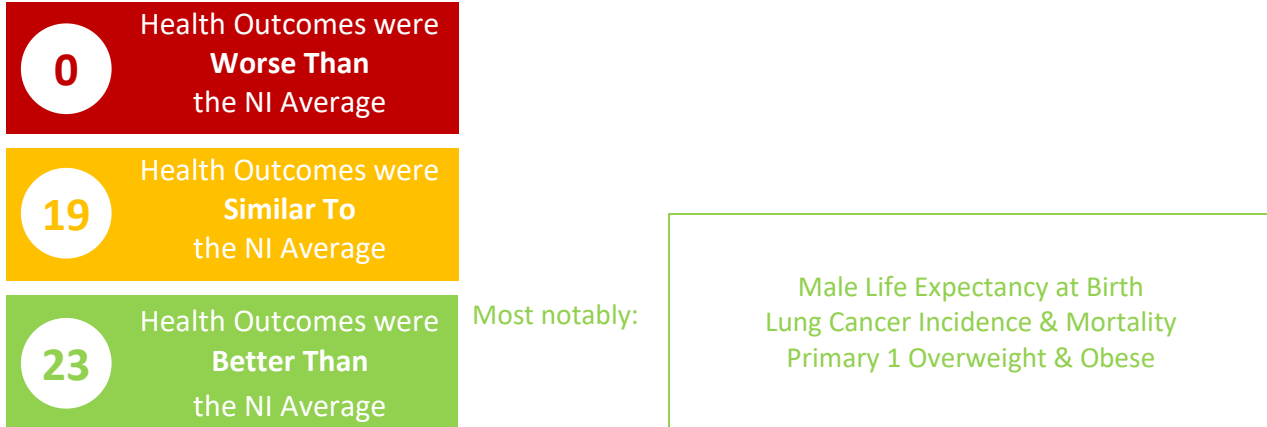
Changes in Inequality Gaps



This is a summary of findings only. For a full assessment and all figures see downloadable tables at: <https://www.health-ni.gov.uk/articles/health-inequalities-statistics>

Ards & North Down Local Government District (LGD)

Comparison with NI



Comparison with Most Deprived Areas

Inequality gaps between the 20% most deprived areas within the Ards & North Down LGD and the LGD average:

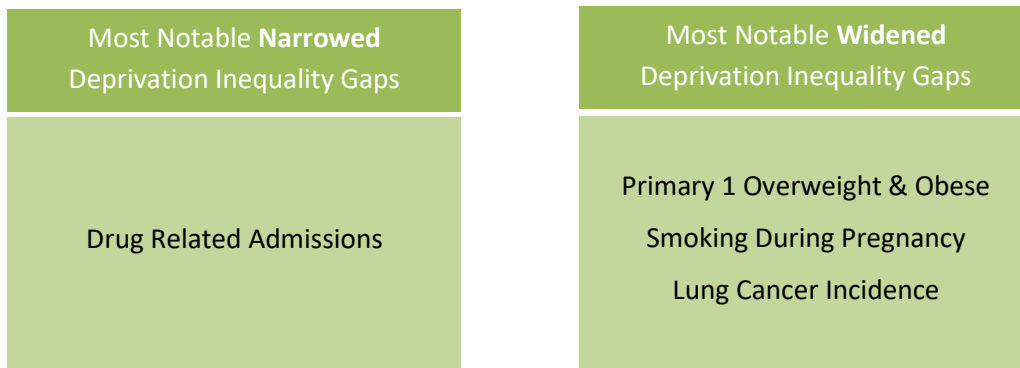
Life Expectancy

- Male life expectancy in the LGD’s most deprived areas was 75.7 years, **3.7 years** less than the LGD average (79.5 years). **No Change in Male Inequality Gap**
- Female life expectancy in the LGD’s most deprived areas was 80.8 years, **1.8 years** less than the LGD average (82.6 years). **No Change in Female Inequality Gap**

Largest Inequality Gaps

Smoking During Pregnancy (111%)	SDR Drug Related (111%)	SDR Alcohol Specific (101%)	Teenage Birth Rate (U20) (100%)	SAR Alcohol Related (90%)
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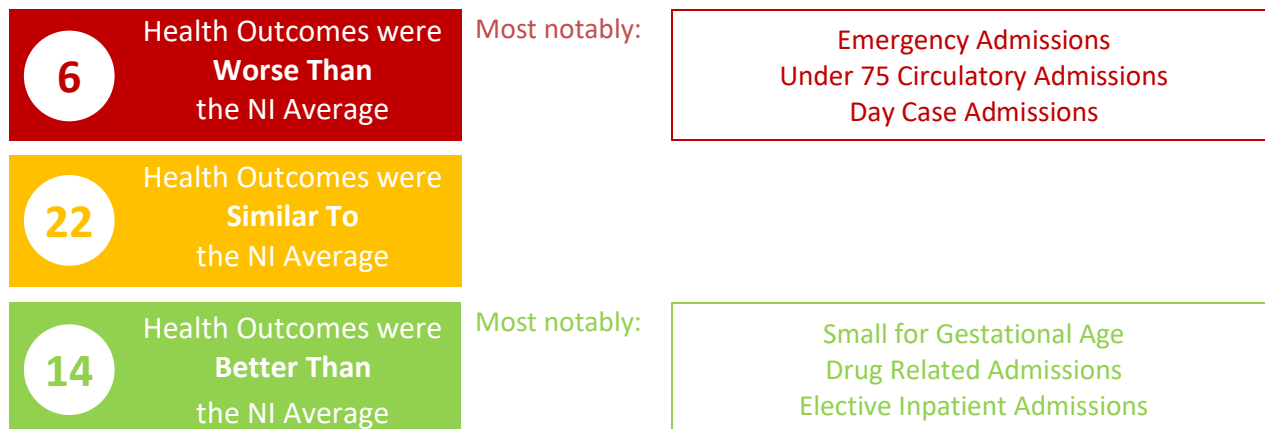
Changes in Inequality Gaps



This is a summary of findings only. For a full assessment and all figures see downloadable tables at: <https://www.health-ni.gov.uk/articles/health-inequalities-statistics>

Armagh City, Banbridge & Craigavon Local Government District (LGD)

Comparison with NI



Comparison with Most Deprived Areas

Inequality gaps between the 20% most deprived areas within the Armagh City, Banbridge & Craigavon LGD and the LGD average:

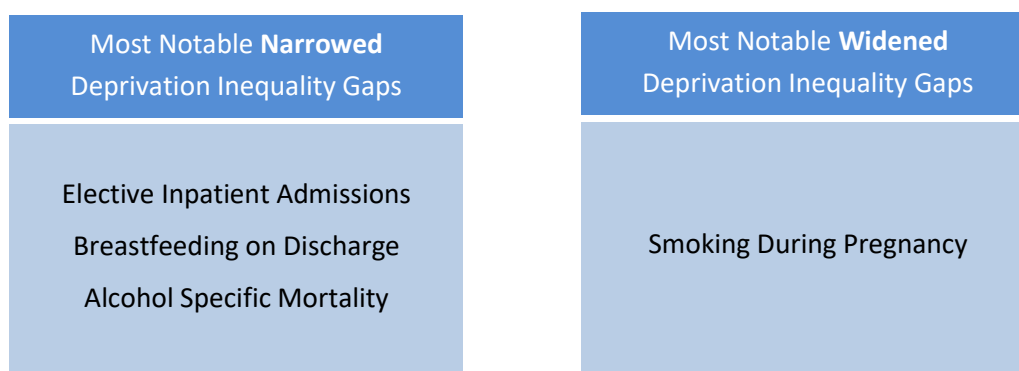
Life Expectancy

- Male life expectancy in the LGD's most deprived areas was 75.5 years, **3.5 years** less than the LGD average (79.0 years). No Change in Male Inequality Gap
- Female life expectancy in the LGD's most deprived areas was 81.0 years, **1.7 years** less than the LGD average (82.7 years). No Change in Female Inequality Gap

Largest Inequality Gaps

Teenage Birth Rate (U20) (108%)	SAR Self-Harm (102%)	Smoking During Pregnancy (96%)	SAR Alcohol Related (95%)	SAR Drug Related (88%)
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Changes in Inequality Gaps

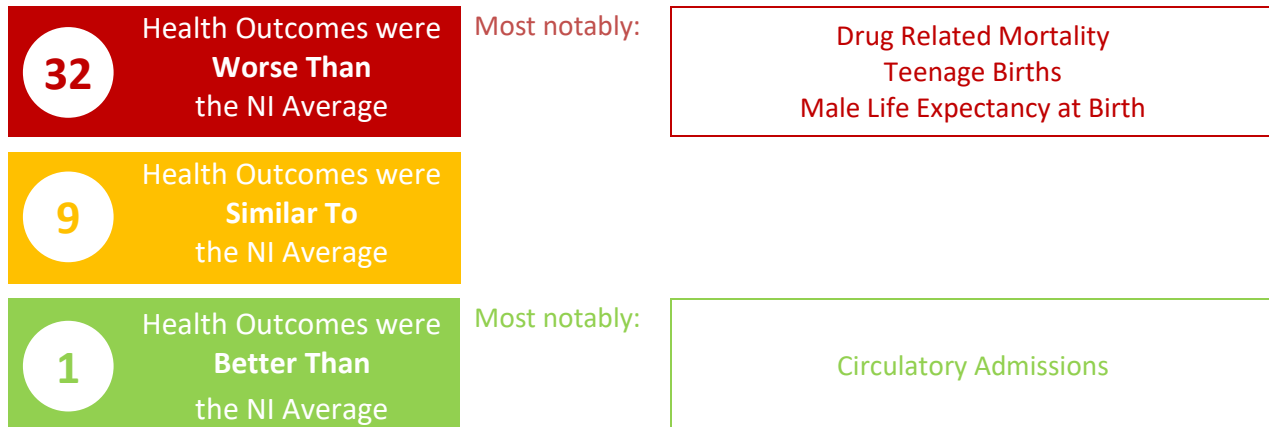


This is a summary of findings only. For a full assessment and all figures see downloadable tables at: <https://www.health-ni.gov.uk/articles/health-inequalities-statistics>

Belfast

Local Government District (LGD)

Comparison with NI



Comparison with Most Deprived Areas

Inequality gaps between the 20% most deprived areas within the Belfast LGD and the LGD average:

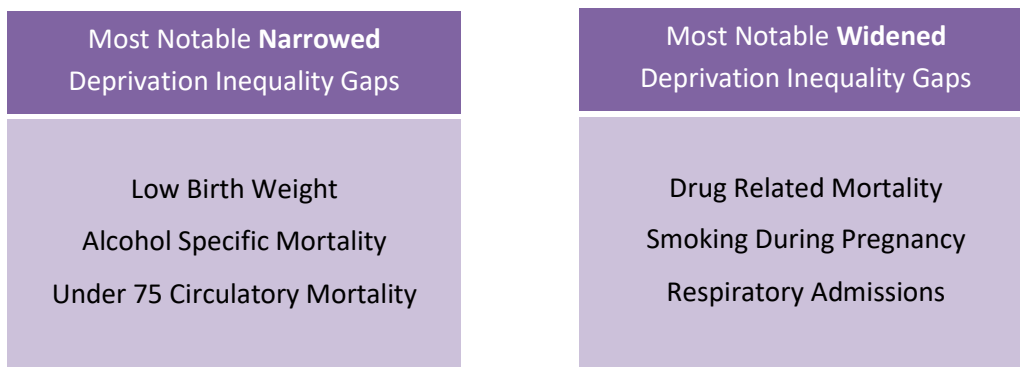
Life Expectancy

- Male life expectancy in the LGD’s most deprived areas was 71.3 years, **4.5 years** less than the LGD average (75.8 years). No Change in Male Inequality Gap
- Female life expectancy in the LGD’s most deprived areas was 77.6 years, **3.4 years** less than the LGD average (81.0 years). No Change in Female Inequality Gap

Largest Inequality Gaps

SAR Drug Related (97%)	SAR Alcohol Related (93%)	SDR Drug Related (92%)	Teenage Birth Rate (U20) (83%)	SAR Self-Harm (83%)
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Changes in Inequality Gaps



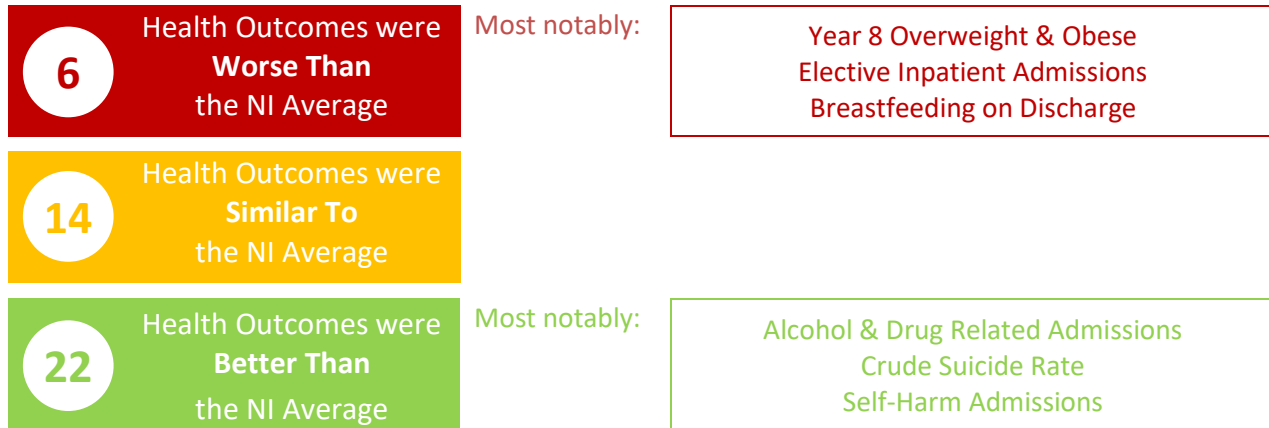
This is a summary of findings only. For a full assessment and all figures see downloadable tables at:

