

INFORMATION
ANALYSIS
DIRECTORATE



Life Expectancy in Northern Ireland 2018-20

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



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An Roinn Sláinte

Mánnystrie O Poustie

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Life Expectancy in Northern Ireland

2018-20

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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. In addition, PHIRB is responsible for the production of official life expectancy estimates for NI, and areas within the region.

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 supports the executive level Programme for Government and its strategic outcomes through a series of performance indicators.

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Introduction

The Official Life Expectancy Figures for Northern Ireland

The Department of Health are the official producers of life expectancy figures for Northern Ireland. This report presents the latest estimates of life expectancy, healthy life expectancy and disability-free life expectancy estimates for Northern Ireland. The report includes an analysis of change in life expectancy including the extent to which mortality within certain age groups and causes of death contributed to the change. In addition, life expectancy estimates are presented for Health and Social Care Trusts and Local Government Districts.

Figures in this release include COVID deaths for the period of March-December 2020

When analysing life expectancy, we average deaths observed over 3 years in order to smooth out the impact of seasonal events such as a flu epidemic on the reported life expectancies. However, the coronavirus pandemic led to a greater number of deaths in total and a higher rate of death in 2020 compared with recent years. In order to show the true extent of the impact of COVID deaths on life expectancy, chapter 8 presents single-year life expectancy estimates highlighting the contribution of COVID deaths to the change in life expectancy between 2019 and 2020. **'COVID' deaths in this report refer to 'deaths due to COVID-19' and use the same International Classification of Disease Tenth Revision (ICD-10) codes as reported by NISRA within the [Registrar General Annual Report](#).** More detail on the classification of COVID deaths is available in [Appendix B](#).

This publication is one of a series of reports produced as part of the NI Health & Social Care Inequalities Monitoring System (HSCIMS)¹.

A guide on the terminology and how to interpret the charts used in this report, alongside technical notes, are set out in [Appendix B](#).

Review of suicide statistics in Northern Ireland

Please note that in light of an on-going review by NISRA and the Coroners' Service into the classification of undetermined deaths, this publication will not report changes and gaps in life expectancy based on 'accidental' deaths or 'intentional self-harm and event of undetermined intent (Suicide)'. Instead, these categories will be grouped in 'Other causes'. Further information is included in [Appendix B](#).

¹ <https://www.health-ni.gov.uk/topics/dhssps-statistics-and-research/health-inequalities-statistics>

Key Findings

Current Life Expectancy Estimates

- In 2018-20, life expectancy in Northern Ireland (NI) was 78.7 years for males and 82.4 years for females.
- Male life expectancy was highest in the Lisburn & Castlereagh LGD (80.3 years) and lowest in the Belfast LGD (75.8 years).
- As with males, life expectancy for females was highest in the Lisburn & Castlereagh LGD (83.3 years) and lowest in the Belfast LGD (80.5 years).

Decomposition of Life Expectancy² Trend over the Last 5 Years

- Since 2014-16, life expectancy has increased by 0.1 years for males and females however, changes were not statistically significant.
- Decreased mortality rates among 60-79 year olds contributed the majority of the increase in male and female life expectancies over the period.
- Reduced mortality from circulatory disease and cancer, among other causes, increased male life expectancy by 0.8 years. However, this increase was offset by 0.6 years due to a rise in mortality for a range of causes, including COVID deaths.
- An improvement of 0.6 years in female life expectancy, mainly due to reduced mortality from circulatory disease and cancer, was offset by 0.6 years due to increased mortality from COVID and other causes.

Gender Gap

- In 2018-20, females in NI could expect to live 3.7 years longer than males.
- Across all age groups, male mortality was higher than that of females.
- Higher male mortality from circulatory disease and cancers accounted for 1.1 and 1.2 years of the gap respectively.

Deprivation Gap

- In 2018-20, males living in the 20% most deprived areas of NI could expect to live 74.5 years, 6.9 years less than those living in the 20% least deprived areas (81.3 years).
- Female life expectancy in the 20% most deprived areas was 79.3 years, 5.0 years fewer than females in the 20% least deprived areas (84.3 years).
- For both males and females, mortality across all causes of death was higher in the most deprived areas than in the least deprived.
- Higher mortality from circulatory disease (1.3 years) and cancer (1.3 years) contributed notably to the male life expectancy deprivation gap, along with the 'other' category (1.9 years). Cancer and 'other' causes were the largest contributors to the female life expectancy deprivation gap.

² Life table decomposition is a statistical technique that allows changes in life expectancy to be broken down into positive and negative contributions by age and cause of death.

COVID impact on single-year life expectancy

- In order to show the true extent of the impact of COVID deaths on life expectancy, an assessment of single-year life expectancy estimates has been produced. These single year estimates will differ from the official 3-year life expectancy estimates.
- Male life expectancy decreased by 0.9 years from 79.0 years in 2019 to 78.2 years in 2020.
- The decrease in male life expectancy was due to increased mortality rates among 50+ year olds, with 60-69 year olds contributing most to the decrease (-0.3 years).
- COVID mortality accounted for the majority of the decrease in male life expectancy (-0.8 years). This reduction was offset slightly by several conditions, including pneumonia (0.1 years).
- Similar to males, female life expectancy decreased by 0.8 years from 82.8 years in 2019 to 82.0 years in 2020.
- This decrease was also primarily due to increased mortality in older age groups, particularly those aged 60+.
- COVID mortality again accounted for the majority of the decrease in female life expectancy (-0.8 years) which was offset slightly by several conditions including pneumonia (0.1 years).

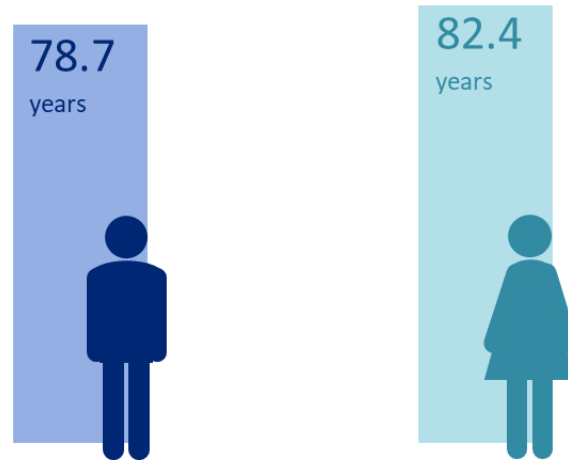
Healthy and Disability-Free Life Expectancy

- Between 2014-16 and 2018-20, healthy life expectancy estimates increased from 59.1 to 60.0 years for males, and from 60.9 to 62.1 years for females. However, these changes were not statistically significant.
- Over the same period, male disability-free life expectancy (DFLE) increased by 2.6 years from 55.3 to 57.9 years and female DFLE increased by 2.5 years from 56.4 to 58.9 years.
- In 2018-20, the HLE gap between the 20% most and least deprived stood at 11.8 years for males and 14.9 years for females.
- The DFLE gap between the most and least deprived areas for males was 11.9 years in 2018-20, compared with 12.3 years for females.

Life expectancy at birth in 2018-20 was 78.7 years for males and 82.4 years for females.

Life expectancy refers to the number of years a person would expect to live if the current mortality patterns remain constant. In 2018-20, females in Northern Ireland could expect to live 3.7 years longer than males.

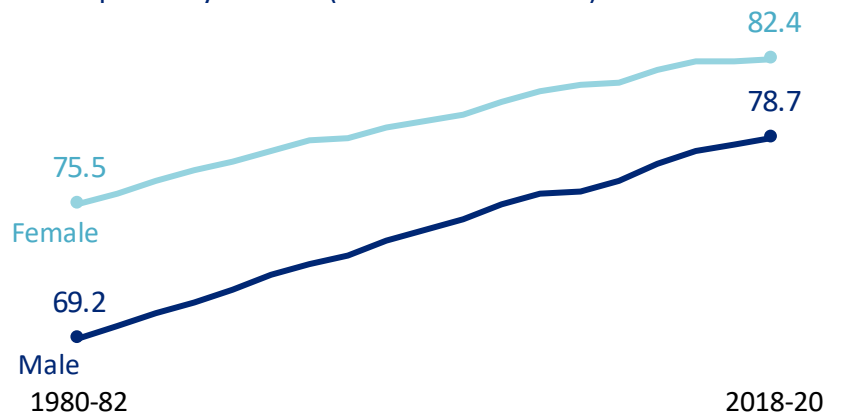
Male and Female Life Expectancy at Birth (2018-20)*



Life expectancy for both males and females has grown steadily since 1980-82.

Since 1980-82, life expectancy at birth has increased by 6.9 years for females and 9.5 years for males. As a result, the gender gap has narrowed from 6.4 years in 1980-82 to 3.7 years in 2018-20.

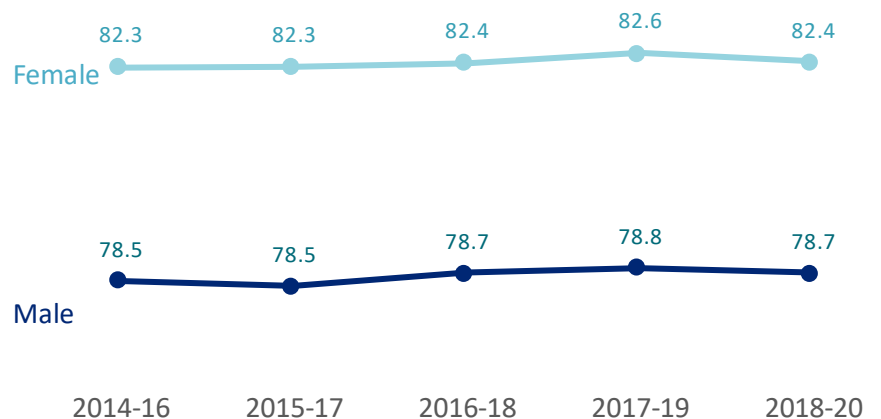
Life Expectancy at Birth (1980-82 to 2018-20)*



The increase in life expectancy has slowed in recent years.

Since 2014-16, life expectancy has increased by 0.1 years for males and females (changes are not statistically significant). This compares with a statistically significant increase of 0.8 years for males and a non-significant 0.2 year increase for females in the previous five-year period (2010-12 to 2014-16).

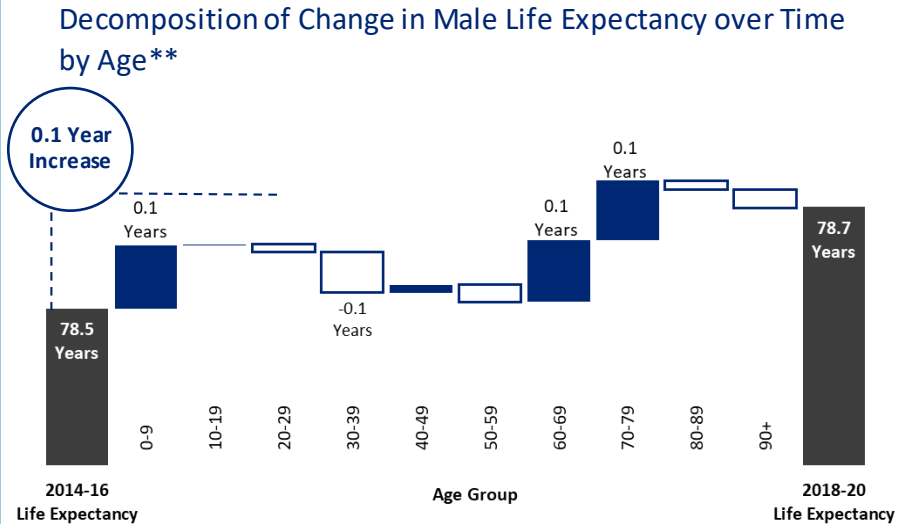
Life Expectancy at Birth (2014-16 to 2018-20)*



* Values presented are rounded to one decimal place independently. As a result, the sum of component items may not therefore always add to the totals shown.