<https://www.health-ni.gov.uk/articles/health-inequalities-statistics>

Causeway Coast & Glens

Local Government District (LGD)

Comparison with NI



Comparison with Most Deprived Areas

Inequality gaps between the 20% most deprived areas within the Causeway Coast & Glens LGD and the LGD average:

Life Expectancy

- Male life expectancy in the LGD's most deprived areas was 75.2 years, **4.4 years** less than the LGD average (79.6 years). No Change in Male Inequality Gap
- Female life expectancy in the LGD's most deprived areas was 81.7 years, **1.5 years** less than the LGD average (83.2 years). No Change in Female Inequality Gap

Largest Inequality Gaps

SDR Drug Related (143%)	SDR Alcohol Specific (117%)	Crude Suicide Rate (109%)	SAR Self-Harm (103%)	SAR Alcohol Related Causes (98%)
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Changes in Inequality Gaps

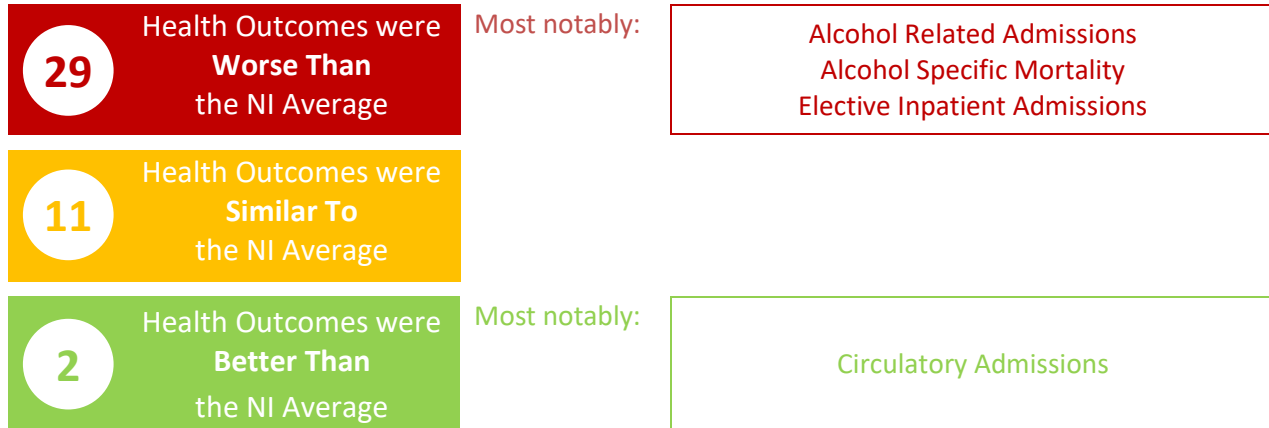
Most Notable Narrowed Deprivation Inequality Gaps	Most Notable Widened Deprivation Inequality Gaps
Teenage Births	Low Birth Weight Drug Related Mortality Smoking During Pregnancy

This is a summary of findings only. For a full assessment and all figures see downloadable tables at:
<https://www.health-ni.gov.uk/articles/health-inequalities-statistics>

Derry City & Strabane

Local Government District (LGD)

Comparison with NI



Comparison with Most Deprived Areas

Inequality gaps between the 20% most deprived areas within the Derry City & Strabane LGD and the LGD average:

Life Expectancy

- Male life expectancy in the LGD's most deprived areas was 72.7 years, **5.0 years** less than the LGD average (77.7 years). **Male Inequality Gap Widened**
- Female life expectancy in the LGD's most deprived areas was 78.0 years, **3.4 years** less than the LGD average (81.4 years). **Female Inequality Gap Widened**

Largest Inequality Gaps

SAR Alcohol Related (141%)	SAR Drug Related (121%)	SDR Alcohol Specific (118%)	SAR Self-Harm (107%)	SDR Lung Cancer (97%)
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Changes in Inequality Gaps

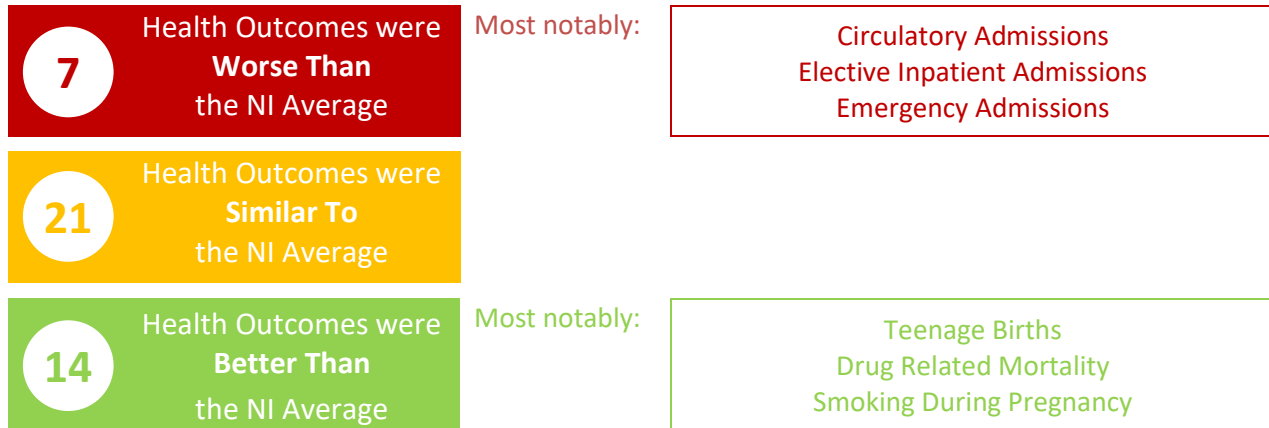
Most Notable Narrowed Deprivation Inequality Gaps	Most Notable Widened Deprivation Inequality Gaps
Low Birth Weight Under 75 Circulatory Admissions Alcohol Specific Mortality	Lung Cancer Incidence & Mortality Smoking Related Mortality Under 75 Cancer Mortality

This is a summary of findings only. For a full assessment and all figures see downloadable tables at:

<https://www.health-ni.gov.uk/articles/health-inequalities-statistics>

Fermanagh & Omagh Local Government District (LGD)

Comparison with NI



Comparison with Most Deprived Areas

Inequality gaps between the 20% most deprived areas within the Fermanagh & Omagh LGD and the LGD average:

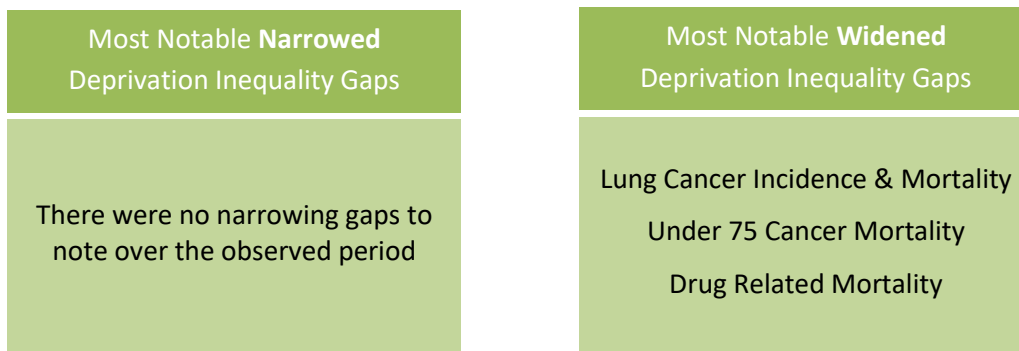
Life Expectancy

- Male life expectancy in the LGD's most deprived areas was 76.0 years, **2.6 years** less than the LGD average (78.7 years). No Change in Male Inequality Gap
- Female life expectancy in the LGD's most deprived areas was 79.3 years, **3.2 years** less than the LGD average (82.5 years). Female Inequality Gap Widened

Largest Inequality Gaps

SAR Alcohol Related (86%)	SDR Drug Related (75%)	SDR Alcohol Specific (71%)	SAR Self-Harm (63%)	SAR Drug Related (63%)
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Changes in Inequality Gaps

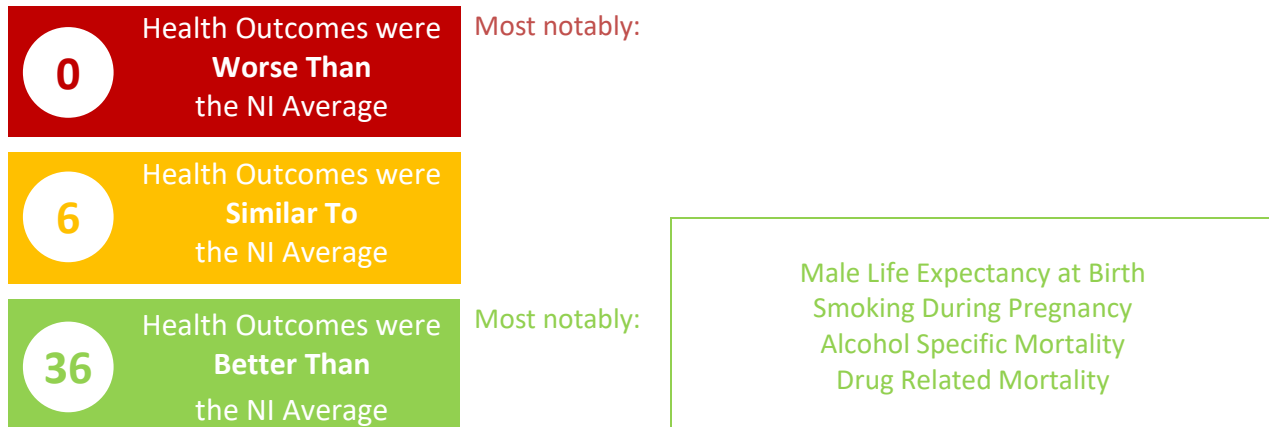


This is a summary of findings only. For a full assessment and all figures see downloadable tables at: <https://www.health-ni.gov.uk/articles/health-inequalities-statistics>

Lisburn & Castlereagh

Local Government District (LGD)

Comparison with NI



Comparison with Most Deprived Areas

Inequality gaps between the 20% most deprived areas within the Lisburn & Castlereagh LGD and the LGD average:

Life Expectancy

- Male life expectancy in the LGD's most deprived areas was 75.4 years, **4.4 years** less than the LGD average (79.8 years). **No Change in Male Inequality Gap**
- Female life expectancy in the LGD's most deprived areas was 80.6 years, **2.8 years** less than the LGD average (83.4 years). **No Change in Female Inequality Gap**

Largest Inequality Gaps

SDR Drug Related (187%)	Smoking During Pregnancy (160%)	SDR Alcohol Specific (146%)	SAR Alcohol Related (110%)	Teenage Birth Rate (U20) (107%)
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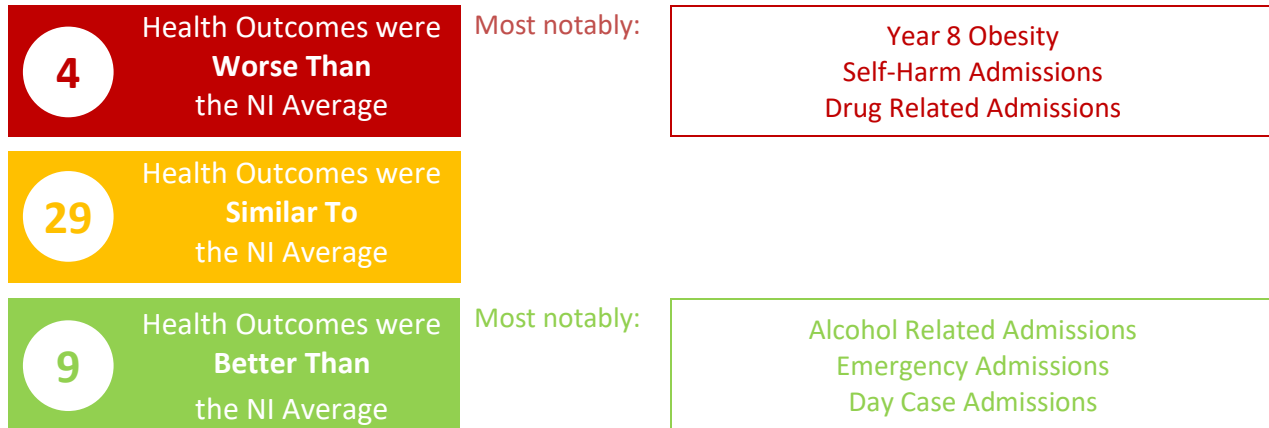
Changes in Inequality Gaps

Most Notable Narrowed Deprivation Inequality Gaps	Most Notable Widened Deprivation Inequality Gaps
<ul style="list-style-type: none"> Under 75 Circulatory Mortality Amenable Mortality Teenage Births 	<ul style="list-style-type: none"> Primary 1 Overweight or Obese Alcohol Specific Mortality Year 8 Obesity

This is a summary of findings only. For a full assessment and all figures see downloadable tables at: <https://www.health-ni.gov.uk/articles/health-inequalities-statistics>

Mid and East Antrim Local Government District (LGD)

Comparison with NI



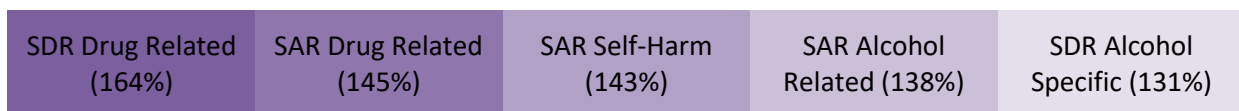
Comparison with Most Deprived Areas

Inequality gaps between the 20% most deprived areas within the Mid and East Antrim LGD and the LGD average:

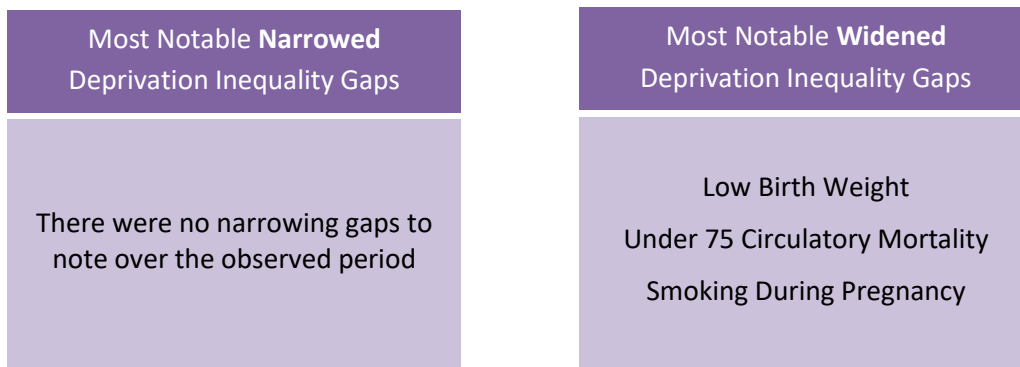
Life Expectancy

- Male life expectancy in the LGD’s most deprived areas was 74.3 years, **4.4 years** less than the LGD average (78.6 years). No Change in Male Inequality Gap
- Female life expectancy in the LGD’s most deprived areas was 79.3 years, **3.3 years** less than the LGD average (82,7 years). No Change in Female Inequality Gap

Largest Inequality Gaps



Changes in Inequality Gaps



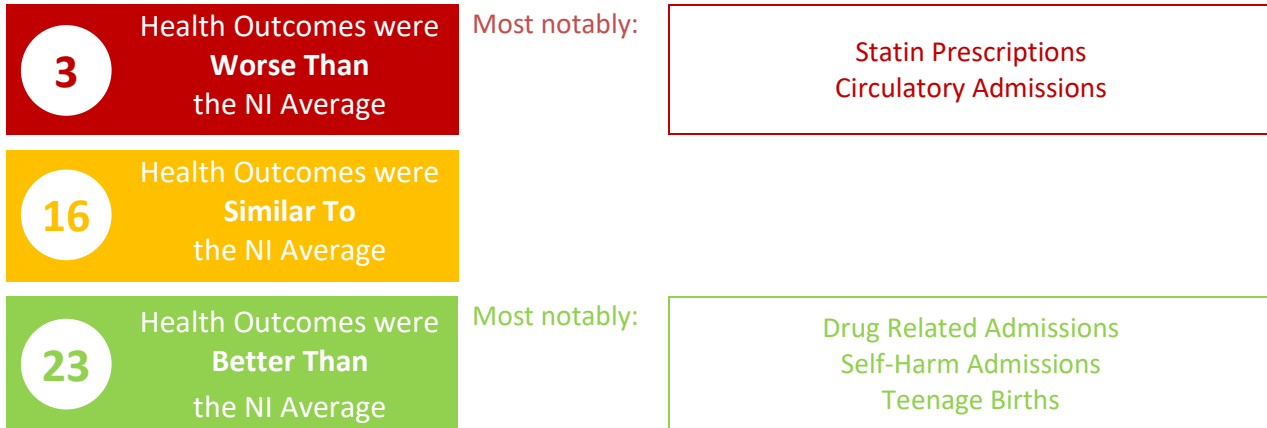
This is a summary of findings only. For a full assessment and all figures see downloadable tables at:

<https://www.health-ni.gov.uk/articles/health-inequalities-statistics>

Mid Ulster

Local Government District (LGD)

Comparison with NI



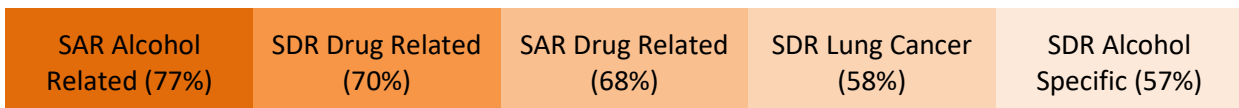
Comparison with Most Deprived Areas

Inequality gaps between the 20% most deprived areas within the Mid Ulster LGD and the LGD average:

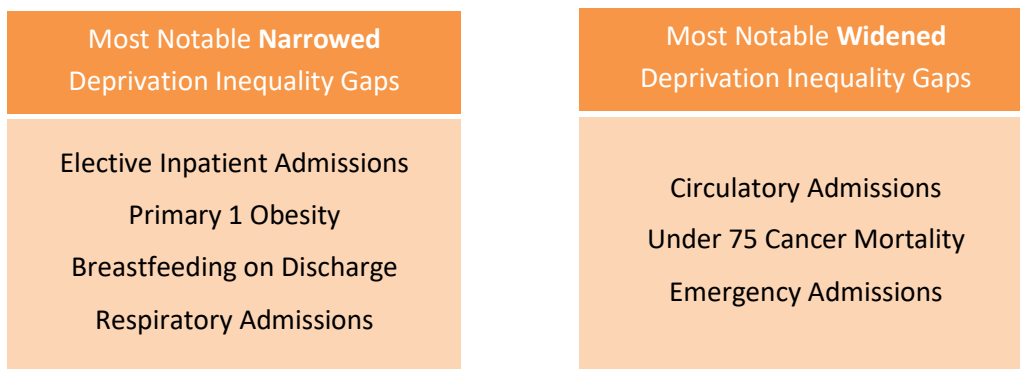
Life Expectancy

- Male life expectancy in the LGD’s most deprived areas was 77.3 years, **2.0 years** less than the LGD average (79.4 years). No Change in Male Inequality Gap
- Female life expectancy in the LGD’s most deprived areas was 82.0 years, **0.6 years** less than the LGD average (82.7 years). No Change in Female Inequality Gap

Largest Inequality Gaps



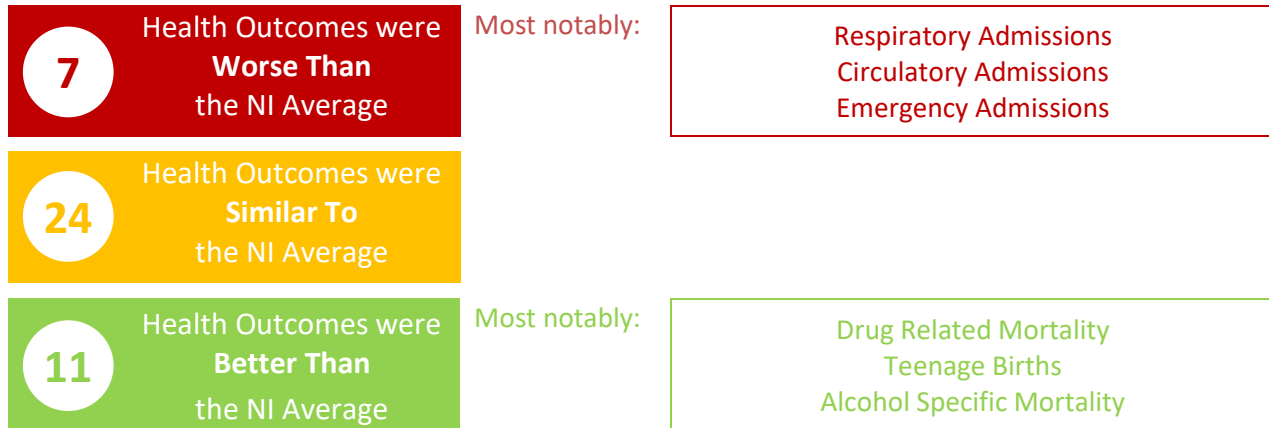
Changes in Inequality Gaps



This is a summary of findings only. For a full assessment and all figures see downloadable tables at: <https://www.health-ni.gov.uk/articles/health-inequalities-statistics>

Newry, Mourne and Down Local Government District (LGD)

Comparison with NI



Comparison with Most Deprived Areas

Inequality gaps between the 20% most deprived areas within the Newry, Mourne & Down LGD and the LGD average:

Life Expectancy

- Male life expectancy in the LGD’s most deprived areas was 76.5 years, **2.5 years** less than the LGD average (78.9 years). No Change in Male Inequality Gap
- Female life expectancy in the LGD’s most deprived areas was 81.6 years, **1.0 years** less than the LGD average (82.6 years). Female Inequality Gap Narrowed

Largest Inequality Gaps

SDR Drug Related (85%)	SDR Alcohol Specific (69%)	SAR Self-Harm (64%)	SAR Drug Related (55%)	Teenage Birth Rate (U20) (54%)
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Changes in Inequality Gaps

Most Notable Narrowed Deprivation Inequality Gaps	Most Notable Widened Deprivation Inequality Gaps
Low Birth Weight Under 75 Circulatory Admissions Lung Cancer Incidence	Year 8 Overweight or Obese Day Case Admissions Amenable Mortality

This is a summary of findings only. For a full assessment and all figures see downloadable tables at: <https://www.health-ni.gov.uk/articles/health-inequalities-statistics>

APPENDICES

APPENDIX A: SOCIAL GRADIENT OF HEALTH

Health inequalities are often considered in terms of the gap between the most and least deprived quintiles of the population. However this does not account for those areas of intermediate levels of deprivation that may also be relatively disadvantaged in terms of their health status. The Marmot Review¹⁴ demonstrated that there is a social gradient in health that runs from top to bottom of the socioeconomic spectrum, meaning that health inequalities affect everyone. There is consistent evidence from throughout the world that people at a socioeconomic disadvantage suffer a heavier burden of illness and have higher mortality rates than their better off counterparts.

Different inequality measures can give information about different aspects of inequalities. Some measures concentrate on the extremes of deprivation such as the most-least deprived (*or absolute*) gap analysis presented in the main body of this report, whilst others include relative inequality gaps across the socioeconomic scale – taking into account the whole population - and can give quite different interpretations of inequalities. Therefore, in addition to the most-least deprived (*or absolute*) gap analysis presented in this report, a social gradient analysis using the Relative Index of Inequalities (RII) has been undertaken to provide a fuller assessment of inequalities.

Absolute gap (most-least deprived gap): This measure describes the absolute difference between the extremes of deprivation. It has the advantage that it is intuitive and straightforward to explain, but the disadvantage that, because it focuses only on the extremes of deprivation, it does not take account of patterns of inequalities observed across the intermediate groups.

Slope Index of Inequality (SII): SII describes the gradient of health observed across the deprivation scale. While the absolute gap shows the difference between two large groups, SII measures the difference in health outcomes between the theoretical most and least deprived individuals, according to linear regression across health outcomes for all deprivation deciles. SII therefore has the advantage of being sensitive to the experience of the entire population, rather than just the extremes of deprivation.

Relative Index of Inequality (RII): The RII describes the gradient of health observed across the deprivation scale, relative to the average for the observed population (by dividing the Slope of Index of Inequality (SII) by the mean). The value of RII tells you the magnitude of inequality in relation to the mean thus representing the proportionate change in the health outcome across the population. It allows inequalities to be compared and contrasted across a number of different health indicators, and also to be monitored over time.