Decreased mortality rates among 60-79 year olds contributed the majority of the increase in male life expectancy over the last 5 years.

Reduced mortality among those aged 0-9 also contributed 0.1 years to the increase in male life expectancy, whilst those aged 30-39 showed the biggest decrease of 0.1 years.



Reduced mortality mainly from cancer, stroke and Coronary Heart Disease (CHD), increased male life expectancy. However, these gains were almost completely offset by increases in mortality from other causes including COVID.

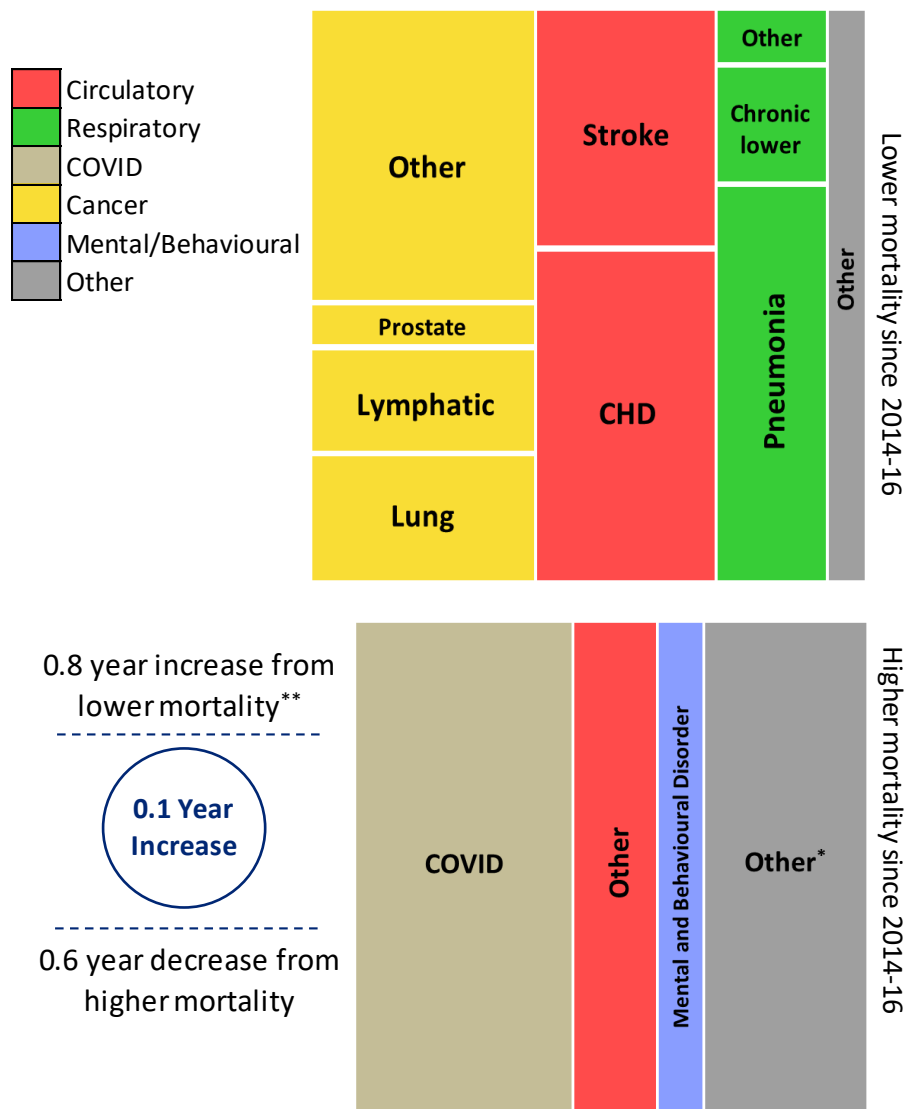
Lower mortality from cancer contributed 0.3 years to the increase in life expectancy and reduced mortality from stroke and CHD contributed a further 0.3 years.

However, this increase was offset by 0.6 years due to increased mortality, notably from COVID deaths which accounted for 0.3 years, and other types of circulatory disease, mental and behavioural disorders, and other causes of death*.

* A more detailed breakdown of the various contributions from different causes of death is available in [Appendix A](#).

** Values presented are rounded to one decimal place independently. As a result, the sum of component items may not therefore always add to the totals shown.

Decomposition of Change in Male Life Expectancy over Time by Cause of Death (2014-16 to 2018-20)

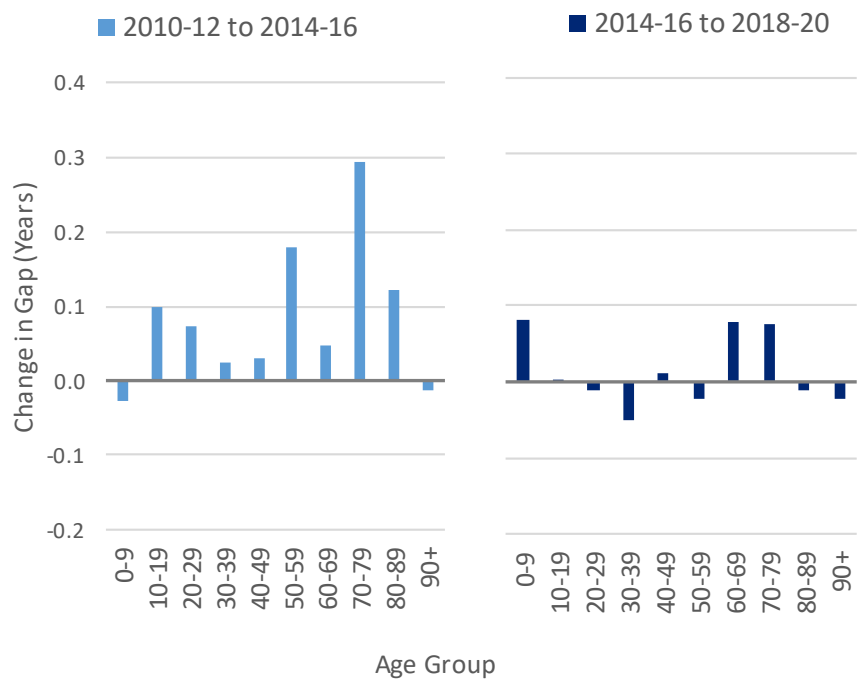


Compared with the previous 5-year period improvements in mortality slowed for the majority of age groups from 2014-16 to 2018-20.

The recent slowdown in male life expectancy improvement can be explained by comparing the changes observed from 2014-16 to 2018-20 (0.1 year increase) with the previous 5-year period, when male life expectancy increased by 0.8 years.

Between 2014-16 and 2018-20, with the exception of those aged 0-9 and 60-69, all age groups have seen either less of an improvement in life expectancy, or increased decline when compared with the previous period.

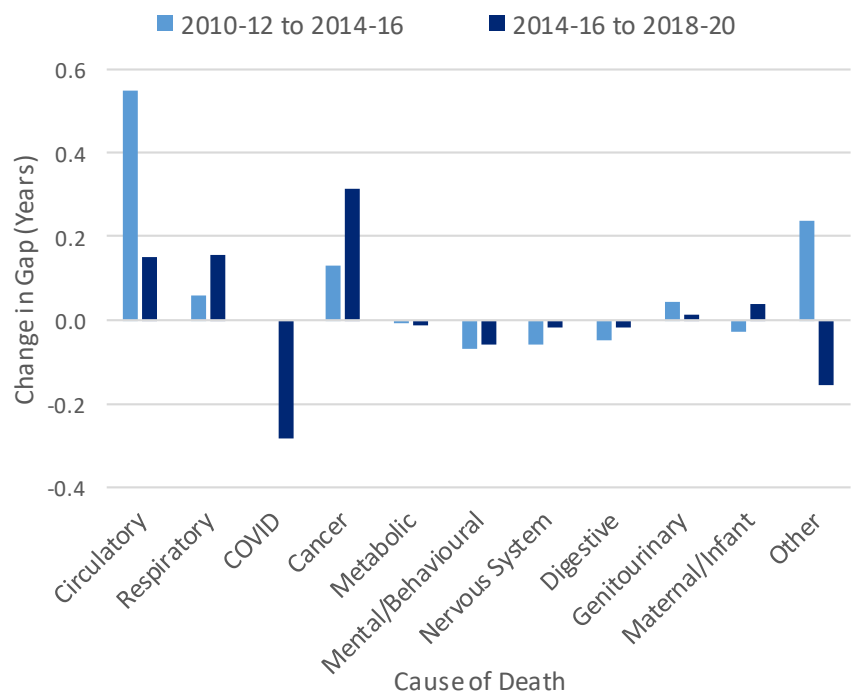
Decomposition of Change in Male Life Expectancy by Age



Between 2014-16 and 2018-20, there was a slower improvement in circulatory disease mortality (0.1 years) than that seen in the previous 5 year period (0.6 years).

While several causes of death, notably cancer and respiratory, have continued to make increasingly positive contributions to improvements in life expectancy; the negative impact of COVID deaths reduced life expectancy changes by 0.3 years** when compared with the previous period, along with the 'other' category (-0.2 years).

Decomposition of Change in Male Life Expectancy by Cause of Death*



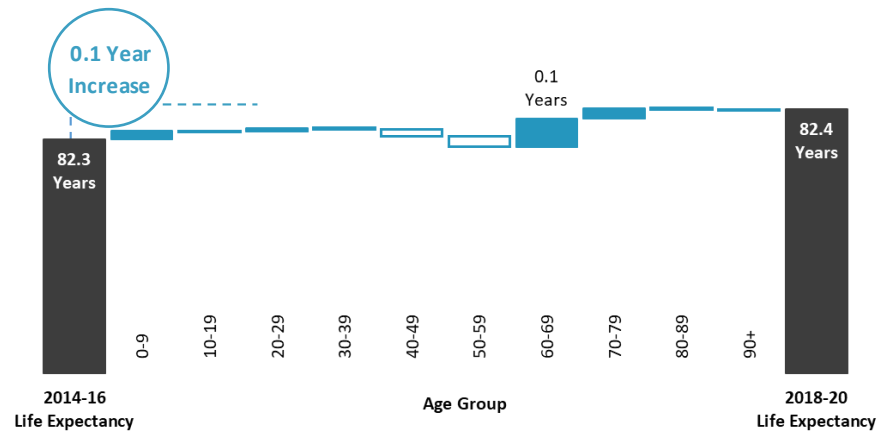
* A more detailed breakdown of the various contributions from different causes of death is available in [Appendix A](#).

** Due to use of 3 year aggregate values used in creating figures, the impact of COVID deaths (which only impacts 2020) is not as profound. Chapter 8 shows the full impact of COVID on single year life expectancy estimates.

Similar to males, decreased mortality rates among 60-79 year olds was the main contribution to the increase in female life expectancy over the last 5 years.

Mortality among all other age groups showed no notable contribution to the change in female life expectancy since 2014-16.