For further information regarding the RII methodology, including how it is calculated, please refer to the NI Health & Social Care Inequalities Monitoring System – Regional 2014 report: <https://www.health-ni.gov.uk/publications/ni-health-and-social-care-inequalities-monitoring-system-hscims-regional-2014>

¹⁴ *Fair Society, Healthy Lives: The Marmot Review* can be accessed at <http://www.instituteofhealthequity.org/projects/fair-society-healthy-lives-the-marmot-review>

RESULTS

Social gradient analyses were carried out for the majority of indicators included in the HSCIMS. For some indicators this analysis could not be performed due to limitations on the level of data available. An explanatory interpretation of RII results is provided for life expectancy at birth below, with a time series for the Absolute Gap (most-least deprived) and Relative Index of Inequality (RII) for all other indicators provided in Table 4. It should be noted that in this report the SII value tends to be larger when compared with the absolute gap. This is due to the SII calculating across deprivation deciles whereas the absolute gap is calculated across deprivation quintiles.

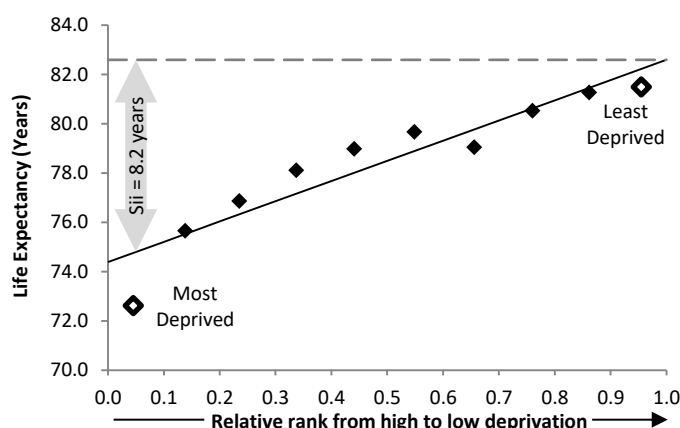
The symbols used in the main body of the report to show the change in the inequality gap indicated by the absolute gap analysis, have also been included in the table for each indicator.

Worked examples are shown below for SII and RII.

Male Life Expectancy at Birth – SII

Year	2011-13	2012-14	2013-15	2014-16	2015-17
Absolute Gap (Most-Least Deprived)¹⁵	7.5	7.0	6.5	6.6	7.1
Slope Index of Inequality (SII)	8.5	8.3	7.6	7.8	8.2

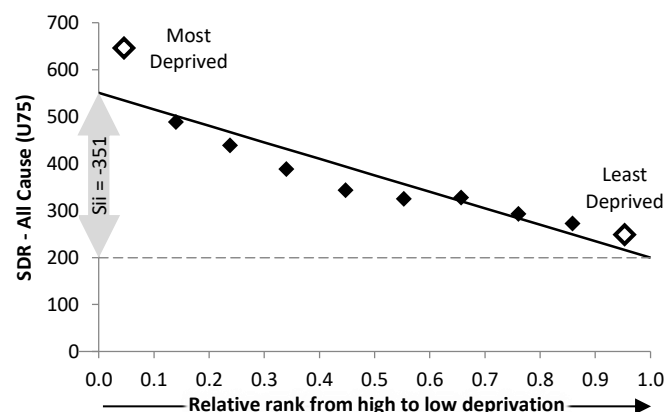
For life expectancy values, the Slope Index of Inequality (SII) indicates the absolute gap across the deprivation scale, represented by the gradient of the linear best fit line shown. In 2015-17, male life expectancy at birth indicates a SII gap of 8.2 years, higher than that indicated by the absolute gap between the most and least deprived quintiles (7.1 years). Across the period, both the absolute gap and SII indicated that the male life expectancy deprivation gap narrowed between 2011-13 and 2015-17.



SDR – All Cause Mortality (U75) - RII

Year	2009-13	2010-14	2011-15	2012-16	2013-17
Absolute Gap (Most-Least Deprived)¹⁵	121%	118%	113%	114%	116%
Relative Index of Inequality (RII)	-0.95	-0.96	-0.93	-0.95	-0.95

The Relative Index of Inequality (RII) indicates the relative gap across the deprivation scale. In 2013-17, mortality rates among those aged below 75 years indicated a deprivation gap of -0.95, meaning that the SII value of -351 deaths per 100,000 population is equivalent to 95% of the average mortality rate across NI. Both the RII and the absolute gap showed that the deprivation gap remained similar across the analysed period.



¹⁵ Calculation is deprivation quintile based i.e. difference between 20% most and least deprived areas.

Table 4: Social Gradient Analysis of Indicators

A comparison of the inequality gaps provided in the main body of the report with social gradient results are presented in the table below:

Indicator	Time Series				
	2011-13	2012-14	2013-15	2014-16	2015-17
Male Life Expectancy at Birth					
Absolute Gap (Most–Least Deprived)	7.5	7.0	6.5	6.6	7.1
Slope Index of Inequality (SII)	8.5	8.3	7.6	7.8	8.2
Female Life Expectancy at Birth					
Absolute Gap (Most–Least Deprived)	4.3	4.4	4.5	4.5	4.5
Slope Index of Inequality (SII)	4.9	5.0	5.1	5.2	5.3
Male Life Expectancy at Age 65					
Absolute Gap (Most–Least Deprived)	2.8	2.8	2.6	2.9	3.0
Slope Index of Inequality (SII)	3.3	3.5	3.1	3.3	3.3
Female Life Expectancy at Age 65					
Absolute Gap (Most–Least Deprived)	2.3	2.4	2.4	2.4	2.3
Slope Index of Inequality (SII)	2.6	2.7	2.6	2.7	2.6
Potential Years of Life Lost					
Absolute Gap (Most–Least Deprived)	133%	127%	119%	118%	131%
Relative Index of Inequality (RII)	- 1.02	- 1.02	- 0.98	- 0.98	- 1.01
SDR- Amenable					
Absolute Gap (Most–Least Deprived)	134%	128%	127%	127%	128%
Relative Index of Inequality (RII)	- 1.04	- 1.03	- 1.01	- 1.01	- 0.99
SDR – Preventable					
Absolute Gap (Most–Least Deprived)	151%	148%	144%	141%	135%
Relative Index of Inequality (RII)	- 1.12	- 1.12	- 1.10	- 1.09	- 1.07
SDR – Avoidable					
Absolute Gap (Most–Least Deprived)	146%	141%	138%	136%	132%
Relative Index of Inequality (RII)	- 1.09	- 1.09	- 1.07	- 1.06	- 1.04
SDR - Avoidable Children & Young People					
Absolute Gap (Most–Least Deprived)	102%	77%	68%	53%	54%
Relative Index of Inequality (RII)	- 0.77	- 0.67	- 0.60	- 0.55	- 0.63
SDR - Circulatory (U75)					
Absolute Gap (Most–Least Deprived)	152%	153%	146%	143%	141%
Relative Index of Inequality (RII)	- 1.11	- 1.14	- 1.10	- 1.08	- 1.06
SDR - Respiratory (U75)					
Absolute Gap (Most–Least Deprived)	216%	236%	228%	242%	264%
Relative Index of Inequality (RII)	- 1.43	- 1.50	- 1.43	- 1.47	- 1.49
SDR - Cancer (U75)					
Absolute Gap (Most–Least Deprived)	78%	76%	72%	73%	72%
Relative Index of Inequality (RII)	- 0.69	- 0.71	- 0.70	- 0.72	- 0.70
SDR - All Cause Mortality (U75)					
Absolute Gap (Most–Least Deprived)	121%	118%	113%	114%	116%
Relative Index of Inequality (RII)	- 0.95	- 0.96	- 0.93	- 0.95	- 0.95
SAR - Circulatory					
Absolute Gap (Most–Least Deprived)	26%	27%	27%	27%	26%
Relative Index of Inequality (RII)	- 0.24	- 0.27	- 0.27	- 0.27	- 0.25
SAR - Circulatory (U75)					
Absolute Gap (Most–Least Deprived)	38%	39%	39%	39%	37%
Relative Index of Inequality (RII)	- 0.37	- 0.39	- 0.40	- 0.40	- 0.39
SPR - Antihypertensive					
Absolute Gap (Most–Least Deprived)	23%	24%	21%	22%	24%
Relative Index of Inequality (RII)	- 0.24	- 0.24	- 0.23	- 0.24	- 0.25
SPR - Statin					
Absolute Gap (Most–Least Deprived)	30%	31%	27%	29%	31%
Relative Index of Inequality (RII)	- 0.32	- 0.32	- 0.30	- 0.32	- 0.34
SAR - Respiratory					
Absolute Gap (Most–Least Deprived)	87%	96%	95%	96%	93%
Relative Index of Inequality (RII)	- 0.73	- 0.79	- 0.78	- 0.78	- 0.75
SAR - Respiratory (U75)					
Absolute Gap (Most–Least Deprived)	105%	117%	115%	118%	113%
Relative Index of Inequality (RII)	- 0.86	- 0.93	- 0.91	- 0.91	- 0.88

SIR - Cancer		2006-12	2007-13	2008-14	2009-15	2010-16
Absolute Gap (Most–Least Deprived)	—	23%	24%	27%	25%	24%
Relative Index of Inequality (RII)	—	- 0.24	- 0.24	- 0.28	- 0.25	- 0.25
SAR - All Admissions		2013/14	2014/15	2015/16	2016/17	2017/18
Absolute Gap (Most–Least Deprived)	—	41%	46%	42%	40%	39%
Relative Index of Inequality (RII)	—	- 0.40	- 0.44	- 0.42	- 0.39	- 0.38
SAR - Emergency Admissions		2013/14	2014/15	2015/16	2016/17	2017/18
Absolute Gap (Most–Least Deprived)	▶▶	76%	77%	73%	73%	64%
Relative Index of Inequality (RII)	▶▶	- 0.66	- 0.68	- 0.65	- 0.63	- 0.57
SAR - Elective Inpatient Admissions		2013/14	2014/15	2015/16	2016/17	2017/18
Absolute Gap (Most–Least Deprived)	—	30%	32%	31%	22%	26%
Relative Index of Inequality (RII)	—	- 0.29	- 0.31	- 0.32	- 0.23	- 0.26
SAR - Day Case Admissions		2013/14	2014/15	2015/16	2016/17	2017/18
Absolute Gap (Most–Least Deprived)	—	21%	28%	23%	23%	24%
Relative Index of Inequality (RII)	—	- 0.22	- 0.29	- 0.24	- 0.24	- 0.26
SAR – Self-Harm Admissions		2009/10-13/14	2010/11-14/15	2011/12-15/16	2012/13-16/17	2013/14-17/18
Absolute Gap (Most–Least Deprived)	▶▶	327%	302%	276%	255%	251%
Relative Index of Inequality (RII)	▶▶	- 1.79	- 1.73	- 1.65	- 1.59	- 1.56
Crude Suicide Rate		2011-13	2012-14	2013-15	2014-16	2015-17
Absolute Gap (Most–Least Deprived)	◀▶	221%	196%	212%	232%	260%
Relative Index of Inequality (RII)	◀▶	- 1.38	- 1.30	- 1.30	- 1.48	- 1.58
SPR - Mood & Anxiety		2013	2014	2015	2016	2017
Absolute Gap (Most–Least Deprived)	—	69%	68%	62%	65%	67%
Relative Index of Inequality (RII)	—	- 0.64	- 0.63	- 0.58	- 0.60	- 0.62
SAR - Alcohol Related Causes		2011/12-13/14	2012/13-14/15	2013/14-15/16	2014/15-16/17	2015/16-17/18
Absolute Gap (Most–Least Deprived)	▶▶	421%	403%	377%	363%	338%
Relative Index of Inequality (RII)	▶▶	-2.1	-2.1	-2.0	-2.0	-1.9
SDR - Alcohol Specific		2009-13	2010-14	2011-15	2012-16	2013-17
Absolute Gap (Most–Least Deprived)	—	392%	351%	348%	336%	353%
Relative Index of Inequality (RII)	—	- 1.99	- 1.92	- 1.84	- 1.87	- 1.85
SDR - Smoking Related Causes		2009-13	2010-14	2011-15	2012-16	2013-17
Absolute Gap (Most–Least Deprived)	—	129%	129%	126%	129%	122%
Relative Index of Inequality (RII)	—	- 0.99	- 1.00	- 0.98	- 1.00	- 0.97
SIR - Lung Cancer		2006-12	2007-13	2008-14	2009-15	2010-16
Absolute Gap (Most–Least Deprived)	—	167%	164%	165%	154%	156%
Relative Index of Inequality (RII)	—	- 1.20	- 1.18	- 1.18	- 1.12	- 1.16
SDR - Lung Cancer		2009-13	2010-14	2011-15	2012-16	2013-17
Absolute Gap (Most–Least Deprived)	▶▶	175%	167%	164%	163%	154%
Relative Index of Inequality (RII)	—	- 1.24	- 1.25	- 1.20	- 1.20	- 1.19
SAR - Drug Related Causes		2011/12-13/14	2012/13-14/15	2013/14-15/16	2014/15-16/17	2015/16-17/18
Absolute Gap (Most–Least Deprived)	—	302%	276%	267%	276%	282%
Relative Index of Inequality (RII)	—	- 1.75	- 1.67	- 1.64	- 1.66	- 1.66
SDR - Drug Related Causes		2009-13	2010-14	2011-15	2012-16	2013-17
Absolute Gap (Most–Least Deprived)	—	322%	314%	347%	397%	334%
Relative Index of Inequality (RII)	—	- 1.84	- 1.89	- 1.92	- 2.00	- 2.00
SDR - Drug Misuse		2009-13	2010-14	2011-15	2012-16	2013-17
Absolute Gap (Most–Least Deprived)	◀▶	316%	348%	398%	464%	393%
Relative Index of Inequality (RII)	◀▶	- 1.83	- 1.97	- 1.99	- 2.08	- 2.06
Smoking During Pregnancy		2013	2014	2015	2016	2017
Absolute Gap (Most–Least Deprived)	◀▶	286%	343%	305%	353%	376%
Relative Index of Inequality (RII)	◀▶	- 1.58	- 1.65	- 1.57	- 1.71	- 1.75
Teenage Birth Rate (U20)		2013	2014	2015	2016	2017
Absolute Gap (Most–Least Deprived)	▶▶	494%	408%	475%	485%	310%
Relative Index of Inequality (RII)	▶▶	- 1.88	- 1.75	- 1.90	- 2.06	- 1.67
Breastfeeding on Discharge		2013	2014	2015	2016	2017
Absolute Gap (Most–Least Deprived)	▶▶	53%	49%	50%	50%	48%
Relative Index of Inequality (RII)	▶▶	0.79	0.75	0.78	0.78	0.73
Low Birth Weight		2013	2014	2015	2016	2017
Absolute Gap (Most–Least Deprived)	—	38%	48%	17%	29%	32%
Relative Index of Inequality (RII)	—	- 0.37	- 0.28	- 0.27	- 0.26	- 0.33
Small for Gestational Age ¹⁶					2016	2017
Absolute Gap (Most–Least Deprived)					79%	43%
Relative Index of Inequality (RII)					- 0.65	- 0.51

¹⁵ As this is a new indicator, no assessment of the inequality gap trend will be made until 5 years of data are available.

Primary 1 BMI: Obese		2012/13	2013/14	2014/15	2015/16	2016/17
Absolute Gap (Most–Least Deprived)	—	65%	57%	71%	16%	55%
Relative Index of Inequality (RII)	—	-0.53	-0.44	-0.71	-0.25	-0.50
Primary 1 BMI: Overweight or Obese		2012/13	2013/14	2014/15	2015/16	2016/17
Absolute Gap (Most–Least Deprived)	—	26%	34%	35%	8%	25%
Relative Index of Inequality (RII)	—	-0.29	-0.29	-0.34	-0.12	-0.26
Year 8 BMI: Obese		2012/13	2013/14	2014/15	2015/16	2016/17
Absolute Gap (Most–Least Deprived)	◀▶	86%	64%	85%	98%	107%
Relative Index of Inequality (RII)	◀▶	-0.66	-0.46	-0.57	-0.72	-0.87
Year 8 BMI: Overweight or Obese		2012/13	2013/14	2014/15	2015/16	2016/17
Absolute Gap (Most–Least Deprived)	◀▶	37%	34%	40%	42%	56%
Relative Index of Inequality (RII)	◀▶	-0.38	-0.27	-0.30	-0.39	-0.54

Changes in Inequality Gaps

In the majority of indicators, there was an agreement between the absolute gap and the slope index of inequality or relative index of inequality. When differences were observed, it was the result of a change in the absolute gap with the social gradient analyses remaining constant.

The absolute deprivation gap of the following indicator was widening while the social gradient analysis remained constant:

- SDR – Respiratory (U75)

The absolute deprivation gap of the following indicators were narrowing while the social gradient analysis remained constant:

- SDR – Preventable
- SDR – Avoidable
- SDR – Lung Cancer

Ranking of Inequality Gaps

The table below displays, in rank order from largest to smallest, the ten indicators with the largest inequality gaps as identified by RII and absolute gap analysis. As can be seen the all ten indicators identified in each analysis were the same, with a few differences in the rank order of these inequality gaps.

Rank	Absolute Gap	RII		
1	SDR - Drug Misuse	SDR - Drug Misuse		
2	Smoking During Pregnancy	SDR - Drug Related Causes	3	^
3	SDR - Alcohol Specific	SAR - Alcohol Related Causes	1	^
4	SAR - Alcohol Related Causes	SDR - Alcohol Specific	1	v
5	SDR - Drug Related Causes	Smoking During Pregnancy	3	v
6	Teenage Birth Rate (U20)	Teenage Birth Rate (U20)		
7	SAR - Drug Related Causes	SAR - Drug Related Causes		
8	SDR - Respiratory (U75)	Crude Suicide Rate	1	^
9	Crude Suicide Rate	SAR – Self-Harm Admissions	1	^
10	SAR – Self-Harm Admissions	SDR - Respiratory (U75)	2	v

It should be noted that life expectancy gaps have not been included in the ranking of inequality gaps above. This is because proportionately, life expectancy gaps are comparatively lower to those ranking highest in the table above. However, as the gap refers to years of life, and as life expectancy is an overarching indicator of health status it is a vital statistic of high importance and reducing this gap is considered a high priority¹⁷.

¹⁷ Life expectancy inequality gaps are included as key overarching indicators of the public health strategic framework 'Making Life Better' www.health-ni.gov.uk/articles/making-life-better-strategic-framework-public-health

APPENDIX B: POPULATION ATTRIBUTABLE RISK (PAR) OF DEPRIVATION

Population Attributable Risk (PAR) measures the proportion of a disease/outcome (i.e. prevalence, mortality, admissions etc.) in the population that is attributable to deprivation and thus could be eliminated if deprivation were eliminated. This allows us to determine the proportional decrease in alcohol-related admissions in the population for example, in the hypothetical situation that all individuals had the same rate of alcohol-related admission as those in the highest socioeconomic category (least deprived deprivation decile). The PAR is calculated as the rate of disease in the overall population minus the rate in the unexposed group (least deprived).

PAR has been calculated in the table below for a number of health outcomes. For example, as can be seen the PAR percentage for suicide in 2015-17 is 50% which indicates that half of deaths due to suicide in Northern Ireland were attributable to deprivation.

Indicator	%PAR
Teenage Birth Rate (U20)	62%
SDR - Avoidable	35%
SDR - Preventable	35%
SDR – Circulatory (U75)	40%
SDR - Respiratory (U75)	57%
SDR - Cancer (U75)	22%
SAR – Emergency	28%
Suicide	50%
SAR - Self Harm Admissions	53%
SAR - Alcohol Related Causes	53%
SDR - Alcohol Related Causes (U75)	52%
SIR – Lung Cancer	36%

APPENDIX C: ADDITIONAL INDICATORS

The tables below refer to additional indicators which form part of the HSCIMS that have not been included in the main body of the report. For each indicator the figures are presented for NI, the 20% most deprived areas, the 20% least deprived areas and the most-least deprived inequality gap. In addition the RII is provided, where appropriate.

Median Fire Response Times ¹⁸ Time (Minutes:Seconds)	2013/14	2014/15	2015/16	2016/17	2017/18
	All	All	All	All	All
NI	00:06:20	00:06:26	00:07:49	00:08:02	00:08:11
Most Deprived	00:04:46	00:05:02	00:07:17	00:06:30	00:06:38
Least Deprived	00:06:22	00:06:17	00:07:59	00:07:58	00:08:07
Most-Least Deprived	-25%	-20%	-9%	-18%	-18%

Median Ambulance Response Times ¹⁸ Time (Minutes:Seconds)	2014	2015	2016	2017	2018
	All	All	All	All	All
NI	00:08:15	00:09:21	00:09:57	00:10:36	00:13:36
Most Deprived	00:06:38	00:07:27	00:07:46	00:07:38	00:09:41
Least Deprived	00:09:02	00:10:16	00:11:02	00:12:58	00:14:48
Most-Least Deprived	-27%	-27%	-30%	-41%	-35%

SDR - All Age All Cause Mortality Deaths per 100,000 population	2009-13	2010-14	2011-15	2012-16	2013-17
	All	All	All	All	All
NI	1,068	1,048	1,041	1,036	1,032
Most Deprived	1,278	1,249	1,252	1,250	1,241
Least Deprived	917	904	908	900	901
Most-Least Deprived	39%	38%	38%	39%	38%
RII	- 0.39	- 0.39	- 0.37	- 0.39	- 0.38

Looked After Children Rate per 1,000 population under 18 years	2013	2014	2015	2016	2017
	All	All	All	All	All
NI	4.8	5.0	5.0	5.1	5.3
Most Deprived	10.4	10.0	10.0	10.5	10.8
Least Deprived	2.0	1.7	1.7	1.5	1.6
Most-Least Deprived	429%	485%	482%	582%	555%

Autism Prevalence in School Age Children Rate per 100,000 population	2013/14	2014/15	2015/16	2016/17	2017/18
	All	All	All	All	All
NI	1,957	2,155	2,310	2,509	2,909
Most Deprived	2,236	2,544	2,844	3,207	3,598
Least Deprived	1,985	2,151	2,277	2,332	2,861
Most-Least Deprived	13%	18%	25%	37%	26%

¹⁸ Evidence shows that emergency times are correlated more with location such as urban/rural than deprivation.

APPENDIX D: URBAN-RURAL ANALYSIS

Urban-Rural analysis included below is based on the 2015 NISRA Urban-Rural classification, with the exception of Healthy Life Expectancy and Disability Free Life Expectancy which use the 2005 urban rural classification, due to data limitations. Further information regarding urban-rural classification can be found on the NISRA webpage at <https://www.nisra.gov.uk/urban-rural-classification>.

A positive inequality gap means that the health outcomes in Northern Ireland are worse than in the rural areas.

Summary of findings

Compared with the regional average, rural areas experienced better outcomes across the majority of indicators analysed, however fire and ambulance response times continue to remain higher in rural areas. There were no notable changes in Rural-NI gaps over the analysed period, with the exception of ambulance response times where the gap decreased from 64% in 2014 to 34% in 2018.

Outcomes that were significantly better in rural areas than the NI average

Male Life Expectancy at Birth	SPR Antihypertensive	SDR Alcohol
Female Life Expectancy at Birth	SPR Statin	SDR Smoking
Female Healthy Life Expectancy	SAR Respiratory	SIR Lung Cancer
Female Disability Free Life Expectancy	SAR Respiratory (U75)	SDR Lung Cancer
Male Life Expectancy at 65	SIR Cancer	SAR Drug Related
Female Life Expectancy at 65	SAR All	SDR Drug Related
PYLL	SAR Emergency	SDR Drug Misuse
SDR Amenable	SAR Day Case	Infant Mortality
SDR Preventable	SAR Self Harm	Smoking During Pregnancy
SDR Avoidable	Suicide	Teenage Birth Rate
SDR Respiratory (U75)	SPR Mood & Anxiety	Low Birth Weight
SDR Cancer (U75)	SAR Alcohol	P1 Obese

Outcomes that were significantly worse in rural areas than the NI average

Ambulance Response Times

Fire Response Times

Outcomes that were similar (or not significantly different) in Rural areas and the NI average

Male Healthy Life Expectancy	SAR Circulatory (U75)	Small for Gestational Age
Male Disability Free Life Expectancy	SAR Elective Inpatient Admissions	P1 Overweight or Obese
SDR Avoidable: Children & Young People	Healthy Birth Weight	Y8 Obese
SAR Circulatory	Breastfeeding on Discharge	Y8 Overweight or Obese

Figures for each indicator for NI, Rural areas, Urban areas, Mixed Urban-Rural areas and the NI-Rural Gap, are provided within the accompanying downloadable tables:

<https://www.health-ni.gov.uk/articles/health-inequalities-statistics>

APPENDIX E: TECHNICAL NOTES & DEFINITIONS

Indicators

There are 50 indicators included in the Northern Ireland analyses for the current report, of which one has been introduced since the previous report of 2018; Small for Gestational Age.

Due to random fluctuations in events over time, it is often necessary to aggregate more than one year of data for indicators, in order to ensure stability. The number of years of information that are required to aggregate for each indicator is informed by both the number of events and also an assessment of its annual variability.

Standardisation Methods

A number of indicators included in this report have been age standardised to allow the comparison of rates between populations with different age structures by relating them to a standard population, in this case the 2013 European Standard Population (90+ version). In most circumstances direct standardisation is used which not only allows the comparison of disease and death rates across both areas and time, but also to assess the relative burden of disease in a population. Further detail on the standardisation methods can be found in the Regional report 2014.¹⁹

Indicator Stability/Confidence Intervals

Indicator stability at the regional level does not mean that an indicator is also stable at the lower geographic levels of HSC Trust, LGD or DEA. To ensure robustness of the data, confidence intervals were calculated for rates for the most recent year at each geographic level, including the 20% most deprived Trust and LGD areas. The confidence interval for each standardised rate was assessed, in terms of its size and in relation to other comparable rates for other geographical areas, i.e. the Belfast Trust average and its 20% most deprived Trust areas. As a result of these assessments not all of the 50 indicators examined at the regional level were deemed robust enough to be presented at the sub-regional level, of these 50 indicators; 44 were found suitable to be published at the HSC Trust level, 42 at the LGD level and 25 at the DEA level.