Decomposition of Change in Female Life Expectancy over Time by Age

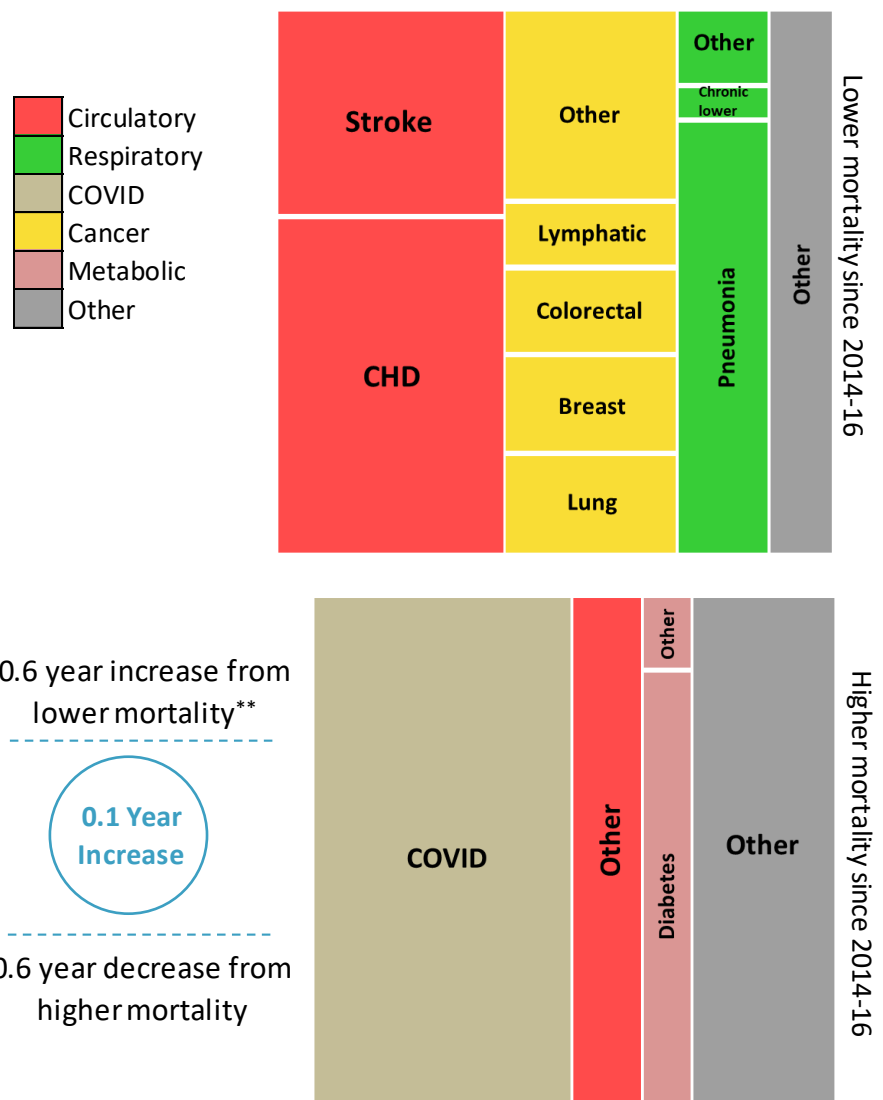


Improvements in female life expectancy were mainly due to reduced mortality from Coronary Heart Disease (CHD), stroke and cancer, contributing to a life expectancy increase of 0.6 years. However, this increase was almost completely offset due to COVID deaths and increased mortality from a range of other causes.

Lower mortality from stroke and CHD accounted for almost half (0.3 years) of the increase in female life expectancy, the majority of which was attributable to Coronary Heart Disease (CHD). Reduced mortality from cancer and respiratory diseases also contributed to the increase.

However, this increase was offset by 0.6 years due to COVID mortality (-0.3 years), and higher mortality for several causes of death.

Decomposition of Change in Female Life Expectancy over Time by Cause of Death (2014-16 to 2018-20)*



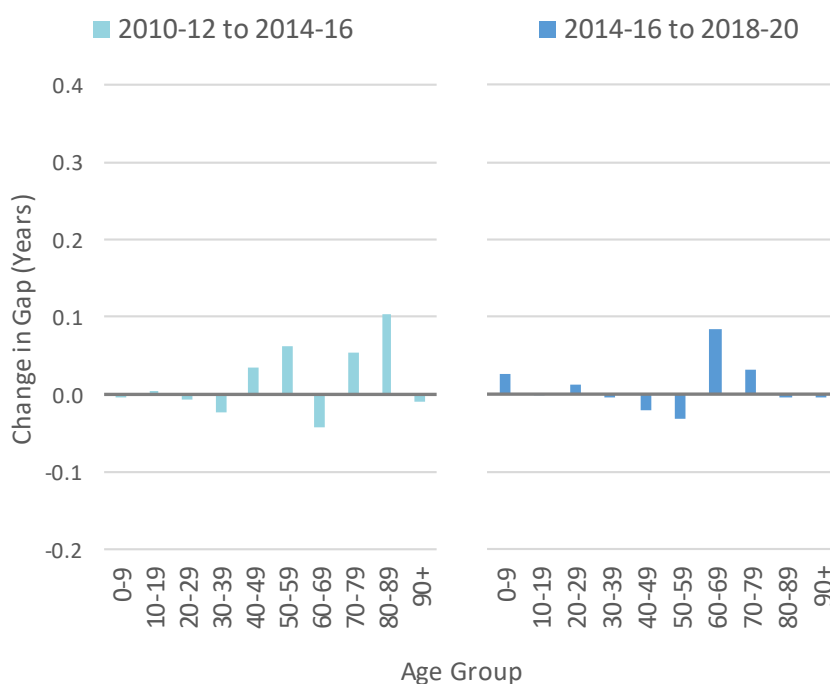
* A more detailed breakdown of the various contributions from different causes of death is available in [Appendix A](#).

** Values presented are rounded to one decimal place independently. As a result, the sum of component items may not therefore always add to the totals shown.

Similar to the previous 5 year period, broadly static mortality in age groups under 60 years made little or no change to female life expectancy from 2014-16 to 2018-20.

Changes in female life expectancy have remained similar to that during 2010-12 to 2014-16, which saw a 0.2 year increase, compared with 0.1 in 2014-16 to 2018-20. Those aged 60-69 years, saw a positive contribution of 0.1 years, as opposed to a small negative contribution in the previous 5 year period. Other age groups were fairly static, though improvements in the 80-89 age group seen in the previous 5 year period have stalled.

Decomposition of Change in Female Life Expectancy by Age



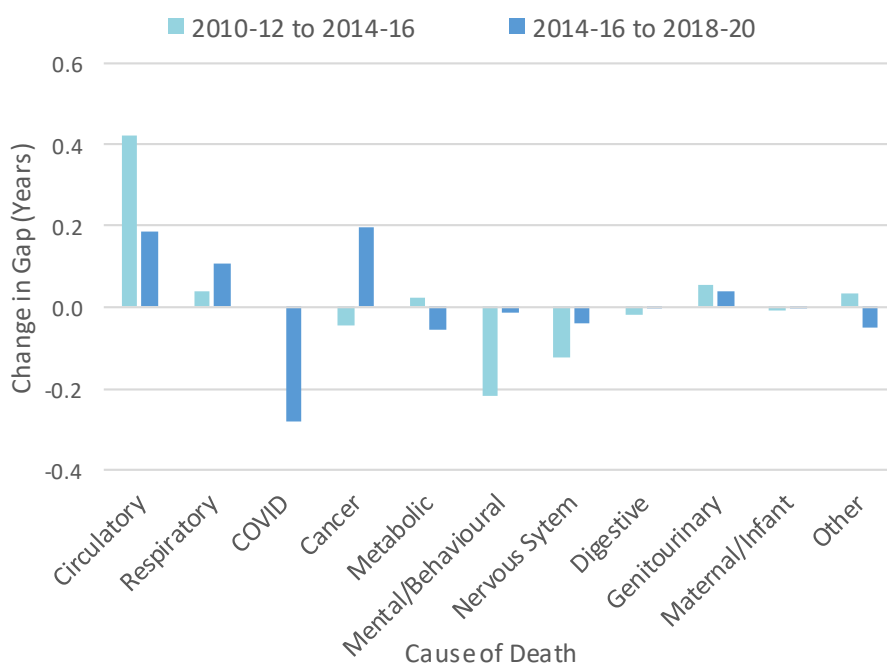
The positive contribution to female life expectancy from reduced circulatory mortality was less than half that seen in the previous 5 year period.

There was also a negative contribution from COVID deaths of 0.3 years.

In contrast, there were improvements in mortality from mental and behavioural disorders, respiratory and cancer; as well as a reduction in the negative contribution from nervous system disorders.

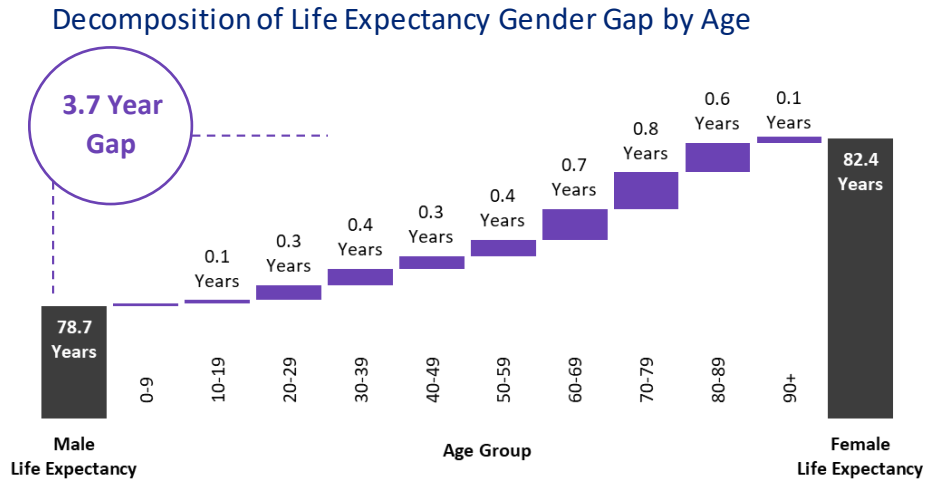
* A more detailed breakdown of the various contributions from different causes of death is available in [Appendix A](#).

Decomposition of Change in Female Life Expectancy by Cause of Death*



In 2018-20, females in NI could expect to live 3.7 years longer than males.

Across all age groups, male mortality was higher than that of females. The contribution to the life expectancy gender gap is most pronounced at older ages, with over two-thirds of the gap attributable to lower mortality for females aged 50-89.

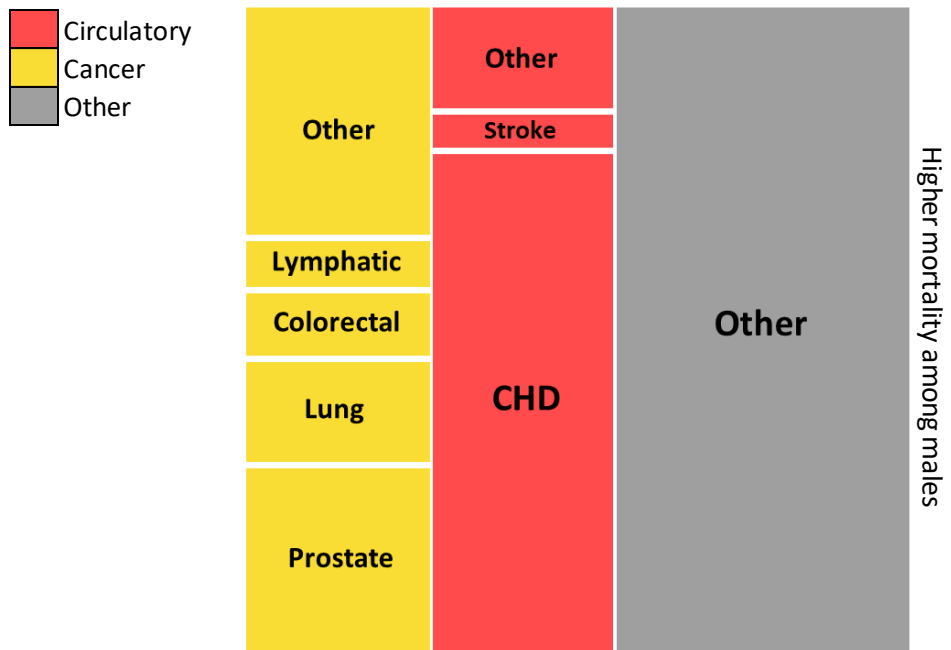


Higher mortality among males, particularly from cancer and circulatory disease, contributed 4.2 years to the gender gap in life expectancy.

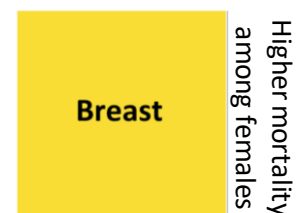
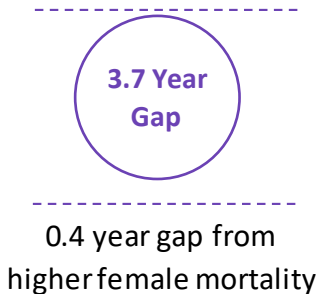
In 2018-20, higher mortality among males for a range of cancer and circulatory causes contributed 2.3 years to the life expectancy gender gap. A further 1.1 years of the gap was attributable to higher mortality among males in the 'other' category – which in addition to a combination of relatively less common causes of death, also includes accidental deaths and those classified as intentional self-harm (see [Appendix B](#) for more detail on why this breakdown is unavailable).

However, the life expectancy gender gap was offset slightly by 0.4 years due to higher female mortality from breast cancer.

Decomposition of Life Expectancy Gender Gap by Cause of Death*



4.2 year gap from higher male mortality**



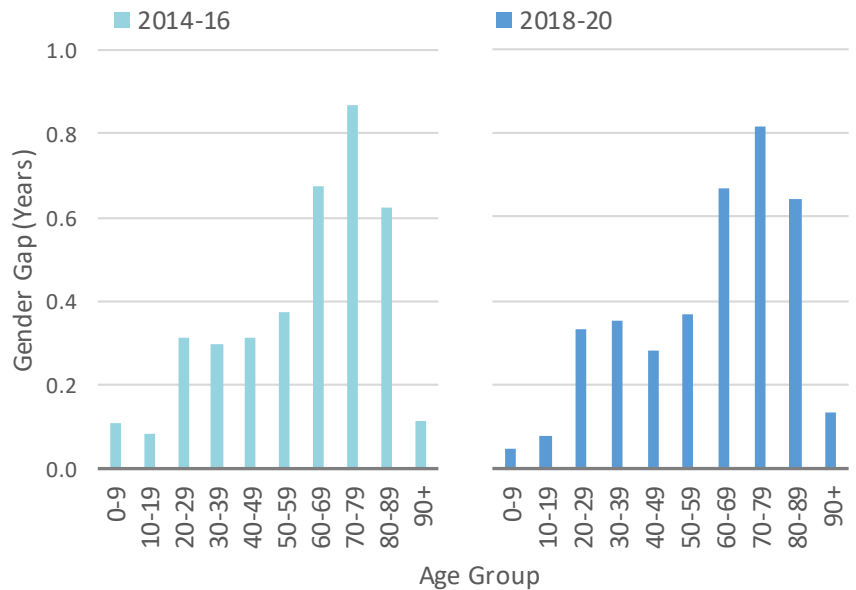
* A more detailed breakdown of the various contributions from different causes of death is available in [Appendix A](#).

** Values presented are rounded to one decimal place independently. As a result, the sum of component items may not therefore always add to the totals shown.

The contribution of each age group to the gender gap in 2018-20 was similar to that in 2014-16. Higher mortality among males at older ages continued to provide the largest contribution to the life expectancy gender gap.

As shown previously, there have been many changes in the contribution of age groups to changes in both male and female life expectancy since 2014-16. However, in terms of the gender gap, the age contribution to the gap has remained largely similar with no notable change since 2014-16.

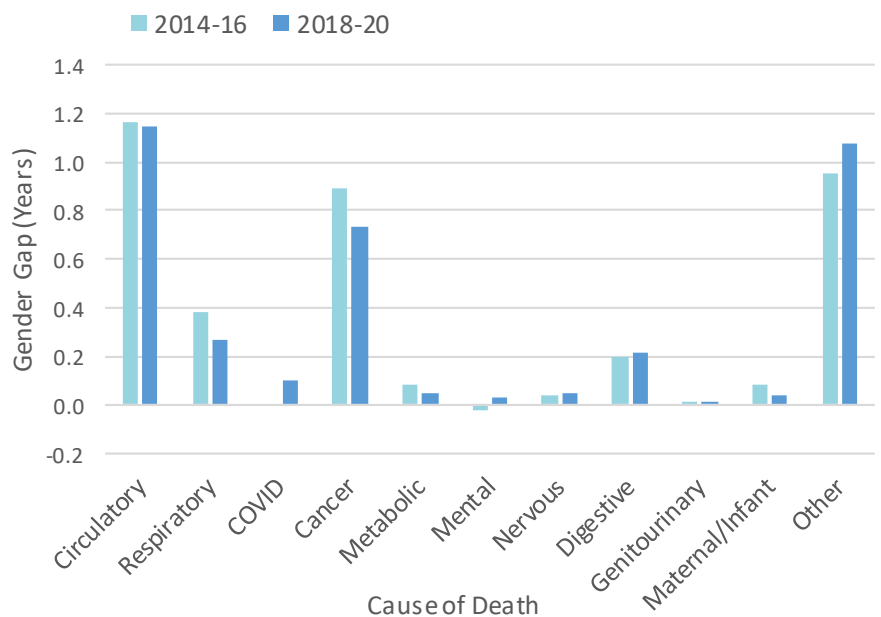
Contribution of Age Groups to Differences in the Life Expectancy Gender Gap



There has been little change in the pattern of contribution to the life expectancy gender gap by different causes of death since 2014-16.

Higher mortality among males from circulatory disease and cancer continue to be the largest contributors to the life expectancy gender gap, though there were slight reductions in male mortality for respiratory and cancer when compared to 2014-16.

Contribution of Cause of Death to Differences in the Life Expectancy Gender Gap

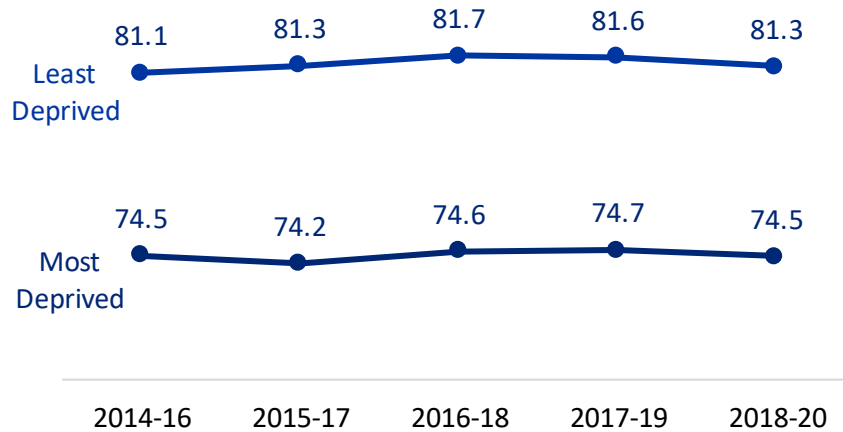


Values above 0 on the y-axis represent greater mortality among males, with values below 0 representing greater female mortality.

Between 2014-16 and 2018-20, life expectancy for males living in both the 20% most deprived and 20% least deprived areas in NI showed no significant change.

Life expectancy for males in the most deprived areas was 74.5 years in both 2014-16 and 2018-20. While life expectancy in the least deprived areas increased slightly from 81.1 years in 2014-16 to 81.3 years in 2018-20, the change was not statistically significant.

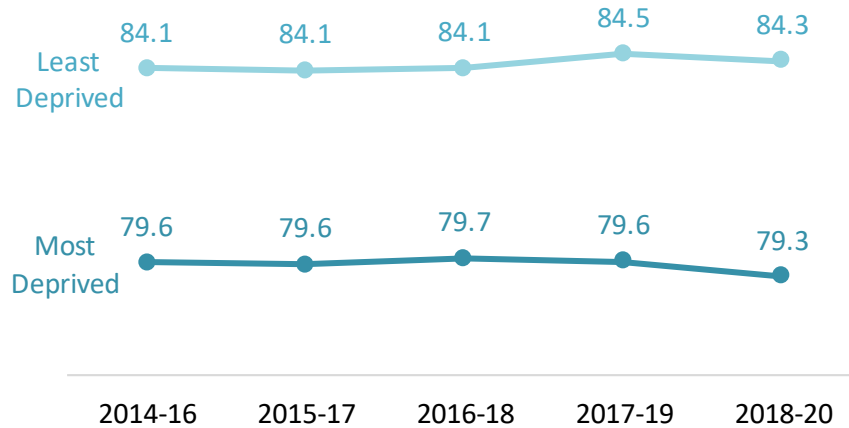
Male Life Expectancy by Deprivation (2014-16 to 2018-20)



There was little change in life expectancy for females living in the 20% most and least deprived areas between 2014-16 and 2018-20.

Female life expectancy in the least deprived areas increased from 84.1 years in 2014-16 to 84.3 years in 2018-20. In the most deprived areas life expectancy was 79.3 years in 2018-20, a decrease from 79.6 years in 2014-16 (changes were not statistically significant).

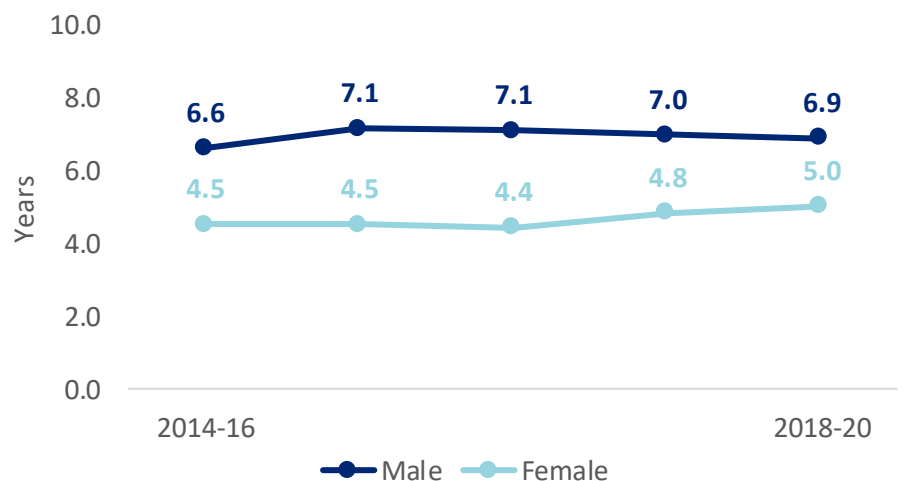
Female Life Expectancy by Deprivation (2014-16 to 2018-20)



The life expectancy at birth gap between the 20% most and least deprived females increased since 2014-16.