Confidence intervals are used to quantify the imprecision in the estimate of a particular value. Specifically it quantifies the imprecision that results from random variation in the estimation of the value. In many cases the source of this random variation is sampling, for example in Healthy Life Expectancy, as any measurement taken from a sample provides an imprecise estimate of the true population value. In public health many indicators are based on what can be considered to be complete data sets and not samples, e.g. age standardised mortality rates based on death registers. In these instances the imprecision arises not as a result of sampling variation but of 'natural' variation. The indicator is considered to be the outcome of a stochastic process, i.e. one which can be influenced by the random occurrences that are inherent in the world around us. In such instances the value actually observed is only one of the set that could occur under the same circumstances. Generally in public health, it is the underlying circumstances or process that is of interest and the actual value observed gives only an imprecise estimate of this 'underlying risk'.

¹⁹<https://www.health-ni.gov.uk/publications/ni-health-and-social-care-inequalities-monitoring-system-hscims-regional-2014>

Table 5: HSCIMS Indicators Analysed at Northern Ireland (NI), HSC Trust, LGD and DEA level

INDICATOR	NI	Trust	LGD	DEA
Male Life Expectancy at Birth	●	●	●	●
Female Life Expectancy at Birth	●	●	●	●
Male Life Expectancy at Age 65	●	●	●	●
Female Life Expectancy at Age 65	●	●	●	●
Male Healthy Life Expectancy	●			
Female Healthy Life Expectancy	●			
Male Disability Free Life Expectancy	●			
Female Disability Free Life Expectancy	●			
Potential Years of Life Lost –All	●	●	●	●
Standardised Death Rate – Amenable	●	●	●	●
Standardised Death Rate – Preventable	●	●	●	●
Standardised Death Rate – Avoidable	●	●	●	●
Standardised Death Rate – Avoidable: Children & Young People	●	●		
Standardised Death Rate - Circulatory (U75)	●	●	●	
Standardised Death Rate - Respiratory (U75)	●	●	●	
Standardised Death Rate - Cancer (U75)	●	●	●	
Standardised Death Rate - All Cause Mortality (U75)	●	●	●	
Standardised Admission Rate –Circulatory	●	●	●	●
Standardised Admission Rate - Circulatory (U75)	●	●	●	●
Standardised Prescription Rate – Antihypertensive	●	●	●	●
Standardised Prescription Rate – Statin	●	●	●	●
Standardised Admission Rate – Respiratory	●	●	●	●
Standardised Admission Rate - Respiratory (U75)	●	●	●	●
Standardised Incidence Rate – Cancer	●	●	●	●
Standardised Admission Rate - All Admissions	●	●	●	●
Standardised Admission Rate - Emergency Admissions	●	●	●	●
Standardised Admission Rate - Elective Inpatient Admissions	●	●	●	●
Standardised Admission Rate - Day Case Admissions	●	●	●	●
Standardised Admission Rate – Self-Harm Admissions	●	●	●	
Crude Suicide Rate	●	●	●	●
Standardised Prescription Rate - Mood & Anxiety	●	●	●	●
Standardised Admission Rate - Alcohol Related Causes	●	●	●	●
Standardised Death Rate - Alcohol Specific Causes	●	●	●	
Standardised Death Rate - Smoking Related Causes	●	●	●	●
Standardised Incidence Rate - Lung Cancer	●	●	●	●
Standardised Death Rate - Lung Cancer	●	●	●	
Standardised Admission Rate - Drug Related Causes	●	●	●	●
Standardised Death Rate - Drug Related Causes	●	●	●	
Standardised Death Rate - Drug Misuse	●	●		
Infant Mortality Rate	●	●		
Smoking During Pregnancy	●	●	●	
Teenage Birth Rate (U20)	●	●	●	
Low Birth Weight	●	●	●	
Healthy Birth Weight	●	●	●	
Breastfeeding on Discharge	●	●	●	
Small for Gestational Age ^{NEW}	●	●	●	
Primary 1 BMI: Obese	●	●	●	
Primary 1 BMI: Obese & Overweight	●	●	●	
Year 8 BMI: Obese	●	●	●	
Year 8 BMI: Obese & Overweight or Obese	●	●	●	

Methodology for assessing Health Outcomes

In order to provide an assessment of the LGD to NI inequality gaps for the most recent year, analysis was performed to indicate whether the LGD average was better than, similar to, or worse than the NI average. If the LGD average of the health outcome had overlapping confidence intervals with the NI average, then the health outcome was reported as being similar to the NI average. Where confidence intervals did not overlap, the LGD average of the health outcome was reported as being either better or worse than the NI average. This methodology was employed for all standardised rates (i.e. death, admission, incidence and prescription rates). For those health outcomes which did not have confidence intervals associated with them, such as teenage birth rate, a range of +/- 5% was calculated for each health outcome value and if the NI average fell within this range the health outcome was considered to be similar to the NI average. It should be noted that given the particular sensitivity around the health outcome 'crude suicide rate' and the relatively small numbers involved a range of +/- 2.5% was employed. This methodology allowed us to identify any health outcomes which were notably worse or better than the NI average and was used to provide an assessment of the health outcomes at DEA level, compared with the LGD average. As with all of our observations of differences between areas and assessments of changes over time, conclusions are open to interpretation.

Mortality Rates

For simplicity of understanding, mortality figures are based on the single main underlying cause of death classification, but a death can be due to a variety of different causes. This can lead to an underestimation of the impact of common conditions associated with multiple causes of death (e.g. diabetes, influenza and pneumonia). All death figures used in the HSCIMS are based on the year that the death was registered and not necessarily the year in which the death occurred. While the vast majority of deaths are registered shortly after death, there may be a delay in registering some deaths. Events such as infant death or suicide are usually referred to a coroner and this legal process can take some time.

Population

Population is a vital part of rate calculations; a change to the size of a population or its age distribution will impact on rates and subsequently inequality gaps. For instance, overall yearly deaths in Northern Ireland remained between 14,000 and 16,250 from the turn of the century up to 2017, yet mortality rates have been falling – this can be partially explained by the growing and ageing Northern Ireland population. Between 2007 and 2017 for example, the population grew from 1,761,683 to 1,870,834; an increase of 109,151 persons (6.2%). During this time the proportion of the population aged 65 and over increased from 13.7% (241,928 persons) in 2007 to 16.2% (302,975 persons) in 2017.

Small Area Population Estimates

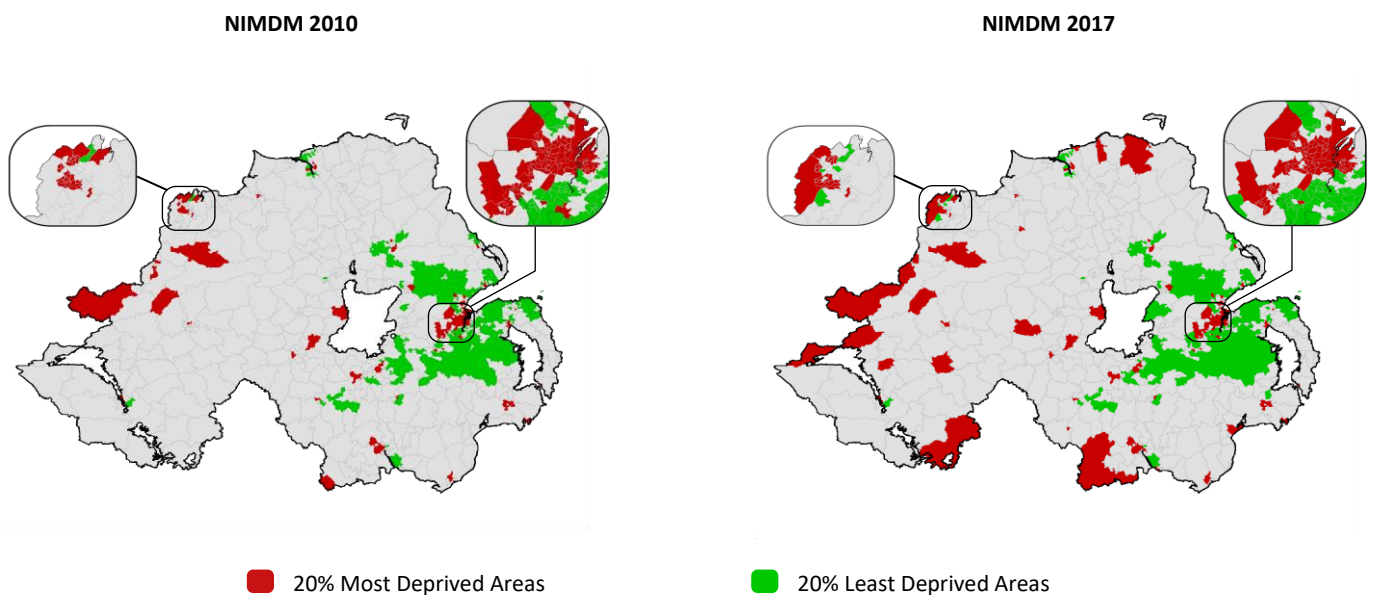
Population estimates disaggregated to a relatively small geographic area level (i.e. Super Output Area (SOA) and Small Area (SA) by age and gender are used to calculate many of the HSCIMS indicators for deprived and rural areas. However, as population estimates produced for NI are not available to the required level of detail, it is necessary to rework these estimates by proportioning out aggregated small area population estimates by gender and single year of age breakdowns from NISRA mid-year estimates. These reworked estimates are validated by a process of integrity checks with higher level age and geography population totals published by NISRA. Reworked estimates are calculated from unrounded population breakdown figures which may not match exactly with some of the population breakdowns published by NISRA which have been rounded to the nearest person.

Deprivation Classification

The deprivation classification used in this report is based on the Northern Ireland Multiple Deprivation Measure (NIMDM) produced by NISRA. The 2017 NIMDM²⁰ has been applied to all newly published figures, specifically the latest three years / data points in the time series presented for each indicator. All other data points are based on the 2010 NIMDM²¹.

Although the 2017 NIMDM is available at small area level it was decided to continue using the SOA classification within the HSCIMS to ensure continuity and comparability with the back series of data and across indicators. In addition, all analysis presented is based on multiple deprivation rather than any specific deprivation domain.

Chart 1 – 20% Most and least deprived areas in Northern Ireland according to 2010 and 2017 NIMDM



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²⁰ <https://www.nisra.gov.uk/statistics/deprivation/northern-ireland-multiple-deprivation-measure-2017-nimdm2017>

²¹ <https://www.nisra.gov.uk/statistics/deprivation/northern-ireland-multiple-deprivation-measure-2010-nimdm2010>

Sources of Information

Table 6: Indicators and Supplementary Information

Information	Source
Deaths and births	General Register Office, Demography Branch , NI Statistics and Research Agency (NISRA)
Hospital Admissions	Hospital Information Branch, Information Analysis Directorate, DoH
Prescriptions	Business Services Organisation
Cancer Incidence	NI Cancer Registry
Smoking during pregnancy, breastfeeding, low birth weight, small for gestational age, healthy birth weight	NI Maternity System ²²
Childhood overweight/obesity	Child Health System
Fire response times	NI Fire and Rescue Service
Ambulance response times	NI Ambulance Service
NI Health Survey	Public Health Information & Research Branch, Information Analysis Directorate, DoH
Continuous Household Survey	NI Statistics and Research Agency (NISRA)
NI Small Area Population Estimates	NI Statistics and Research Agency (NISRA)
European Standard Population (ESP) 2013	Eurostat
Deprivation classification	NI Multiple Deprivation Measure 2010 (NISRA)
Urban-rural classification	NI Statistics and Research Agency (NISRA)
Looked after Children	Community Information Branch, Information Analysis Directorate, DoH
Children with Autism	Community Information Branch, Information Analysis Directorate, DoH

Indicator Definitions

Disease Classification - The indicators making up the HSCIMS are classified using the International Classification of Disease, 10th revision (ICD-10). This is the standard diagnostic tool for epidemiology, health management and clinical purposes, including the analysis of the general health situation of population groups.

A complete listing of ICD-10 codes can be found at the following web link:

www.who.int/classifications/apps/icd/icd10online/

²² Please note that prior to 2017, data used in the production of low birth weight statistics, as well as healthy birth weight, smoking during pregnancy and breastfeeding, were provided from each of the HSC Trust Child Health Systems (CHS). From 2017 onwards figures are produced directly from the Northern Ireland Maternity System (NIMATS) by Information & Analysis Directorate (IAD). Low birth weight data from NIMATS data is used to populate the Trust CHS so data from the two systems should be consistent. IAD are currently investigating whether the previously published data obtained through CHS is indeed wholly consistent with that held on NIMATS which if not, might necessitate some revisions to the time series.