The life expectancy gap between the 20% most and least deprived areas stood at 6.9 years for males and 5.0 years for females in 2018-20. This represents a 0.5 year increase for females since 2014-16. For males, although the inequality gap widened slightly over the period, the change was not statistically significant.

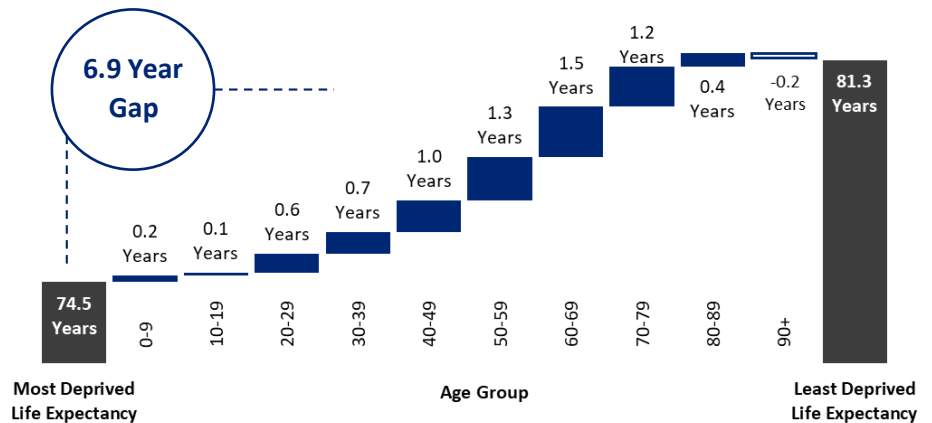
Male and Female Life Expectancy Deprivation Gap (2014-16 to 2018-20)



In 2018-20, life expectancy for males living in the 20% most deprived areas of NI was 74.5 years. This was 6.9 years less than those in the 20% least deprived areas (81.3 years).

Almost all age groups contributed towards the life expectancy deprivation gap, with higher mortality in the most deprived areas compared with the least deprived. Mortality rates for males aged 90 and over, in the least deprived areas were higher however, this is likely due to a larger proportion of the population in the least deprived areas surviving into this age group.

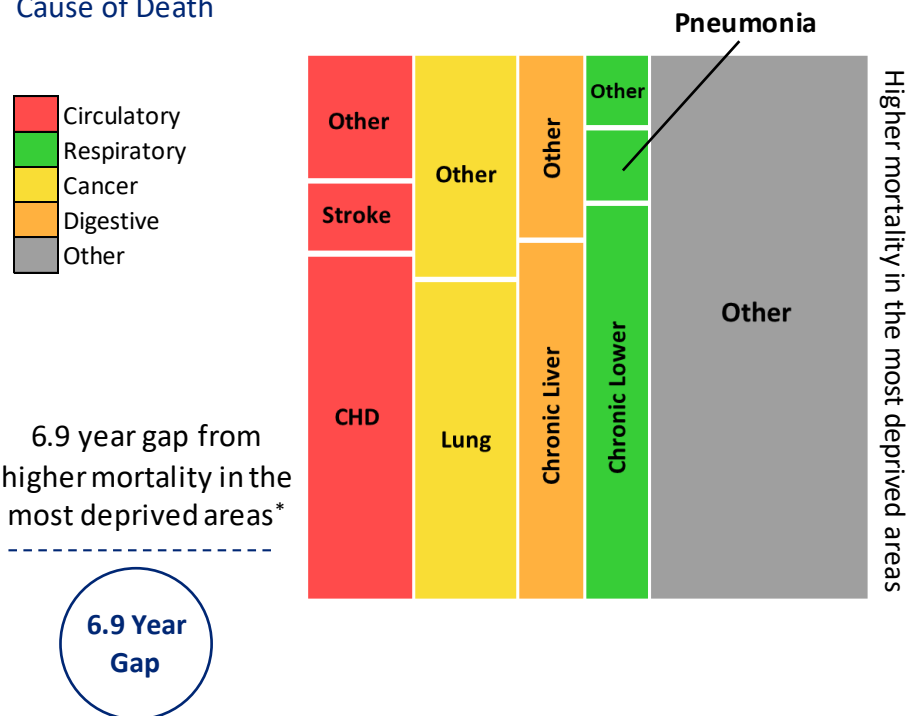
Decomposition of Male Life Expectancy Deprivation Gap by Age



Mortality across all causes of death was higher in the most deprived areas than in the least deprived.

All causes of death were higher in the 20% most deprived areas when compared with the 20% least deprived areas with the exception of 'other genitourinary', where mortality was slightly higher in the least deprived areas (not large enough to display in chart). Higher mortality from circulatory disease (1.3 years) and cancer (1.3 years) combined contributed more than a third of the male life expectancy deprivation gap. 'Other' contributed 1.9 years to the gap (see [Appendix B](#) for more detail on why this breakdown is unavailable).

Decomposition of Male Life Expectancy Deprivation Gap by Cause of Death



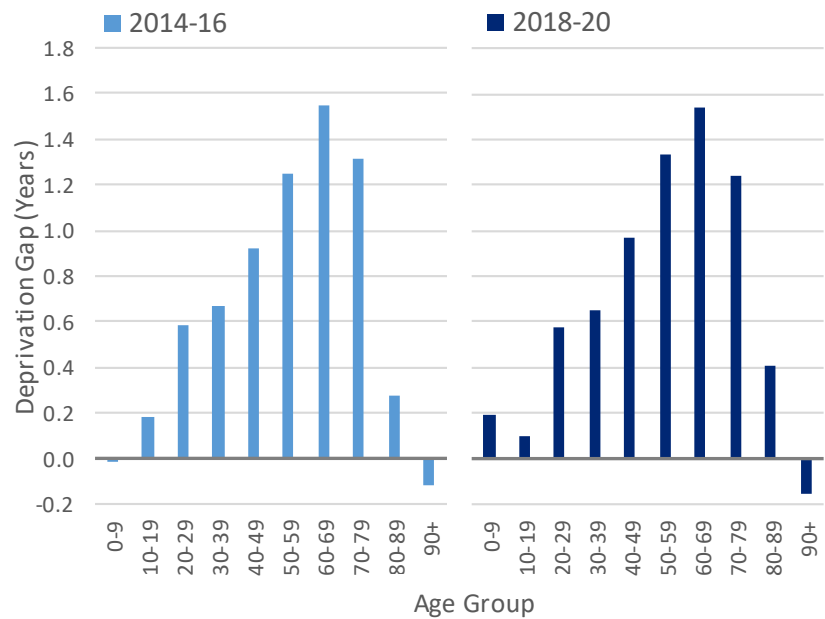
6.9 year gap from higher mortality in the most deprived areas*

* Values presented are rounded to one decimal place independently. As a result, the sum of component items may not therefore always add to the totals shown.

The age contribution to the male deprivation gap in 2018-20 is similar to that in 2014-16, with higher mortality among males at older ages the largest contributor. The total value for the male deprivation gap in 2014-16 (6.6 years) is also similar, to the gap in 2018-20 (6.9 years).

Although the gap for most age groups remained similar, there was an increase in the contribution for those aged 0-9 of 0.2 years. Likewise, the gap for age groups 50-59 and 80-89 increased by 0.1 years in 2018-20. These negative contributions were offset slightly by decreased impact from the 10-19 and 70-79 age groups.

Contribution of Age Groups to Differences in the Male Life Expectancy Deprivation Gap

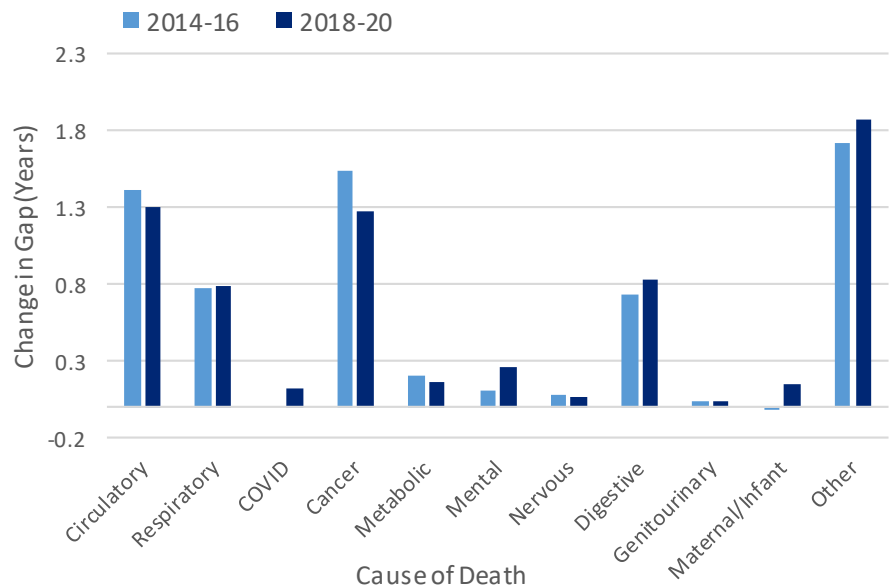


There has been little change in the contribution by different causes of death to the male life expectancy deprivation gap since 2014-16.

Higher mortality from circulatory disease, cancer and 'other' category causes among males in the 20% most deprived areas continue to be the largest contributors to the life expectancy deprivation gap. However, these contributions have decreased by 0.1 and 0.2 years for circulatory disease and cancer respectively since 2014-16, whilst 'other' has increased by 0.2 years.

COVID deaths accounted for a 0.1 year increase in the deprivation gap, whilst mental and behavioural disorders more than doubled – contributing 0.1 years to the gap in 2014-16 and 0.3 years in 2018-20.

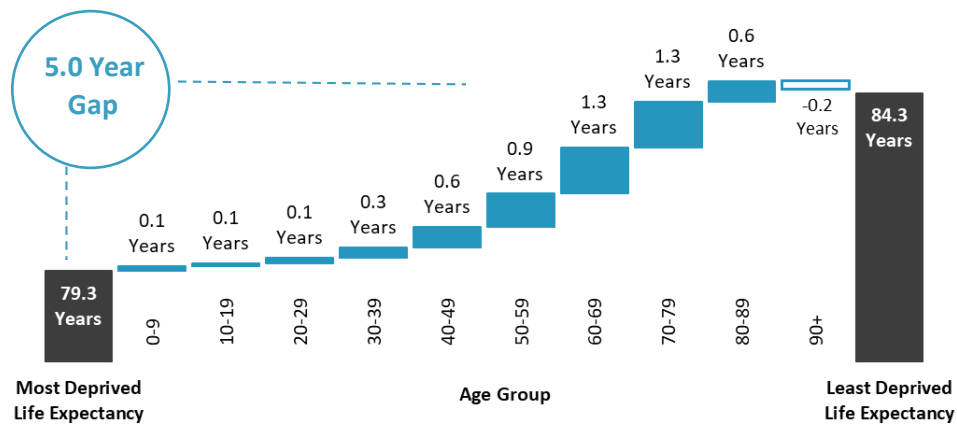
Contribution of Cause of Death to Differences in the Male Life Expectancy Deprivation Gap



Life expectancy for females living in the 20% most deprived areas in NI was 79.3 years. This was 5.0 years less than those in the 20% least deprived areas (84.3 years).