LIFE EXPECTANCY	
Life Expectancy Estimates	NISRA publish the official life expectancy estimates at NI, Local Government District and Parliamentary Constituency level. The HSCIMS publishes at further levels to allow for assessment of inequality gaps between different areas/population groups, including deprivation analysis.
Life Expectancy at Birth	The expected years of life at time of birth based on mortality patterns in the period in question. It is based on the average death rates over a three year period. Presented separately for males and females.
Life Expectancy at Age 65	The expected years of life at age 65 based on mortality patterns in the period in question. It is based on the average death rates over a three year period. Presented separately for males and females.
Healthy Life Expectancy (HLE)	This is the average number of years a person can expect to live in good health. HLE provides an estimate of lifetime spent in 'Very Good' or 'Good' health, calculated using respondents' perception of their own health according to the Health Survey Northern Ireland (HSNI). HLE excludes communal establishments. All urban/rural analysis is based on the 2005 urban-rural classification. 2015 urban-rural classification cannot currently be applied due to data limitations.
Disability Free Life Expectancy (DFLE)	This is the average number of years a person can expect to live disability free. DFLE provides an estimate of lifetime spent free from a limiting persistent (twelve months or more) illness or disability, based upon a self-rated functional assessment of health recorded in the HSNI. DFLE excludes communal establishments. All urban/rural analysis is based on the 2005 urban-rural classification. 2015 urban-rural classification cannot currently be applied due to data limitations. It should be noted that the health survey question used to determine longstanding illness changed from 2012/13 onward by making specific reference to mental health conditions in addition to physical. The new question is based on the UK harmonised principle for long-lasting health conditions and illness. This change may have affected responses to the question and subsequently impacted on DFLE figures. For further information contact PHIRB (details on reverse of publication).
Pregnancy & Early Years	
Teenage Birth Rate (U20)	The number of births in an area to teenage mothers (i.e. Between 13 and 19 years of age) expressed per 1,000 females.
Smoking during Pregnancy	The proportion of all live births, where the Health and Care Number (HCN) of the mother is recorded, that were to mothers that reported smoking during pregnancy. Information is gathered at the 'booking in' appointment and therefore represents mothers at the end of the first trimester. As this indicator is self-reported, it may be subject to a degree of under-reporting.
Low Birth Weight	The proportion of all live births where the HCN of the mother is recorded and the birth weight of the child was less than 2500g.
Healthy Birth Weight	The proportion of all live births, where the HCN of the mother is recorded, with a birth weight within a range appropriate for their gestational age and gender.
Breastfeeding on Discharge	The proportion of all live births, where the HCN of the mother is recorded, that were being breastfed on discharge from hospital. Figures include mothers' breastfeeding their child as well as using complementary feeding.

Small for Gestational Age ^{NEW}	The proportion of all live births, where the HCN of the mother is recorded, that were small-for-gestational age (SGA). This is when an infant is born with a birth weight less than the 10th percentile, on a chart customised for maternal characteristics, for gestational age in body weight.
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ADMISSIONS

Hospital Information System (HIS)	Admissions data used to calculate rates are provided by the Hospital Information Branch and are extracted from the Hospital Information System (HIS). All mental health specialities have been excluded from the data. Figures are based on number of admissions and not individuals. Further information and definition on inpatient and day case activity is available at https://www.health-ni.gov.uk/articles/inpatient-and-day-case-activity .
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Standardised Admission Rate (SAR)	This is calculated by standardising (using the direct method) the average admission rate in NI (over a predefined period) due to specified ICD-10 classification codes (may also be age specific) to the 2013 European Standard Population (ESP).
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Indicator Name

- All Admissions	Includes all acute inpatient and day case admissions (excluding regular day and night attenders, hospital transfers and other (maternity/delivery episodes)). Deaths and discharges have been used as an approximation for admissions.
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- Emergency Admissions	A patient for whom admission is unpredictable and at short notice because of clinical need. All non-elective acute admissions excluding maternity, other and not known.
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- Elective Inpatient Admissions	A patient for whom the decision to admit could be separated in time from the actual admission. Does not include day cases, not to be confused with elective admissions (which include day cases)
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- Day Case Admissions	A patient admitted electively during the course of a day with the intention of receiving care who does not require the use of a hospital bed overnight and who returns home as scheduled. If this original intention is not fulfilled and the patient stays overnight, such a patient should be counted as an inpatient and is not counted as a day case admission.
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- Circulatory	Selected according to International Classification of Disease (ICD-10) codes I00-199. ²³
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- Circulatory U75	ICD-10 codes I00-199, under 75 years of age.
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- Respiratory	ICD-10 codes J00-J99.
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- Respiratory U75	ICD-10 codes J00-J99, under 75 years of age.
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- Alcohol Related Causes	Alcohol related causes included in Table 9.
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- Drug Related Causes	Drug related causes included in Table 11.
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- Self-Harm Admissions	ICD-10 codes X60-84 and Y87.0. This indicator was developed to complement the suicide information, however it does not provide a complete picture of the problem of self-harm (or parasuicide) as in many instances, self-harm does not result in an acute admission to hospital. It should be noted that there have been a range of additional infrastructure provided to support people presenting with self-harm. These programmes may be contributing to the decrease in self-harm admissions.
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²³ For a listing and explanation of topology or site codes see: International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, World Health Organisation, Geneva. Or view online at: <http://apps.who.int/classifications/icd10/browse/2010/en#/I>

MORTALITY

Infant Mortality Rate	The number of infant deaths per 1,000 live births. Infant deaths refer to all deaths in the first year of life.
Potential Years of Life Lost (PYLL)	This is calculated by summing the deaths occurring at each age and multiplying this with the number of years a person of that age could have been expected to live. It is a summary measure of premature mortality, weighting deaths occurring at younger ages, which are, a priori, preventable. It uses the average age-specific life expectancy for each five year age band as the age to which a person in that age band might be expected to live.
Crude Suicide Rate <i>Not age standardised as it was found to make little or no difference whilst introducing a new confidence interval</i>	The number of deaths by suicide per 100,000 population Suicide deaths in NI are defined using the UK definition - ICD-10 Classification: X60-84 and Y87.0 (Self-inflicted Injury) and Y10-Y34, Y87.2 (as well as Events of Undetermined Intent). Crude rate is used instead of age standardised rate as it was found to make little or no difference whilst introducing a confidence interval.
Standardised Death Rate (SDR)	This is calculated by directly age standardising the average death rate in NI over a given period, due to specific causes of death (selected according to ICD-10 classification) to the 2013 European Standard Population (ESP). Some death rates relate to those under the age of 75 as indicators of premature mortality for specific diseases.
Indicator Name	
- All Cause U75	All causes, under 75 year of age
- All Age All Cause	All causes
- Amenable	Amenable to medical intervention – see Table 7 for full list of causes.
- Preventable	Preventable by broad public health intervention – see Table 7 for full list of causes.
- Avoidable	Avoidable – see Table 7 for full list of causes.
- Avoidable: Children & Young People	Avoidable in children and young people – see Table 8 for full list of causes.
- Circulatory U75	ICD-10 codes I00-I99, under 75 year of age.
- Respiratory U75	ICD-10 codes J00-J99, under 75 year of age.
- Cancer U75	ICD-10 codes C00-C97, under 75 year of age.
- Lung Cancer	ICD-10 codes C33-C34.
- Alcohol Specific	Alcohol related causes – see Table 10 for full list of causes.
- Drug Related Causes	Drug related causes – see Table 11 for full list of causes.
- Drug Misuse	Deaths related to drug misuse – see Table 12 for full list of causes.
- Smoking Related Causes	Deaths due to Smoking related causes – see Table 13 for full list of causes.

Cancer Incidence

Northern Ireland Cancer Registry (NICR)	Cancer incidence numbers are extracted from the NICR's "live" database, and hence are continuously updated. As a result, an earlier extract taken at a later date may supply slightly different results. Therefore, although the overall trend will be the same, previously published data and data published elsewhere may have rates that vary slightly to what is published is here.
Standardised Incidence Rate (SIR)	NICR publish official Standardised Incidence Rates (SIRs), however the HSCIMS publishes at further levels to allow for assessment of inequality gaps between different areas/population groups, including deprivation analysis.
Indicator Name	ICD-10 Classification
- Cancer	ICD-10 codes C00-C97, excluding C44 (non-melanoma skin cancer which is quite common, in most cases easily treated and rarely fatal).
- Lung Cancer	ICD-10 codes C33 and C34.

Prescriptions

Electronic Prescribing Eligibility System (EPES)	Prescription data is extracted from the EPES which is maintained by Business Services Organisation (BSO). The data provided covers drugs dispensed in primary care only, and includes prescriptions issued by all types of prescribers including doctors, nurses and dentists, and all those issued and dispensed by pharmacists, dispensing doctors and appliance suppliers. Drugs prescribed and dispensed in hospital cannot be captured centrally due to the use of different IT systems.
Standardised Prescription Rate (SPR)	This is calculated by standardising (using the direct method) the average prescription rate (over one year) in NI for people dispensed predefined prescription drugs, to the 2013 European Standard Population (ESP). Rates refer to number of persons prescribed a drug and does not include multiple prescription.
Indicator Name	British National Formulary (BNF) code
- Antihypertensive	Drugs included are those with a BNF code of 2.2.1, 2.4, 2.5.5.1, 2.5.5.2 and 2.6.2
- Statin	Drugs included are those with a BNF code of 2.12
- Mood & Anxiety Disorders	Drugs included are those with a BNF code of 4.1.2 and 4.3

Childhood Obesity

Childhood Overweight and Obese	Height and weight information is extracted from the Child Health System (CHS) and converted into a Body Mass Index (BMI) score for each pupil. The BMI can be categorized using International Growth Charts which consider age and gender, allowing the identification of those who are overweight or obese. Records are analysed based on two criteria: Date of Exam within the Primary 1 or Year 8 school year: 01/09/XX-31/08/XX Date of Birth for Primary 1 or Year 8 pupils: 02/07/XX - 01/07/XX
Indicator Name	CHS Data
-Primary 1 BMI: Obese	The proportion of children in Primary 1 classified as obese.
-Primary 1 BMI: Overweight or Obese	The proportion of children in Primary 1 classified as overweight or obese.
-Year 8 BMI: Obese	The proportion of children in Year 8 classified as obese.
-Year 8 BMI: Overweight or Obese	The proportion of children in Year 8 classified as overweight or obese.

Additional Indicators	
Median Fire Response Time	The median response time taken by the Northern Ireland Fire and Rescue Service (NIFRS) to respond to an incident. The 'response time' is measured as the 'time of the call to NIFRS Regional Control Centre' to 'the time the 1st Appliance books in attendance' at the incident. Calculations are based on the time taken for NIFRS to respond to each incident within a one year time period. The median i.e. midpoint value is reported rather than the simple average as it is unaffected by atypically long or short response times.
Median Ambulance Response Time	The median time taken by the first ambulance to respond to an incident. Calculations are based on the time taken to respond to each incident within a one month time period (August). This data refers to Categories A, B and C emergency responses, excluding Healthcare Professionals (HCP) calls. The median i.e. midpoint value is reported rather than the simple average as it is unaffected by atypically long or short response times.
Looked after Children	The number of looked after children per 100,000 population (under 18 years of age) by location prior to last entering care. Data was extracted from the annual OC2 Community Information Return, which includes children who have been in care continuously for twelve months or longer at 30th September.
Autism Prevalence in School Age Children	The number of children with Autism or Asperger Syndrome per 100,000 children in compulsory grant-aided education. Data extracted from the NI School Census.

ICD-10 Classification Tables

Table 7: Amenable, Preventable & Avoidable Causes

The table below lists the revised ICD-10 classification codes of all causes of death considered avoidable, with indication as to which are considered amenable, preventable or both.