Half of the contribution to the total female life expectancy deprivation gap was from the 60-79 age group (2.5 years). This was largely attributable to higher mortality from chronic lower respiratory disease and lung cancer in the most deprived areas. The mortality rate for females aged 90+ in the least deprived areas was higher than in the most deprived areas. As with males, this is likely due to a larger proportion of females from the least deprived areas living beyond 90 years.

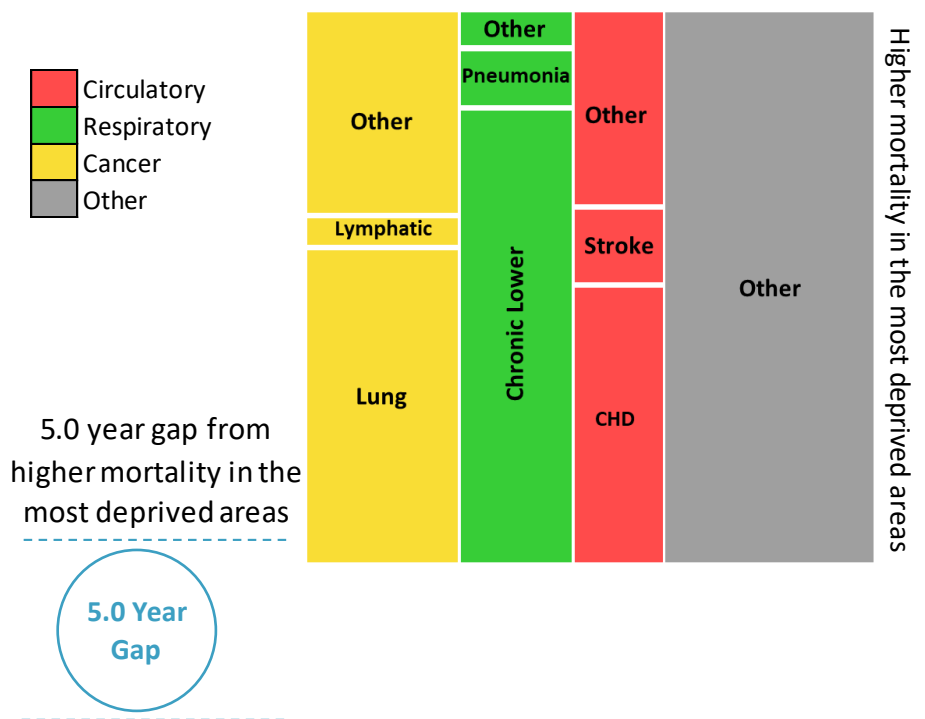
Decomposition of Female Life Expectancy Deprivation Gap by Age



Mortality from cancer (1.4 years) was the largest single contributor to the female deprivation gap, more than half of which (0.8 years) was due to lung cancer.

The combination of a range of other causes however, contributed 2.5 years to the gap. Additionally, 1.0 year of the gap was attributable to mortality from respiratory disease, with chronic lower respiratory illness contributing the majority (0.8 years). Circulatory disease also impacted the gap notably, totalling 0.8 years. Of this, 0.4 years was attributable to Coronary Heart Disease (CHD).

Decomposition of Female Life Expectancy Deprivation Gap by Cause of Death*

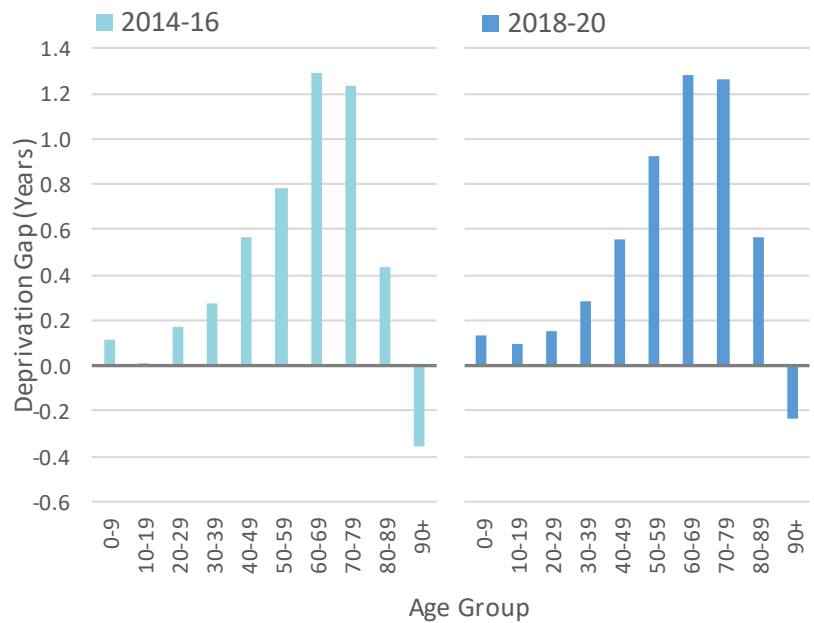


* A more detailed breakdown of the various contributions from different causes of death is available in [Appendix A](#).

As with males, in 2018-20 the age contribution to the female life expectancy deprivation gap remains similar to that in 2014-16. The total value for the deprivation gap increased from 4.5 years in 2014-16 to 5.0 years in 2018-20.

Those age groups that contributed to a change in the life expectancy deprivation gap showed a 0.1 year increase or decrease. The exception was 80-89 year olds (0.2 year) and those aged 90 or over, where the negative effect of higher mortality was less pronounced in 2018-20 (-0.2 years) when compared with 2014-16 (-0.4 years).

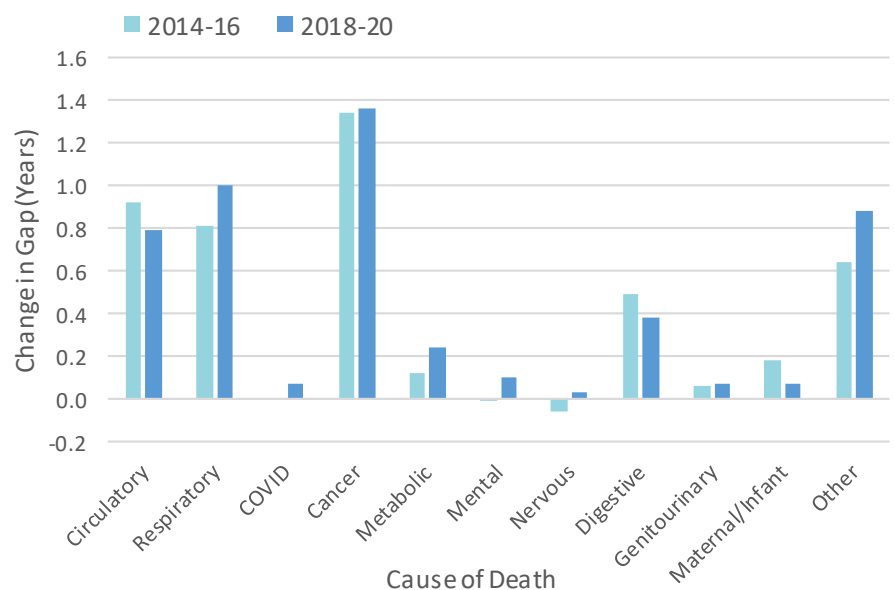
Contribution of Age Groups to Differences in the Female Life Expectancy Deprivation Gap



Between 2014-16 and 2018-20, there has been little change in the causes of death that contributed to the female life expectancy deprivation gap.

Although figures remain similar, higher mortality from respiratory illnesses and cancer have increased the deprivation gap by 0.2 and 0.1 years respectively when compared with the same causes in 2014-16. 'Other' category deaths also increased the deprivation gap by 0.3 years. However, the positive contribution from several causes in 2018-20 offset the increase in the gap slightly by 0.1 years each, such as circulatory disease, digestive diseases and maternal & infant deaths.

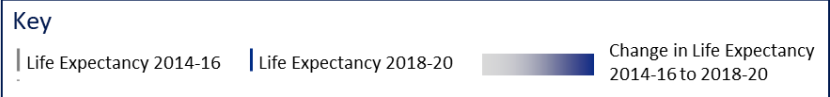
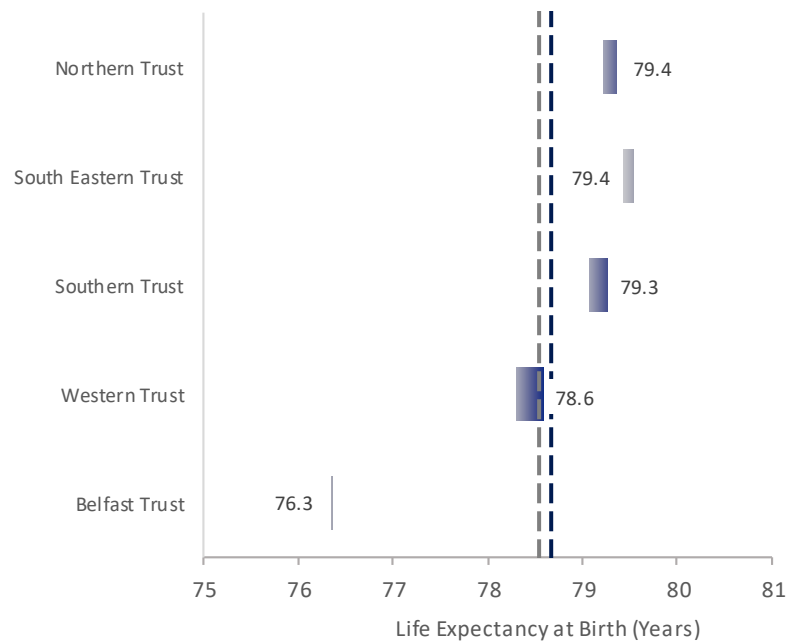
Contribution of Cause of Death to Differences in the Female Life Expectancy Deprivation Gap



In 2018-20, male life expectancy at birth ranged from 76.3 years in the Belfast Trust to 79.4 years in the Northern and South Eastern Trusts.

Estimated values of male life expectancy increased in the Western (+0.3 years), Southern (+0.2 years) and Northern Trusts (+0.1 years) since 2014-16, however none of these observations were statistically significant.

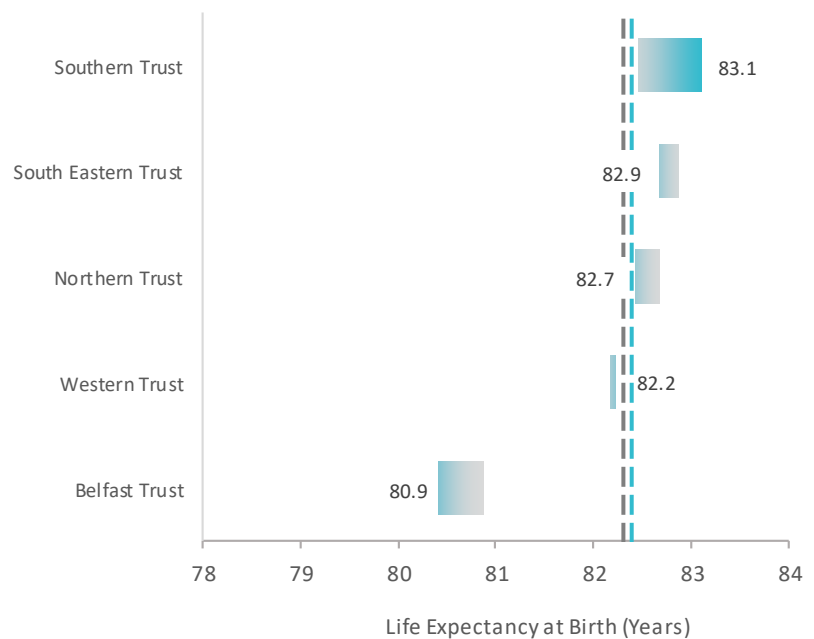
Male Life Expectancy at Birth by Trust (2014-16 to 2018-20)



Life expectancy at birth for females ranged from 80.9 years in the Belfast Trust to 83.1 years in the Southern Trust.

Between 2014-16 and 2018-20, female life expectancy increased by 0.6 years in the Southern Trust and decreased by 0.5 years in the Belfast Trust. Observed changes in the other Trusts were not statistically significant.

Female Life Expectancy at Birth by Trust (2014-16 to 2018-20)



Deaths from other causes, cancer and circulatory disease were the main contributors to the male life expectancy gap between Trusts and the NI average.

In 2018-20, male life expectancy was above the NI average for all Trusts with the exception of Belfast and Western. While life expectancy for Western Trust residents was similar to the NI average, life expectancy was markedly lower for the Belfast Trust. This was due to higher mortality from other causes of death, cancer and digestive diseases.

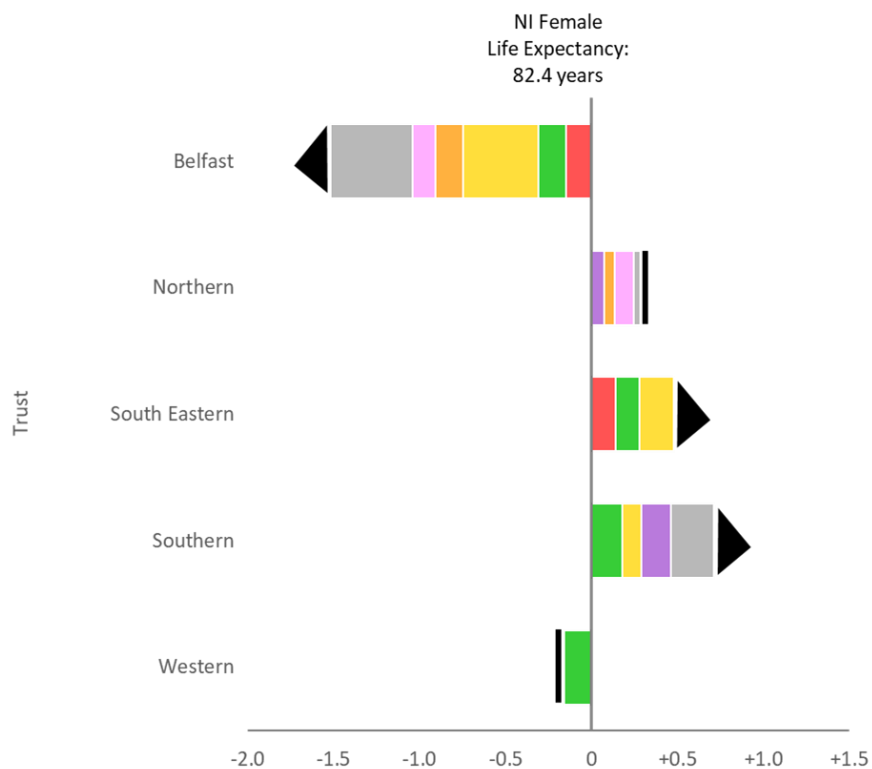
Decomposition of Male Life Expectancy (2018-20): Trust with NI



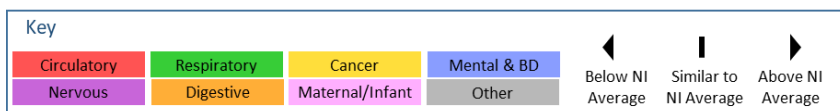
Deaths from cancer, respiratory disease and the other causes were the main contributors to the female life expectancy gap between Trusts and the NI average.

In the Belfast Trust, female life expectancy was notably lower than the NI average, largely due to higher cancer mortality rates and deaths from other causes. Life expectancy in the South Eastern and Southern Trusts was notably higher than the NI average while estimates for the Northern and Western Trusts were both similar to the NI average.

Decomposition of Female Life Expectancy (2018-20): Trust with NI



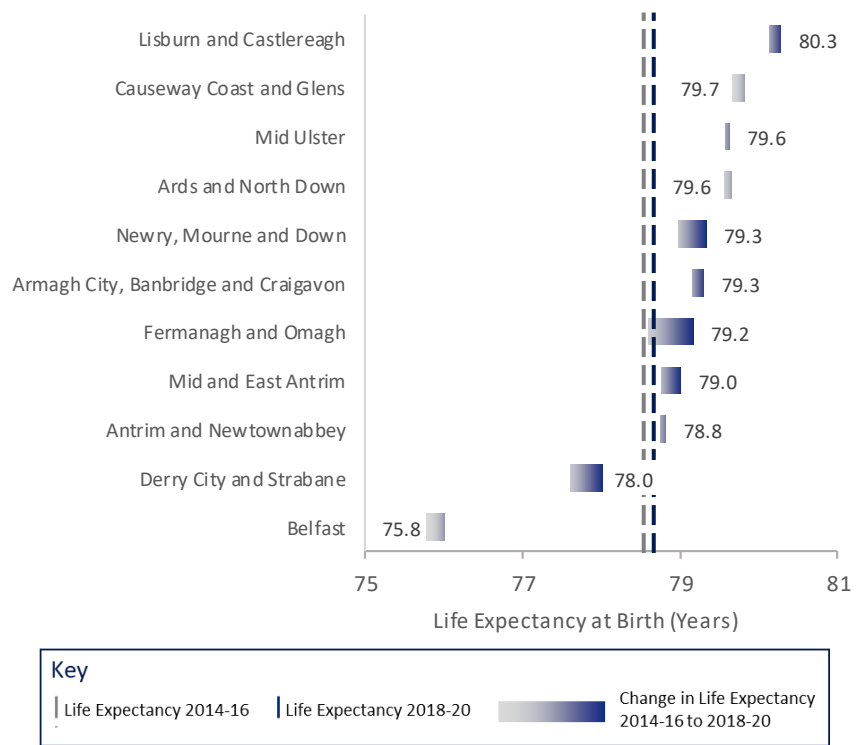
For each area, the life expectancy gap with the NI average has been broken down into its largest contributory causes of death. The contribution from other causes, including accidental, intentional self-harm, are combined into the 'Other' category. A more detailed breakdown is available in the accompanying tables available [online](#).



Across LGDs in 2018-20, male life expectancy at birth ranged from 75.8 years in Belfast to 80.3 years in Lisburn and Castlereagh.

Since 2014-16, estimated values for male life expectancy have increased across the majority of LGDs. However, none were statistically significant with the exception of Fermanagh & Omagh where male life expectancy increased by 0.6 years. Life expectancy estimates decreased in Belfast (-0.2 years), Ards & North Down (-0.1 years) and Causeway Coast & Glens (-0.1 years), however these changes were not statistically significant.

Male Life Expectancy at Birth by Local Government District (2014-16 to 2018-20)

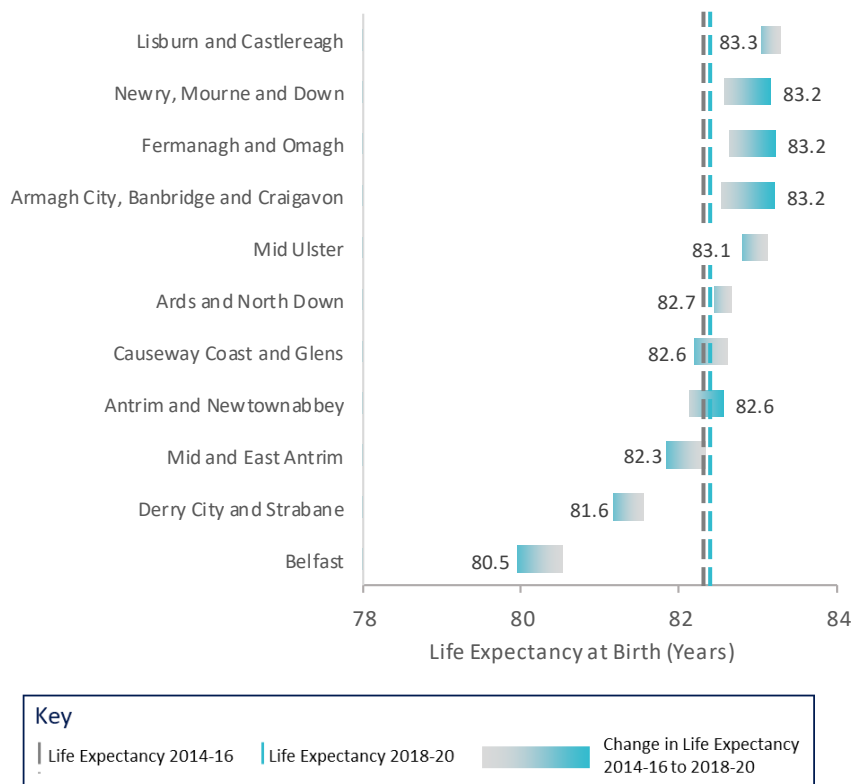


As with males, female life expectancy was highest in Lisburn and Castlereagh (83.3 years) and lowest in Belfast (80.5 years).

While female life expectancy estimates decreased across the majority of LGDs, changes were not statistically significant. Of the LGDs that showed an increase in life expectancy from 2014-16, only the improvements in Armagh City, Banbridge & Craigavon (+0.7 years) and Newry, Mourne & Down (+0.6 years) LGDs were statistically significant.

A full assessment of change and differences in LGD figures, including confidence intervals, can be requested from [PHIRB](#).

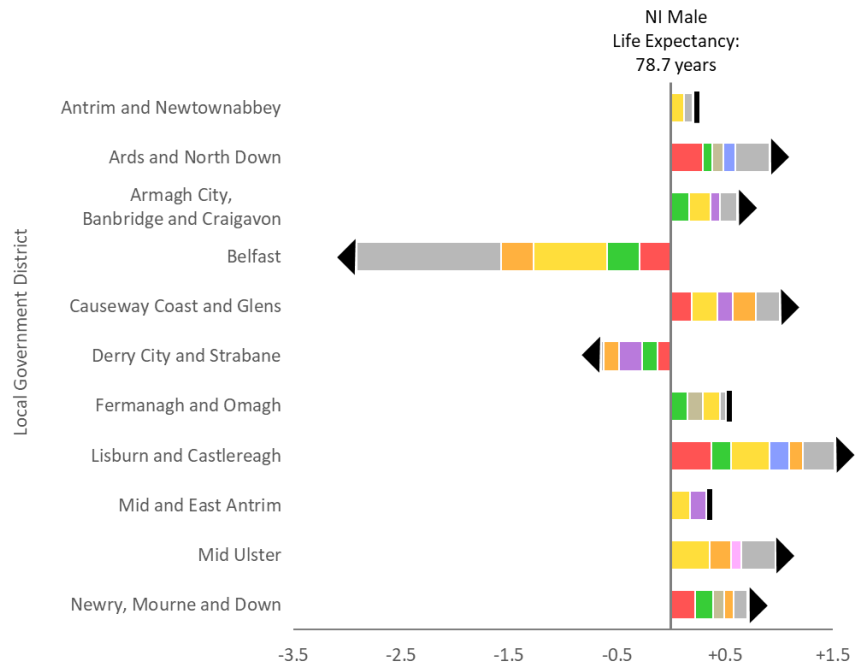
Female Life Expectancy at Birth by Local Government District (2014-16 to 2018-20)



Deaths from other causes, cancer and circulatory disease were the main contributors to the male life expectancy gap between LGDs and the NI average.