Condition Group & Cause	ICD-10 Codes	Age	Amenable	Preventable
Infections				
Tuberculosis	A15-A19, B90	0-74	•	•
Selected invasive bacterial and protozoal infections	A38-A41, A46, A48.1, B50-B54, G00, G03, J02, L03	0-74	•	
Hepatitis C	B17.1, B18.2	0-74	•	•
Pertussis (whooping cough)	A37	0-14	•	•
Measles	B05	1-14	•	•
Rubella	B06	0-14		•
Other infections (Diphtheria, Tetanus, Poliomyelitis and Varicella)	A35, A36, A80, B01	0-19	•	•
Intestinal infections	A00-A09	0-14	•	
HIV/AIDS	B20-B24	All	•	•
Neoplasms				
Malignant neoplasm of lip, oral cavity and pharynx	C00-C14	0-74		•
Malignant neoplasm of oesophagus	C15	0-74		•
Malignant neoplasm of stomach	C16	0-74		•
Malignant neoplasm of colon and rectum	C18-C21	0-74	•	•
Malignant neoplasm of liver	C22	0-74		•
Malignant neoplasm of trachea, bronchus and lung	C33-C34	0-74		•
Malignant melanoma of skin	C43	0-74	•	•
Mesothelioma	C45	0-74		•
Malignant neoplasm of breast	C50	0-74	•	•
Malignant neoplasm of cervix uteri	C53	0-74	•	•
Malignant neoplasm of bladder	C67	0-74	•	
Malignant neoplasm of thyroid gland	C73	0-74	•	
Hodgkin's disease	C81	0-74	•	
Leukaemia	C91, C92.0	0-44	•	
Malignant neoplasm of testis	C62	0-74	•	
Malignant neoplasm of unspecified parts of uterus and body of uterus	C54-C55	0-44	•	
Benign neoplasms	D10-D36	0-74	•	
Nutritional, endocrine and metabolic				
Diabetes mellitus	E10-E14	0-74	•	•
Diseases of Thyroid	E00-E07	0-74	•	
Addison's Disease	E27.1	0-74	•	

Condition Group & Cause	ICD-10 Codes	Age	Amenable	Preventable
Drug use disorders				
Alcohol related diseases, excluding external causes	F10, G31.2, G62.1, I42.6, K29.2, K70, K73, K74 (excl. K74.3-K74.5), K86.0	0-74		•
Illicit drug use disorders	F11-F16, F18-F19	0-74		•
Neurological disorders				
Epilepsy and status epilepticus	G40-G41	0-74	•	
Cardiovascular diseases				
Rheumatic and other valvular heart disease	I01-I09	0-74	•	
Hypertensive diseases	I10-I15	0-74	•	
Ischaemic heart disease	I20-I25	0-74	•	•
DVT with pulmonary embolism	I26, I80.1-I80.3, I80.9, I82.9	0-74		•
Cerebrovascular diseases	I60-I69	0-74	•	
Aortic aneurysm and dissection	I71	0-74		•
Respiratory diseases				
Influenza (including swine flu)	J09-J11	0-74	•	•
Pneumonia	J12-J18	0-74	•	
Chronic obstructive pulmonary disorder	J40-J44	0-74	•	•
Asthma	J45-J46	0-74	•	
Selected respiratory diseases	J00-J06, J20-J22, J30-J39	1-14	•	
Digestive disorders				
Gastric and duodenal ulcer	K25-K28	0-74	•	
Acute abdomen, appendicitis, intestinal obstruction, cholecystitis/lithiasis, pancreatitis, hernia	K35-K38, K40-K46, K80-K83, K85, K86.1-K86.9, K91.5	0-74	•	
Genitourinary disorders				
Nephritis and nephrosis	N00-N07, N17-N19, N25-N27	0-74	•	
Obstructive uropathy and prostatic hyperplasia	N13, N20-N21, N35, N40, N99.1	0-74	•	
Maternal and infant				
Complications of perinatal period	P00-P96, A33	All	•	
Congenital malformations of the circulatory system	Q20-Q28	0-74	•	
Spina Bifida	Q05	0-74		•
Unintentional injuries				
Transport Accidents	V01-V99	All		•
Accidental Injury	W00-X59	All		•
Intentional injuries				
Suicide and self inflicted injuries	X60-X84, Y10-Y34	All		•
Homicide/Assault	X85-Y09, U50.9	All		•
Misadventures to patients during surgical and medical care	Y60-Y69, Y83-Y84	All	•	•

Table 8: Avoidable Children & Young People

Condition Group & Cause	ICD-10 Codes	Age
Infections		
Tuberculosis	A15-A19, B90	0-19
Selected invasive bacterial and protozoal infections	A38-A41, A46, A48.1, B50-B54, G00, G03, J02, L03	0-19
Hepatitis C	B17.1, B18.2	0-19
Pertussis (whooping cough)	A37	0-14
Measles	B05	1-14
Rubella	B06	0-14
Other infections (Diphtheria, Tetanus, Poliomyelitis and Varicella)	A35, A36, A80, B01	0-19
Intestinal infections	A00-A09	0-14
HIV/AIDS	B20-B24	0-19
Neoplasms		
Malignant neoplasm of lip, oral cavity and pharynx	C00-C14	0-19
Malignant neoplasm of oesophagus	C15	0-19
Malignant neoplasm of stomach	C16	0-19
Malignant neoplasm of colon and rectum	C18-C21	0-19
Malignant neoplasm of liver	C22	0-19
Malignant neoplasm of trachea, bronchus and lung	C33-C34	0-19
Malignant melanoma of skin	C43	0-19
Mesothelioma	C45	0-19
Malignant neoplasm of breast	C50	0-19
Malignant neoplasm of cervix uteri	C53	0-19
Malignant neoplasm of bladder	C67	0-19
Malignant neoplasm of thyroid gland	C73	0-19
Hodgkin's disease	C81	0-19
Leukaemia	C91, C92.0	0-19
Malignant neoplasm of testis	C62	0-19
Malignant neoplasm of unspecified parts of uterus and body of uterus	C54-C55	0-19
Benign neoplasms	D10-D36	0-19
Nutritional, endocrine and metabolic		
Diabetes mellitus	E10-E14	0-19
Diseases of Thyroid	E00-E07	0-19
Addison's Disease	E27.1	0-19
Drug use disorders		
Alcohol related diseases, excluding external causes	F10, G31.2, G62.1, I42.6, K29.2, K70, K73, K74 (excl. K74.3-K74.5), K86.0	0-19
Illicit drug use disorders	F11-F16, F18-F19	0-19
Neurological disorders		
Epilepsy and status epilepticus	G40-G41	0-19

Condition Group & Cause	ICD-10 Codes	Age
Cardiovascular diseases		
Rheumatic and other valvular heart disease	I01-I09	0-19
Hypertensive diseases	I10-I15	0-19
Ischaemic heart disease	I20-I25	0-19
DVT with pulmonary embolism	I26, I80.1-I80.3, I80.9, I82.9	0-19
Cerebrovascular diseases	I60-I69	0-19
Aortic aneurysm and dissection	I71	0-19
Respiratory diseases		
Influenza (including swine flu)	J09-J11	0-19
Pneumonia	J12-J18	0-19
Chronic obstructive pulmonary disorder	J40-J44	0-19
Asthma	J45-J46	0-19
Selected respiratory diseases	J00-J06, J20-J22, J30-J39	1-14
Digestive disorders		
Gastric and duodenal ulcer	K25-K28	0-19
Acute abdomen, appendicitis, intestinal obstruction, cholecystitis/lithiasis, pancreatitis, hernia	K35-K38, K40-K46, K80-K83, K85, K86.1-K86.9, K91.5	0-19
Genitourinary disorders		
Nephritis and nephrosis	N00-N07, N17-N19, N25-N27	0-19
Obstructive uropathy and prostatic hyperplasia	N13, N20-N21, N35, N40, N99.1	0-19
Maternal and infant		
Complications of perinatal period	P00-P96, A33	0-19
Congenital malformations of the circulatory system	Q20-Q28	0-19
Spina Bifida	Q05	0-19
Unintentional injuries		
Transport Accidents	V01-V99	0-19
Accidental Injury	W00-X59	0-19
Intentional injuries		
Suicide and self inflicted injuries	X60-X84, Y10-Y34	0-19
Homicide/Assault	X85-Y09, U50.9	0-19
Misadventures to patients during surgical and medical care	Y60-Y69, Y83-Y84	0-19

Table 9: Admissions – Alcohol Related Causes²⁴

ICD-10 code	Description
E24.4	Alcohol induced Pseudo-Cushing's syndrome
E51.2	Wernicke's Encephalopathy
F10	Mental and Behavioural disorders due to use of alcohol
G31.2	Degeneration of the nervous system due to alcohol
G62.1	Alcoholic polyneuropathy
G72.1	Alcoholic myopathy
I42.6	Alcoholic cardiomyopathy
K29.2	Alcoholic gastritis
K70	Alcoholic liver disease
K85.2	Alcohol-induced acute pancreatitis
K86.0	Alcohol-induced chronic pancreatitis
O35.4	Maternal care for (suspected) damage to foetus from alcohol
P04.3	Foetus and newborn affected by maternal use of alcohol
Q86.0	Foetal alcohol syndrome (dysmorphic)
T51.0	Toxic effect of ethanol
T51.1	Toxic effect of methanol
T51.9	Toxic effect of alcohol, unspecified
X45	Accidental poisoning by and exposure to alcohol
X65	Intentional self-poisoning by and exposure to alcohol
Y15	Poisoning by and exposure to alcohol, undetermined intent
Y57.3	Alcohol deterrents
Y90	Evidence of alcohol involvement determined by blood alcohol level
Y91	Evidence of alcohol involvement determined by level intoxication
Z50.2	Alcohol rehabilitation
Z71.4	Alcohol abuse counselling and surveillance
Z72.1	Alcohol use

Table 10: Deaths – Alcohol Specific Causes

ICD-10 code	Description
E24.4	Alcohol-induced pseudo-Cushing's syndrome
F10	Mental and Behavioural disorders due to use of alcohol
G31.2	Degeneration of the nervous system due to alcohol
G62.1	Alcoholic polyneuropathy
G72.1	Alcohol myopathy
I42.6	Alcoholic cardiomyopathy
K29.2	Alcoholic gastritis
K70	Alcoholic liver disease
K85.2	Alcohol-induced acute pancreatitis
K86.0	Alcohol induced chronic pancreatitis
Q86.0	Fetal alcohol syndrome (dysmorphic)

²⁴ The definition for admissions due to alcohol related causes was updated for 2017/18 to include ICD Code K85.2: alcohol-induced chronic pancreatitis.

R78.0	Excess alcohol blood levels
X45	Accidental poisoning by and exposure to alcohol
X65	Intentional self-poisoning by and exposure to alcohol
Y15	Poisoning by and exposure to alcohol, undetermined intent

Table 11: Admissions and Deaths – Drug Related Causes

ICD-10 code	Description
F11-16, F18-F19	Mental and Behavioural disorders due to drug use (excluding alcohol and tobacco)
X40-44	Accidental poisoning by drugs, medicaments and biological substances
X60-X64	Intentional self-poisoning by drugs, medicaments and biological substances
X85	Assault by drugs, medicaments and biological substances
Y10-14	Poisoning by drugs, medicaments and biological substances, undetermined intent

Table 12: Deaths – Drugs Misuse

ICD-10 code	Description
F11-16, F19	Mental and Behavioural disorders due to drug use (excluding alcohol, tobacco and volatile substances)
Deaths due to the following categories <i>and</i> where a drug controlled under the Misuse of Drugs Act 1971 was mentioned;	
X40-44	Accidental poisoning by drugs, medicaments and biological substances
X60-X64	Intentional self-poisoning by drugs, medicaments and biological substances
X85	Assault by drugs, medicaments and biological substances
Y10-14	Poisoning by drugs, medicaments and biological substances, undetermined intent

Table 13: Deaths – Smoking Related Causes²⁵

Cause of Death	ICD-10 code	Attributable Percentage	
		Men	Women
Cancer			
Lung	C33 – C34	90%	79%
Upper respiratory	C32, C14.0	77%	58%
Oesophagus	C15	70%	72%
Bladder	C67	49%	20%
Kidney	C64	41%	7%
Stomach	C16	35%	10%
Pancreas	C25	26%	30%
Unspecified site	C80	33%	7%
Myeloid Leukaemia	C92	19%	10%
Respiratory			
Chronic obstructive lung disease	J44	87%	83%
Pneumonia 35-64	J18	33%	53%
Pneumonia 65+	J18	23%	13%
Circulatory			
Ischaemic heart disease 35-54	I20-I25	55%	63%
Ischaemic heart disease 55-64	I20-I25	41%	36%
Ischaemic heart disease 65-74	I20-I25	25%	18%
Ischaemic heart disease 75+	I20-I25	9%	5%
Cerebrovascular disease 35-54	I60-I69	56%	53%
Cerebrovascular disease 55-64	I60-I69	33%	38%
Cerebrovascular disease 65-74	I60-I69	16%	31%
Cerebrovascular disease 75+	I60-I69	4%	2%
Aortic Aneurysm	I71	64%	66%
Myocardial Degeneration	I51.5	27%	18%
Atherosclerosis	I70	21%	21%
Digestive			
Stomach/Duodenum Ulcer	K25-K26	53%	59%
Disease Prevented by Smoking			
Parkinson's Disease	G20	-51%	-30%
Endometrial Cancer	C54	N/A	-16%

²⁵It should be noted that this definition is specific to the death rates in NI and therefore differs from those used in other parts of the UK and other countries, meaning it is not directly comparable.

Also available for the Health & Social Care Inequalities Monitoring System (HSCIMS)

Public Health NI

Fact Sheet

Summary of the latest position for a range of public health indicators at NI, Health & Social Care Trust, and Local Government District levels. These statistics are a combination of the latest information from the HSCIMS, the Health Survey NI, and other information sources (Annual).

<https://www.health-ni.gov.uk/articles/public-health-statistics>

Health Inequalities

Life Expectancy Decomposition

Examination of the causes that contribute to the change in life expectancy over time as well as causes that explain the differentials in life expectancy between those living in the most and least deprived areas, between urban and rural areas, and between NI, other UK countries, and the Republic of Ireland. (Biennial).

<https://www.health-ni.gov.uk/articles/life-expectancy-decomposition-statistics>

Making Life Better

Monitoring the Wider Social Determinants of Health & Wellbeing

Key Indicators

Monitoring of the key indicators of the wider social determinant of health & wellbeing set out against each of the themes contained in the making life better strategic framework (Annual).

<http://www.health-ni.gov.uk/articles/social-determinants-health-statistics>

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