Male life expectancy was significantly lower than the NI average in Derry City & Strabane and Belfast LGDs. Reduced life expectancy in Belfast was due to higher mortality from other causes, cancer, respiratory illness, circulatory disease and digestive disorders. Life expectancy showed the greatest increase from the NI average for the Lisburn & Castlereagh LGD.

Decomposition of Male Life Expectancy (2018-20):
Local Government Districts Compared with NI

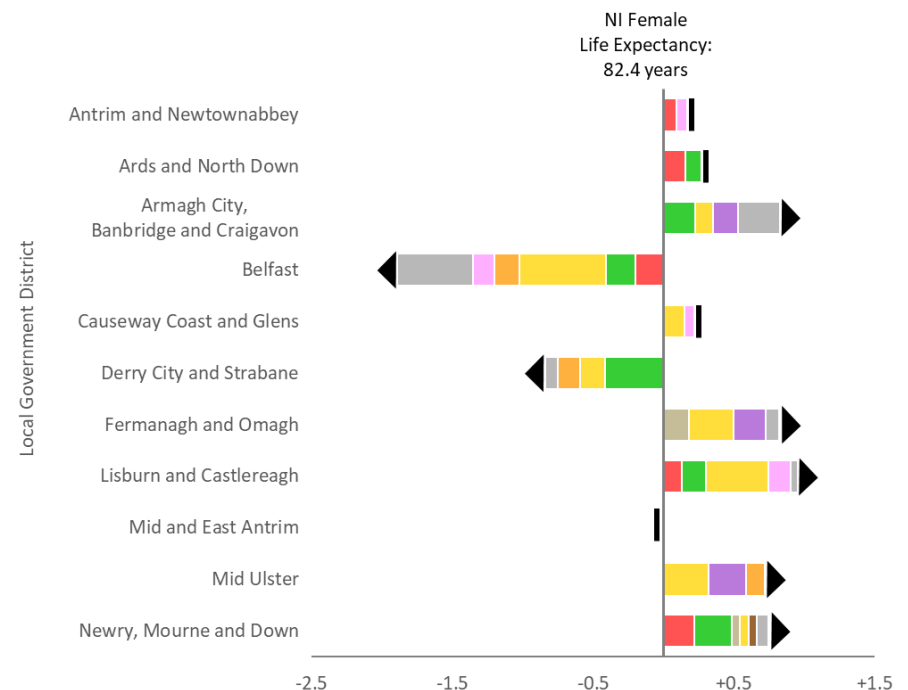


Deaths from cancer, respiratory illness and circulatory disease were the main contributors to the female life expectancy gap between LGDs and NI.

Female life expectancy was significantly lower than the NI average in the Belfast and Derry City & Strabane LGDs. The Lisburn & Castlereagh LGD showed the largest increase on the NI average, due to lower cancer mortality.

For each area, the life expectancy gap with Northern Ireland has been broken down into its largest contributory causes of death. The contribution from other causes, including accidental and intentional self-harm, are combined into the 'Other' category. A more detailed breakdown is available in the accompanying tables available [online](#).

Decomposition of Female Life Expectancy (2018-20):
Local Government Districts Compared with NI



Key

◀ Below NI Average | Similar to NI Average ▶ Above NI Average

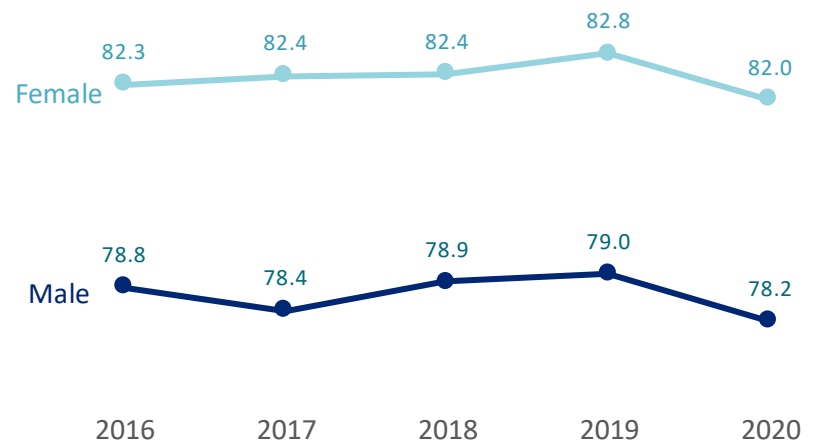
Circulatory	Respiratory	COVID	Cancer	Metabolic
Mental & BD	Nervous	Digestive	Maternal/Infant	Other

To better highlight the impact of COVID deaths in 2020, life expectancy estimates in this chapter are presented as single year values rather than the official 3 year aggregate values analysed in the previous chapters.

Life expectancy for males decreased by 0.9 years and for females by 0.8 years, between 2019 and 2020.

Life expectancy for males decreased by 0.4 years between 2016 and 2017, before increasing to 79.0 years in 2019. In 2020 male life expectancy decreased by 0.9 years to 78.2 years. Female life expectancy increased by 0.5 years from 82.3 years in 2016 to 82.8 years in 2019, before decreasing by 0.8 years to 82.0 years in 2020.

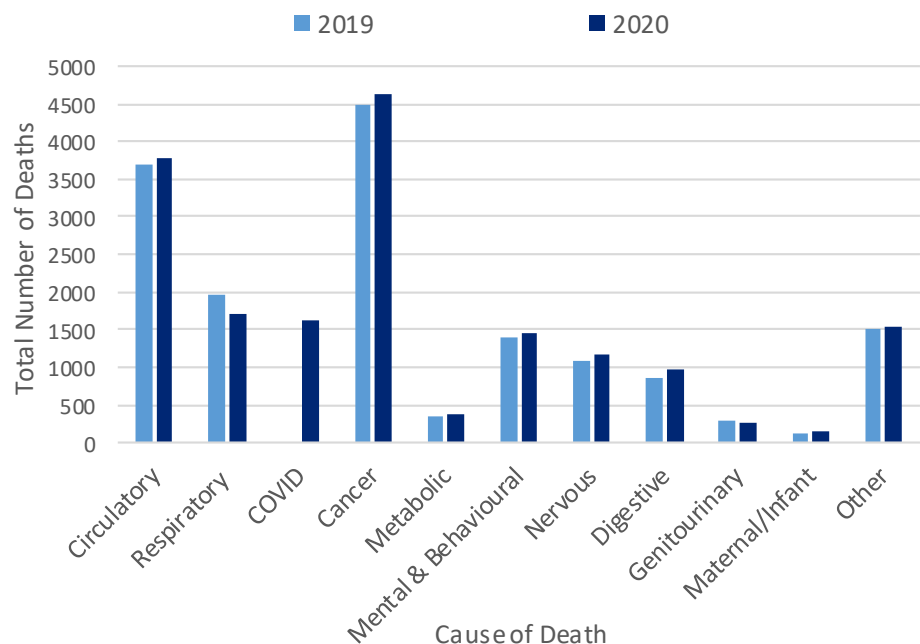
Single-year Life Expectancy at Birth (2016 to 2020)



Overall death numbers (for both males and females) increased by 11.8% from 15,758 in 2019 to 17,614 in 2020.

COVID deaths were a major factor in the increase, accounting for 1,625 deaths (9.2%) in 2020. However, it should be noted that the number of deaths increased in all main categories between 2019 and 2020, with the exception of respiratory and genitourinary deaths. Respiratory related deaths decreased by 255 (13%), though this decrease may have been affected by COVID deaths (which have been categorised separately to respiratory deaths) and this observation should therefore be interpreted with caution. See [Appendix A](#) for further details of deaths.

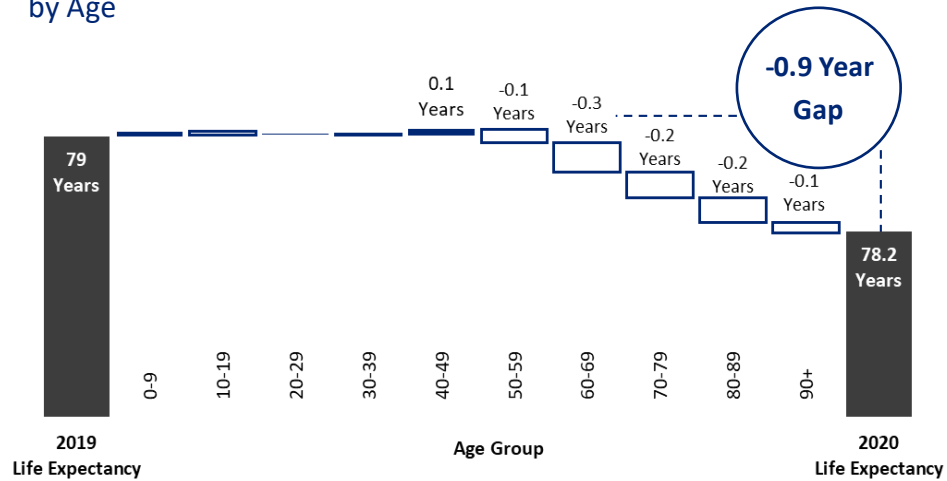
Total Number of Deaths by Cause in 2019 and 2020



Increased mortality rates among 50+ year olds accounted for the majority of the decrease in male life expectancy (-0.9 years) between 2019 and 2020.

Those aged 60-69 contributed most to the decrease in life expectancy (-0.3 years). Mortality among 0-49 year-olds was more stable, showing little or no change.

Decomposition of Change in Male Life Expectancy over Time by Age



COVID mortality was the main contributor to the decrease in male life expectancy between 2019 and 2020. This reduction was partly offset by decreases in mortality from other causes.

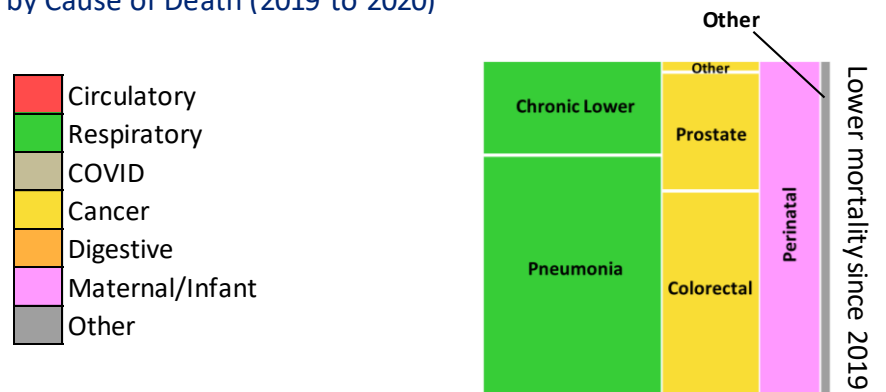
COVID mortality accounted for two thirds of the decrease in male life expectancy (-0.8 years). Small increases in mortality from certain types of cancer, digestive diseases, circulatory and other causes of death also contributed to the decrease.

The reduction in life expectancy was offset by 0.3 years due to decreased mortality from several conditions, particularly pneumonia (0.1 years).**

* Values presented are rounded to one decimal place independently. As a result, the sum of component items may not therefore always add to the totals shown.

** Observed decreases may be as a result of those dying alternatively from COVID.

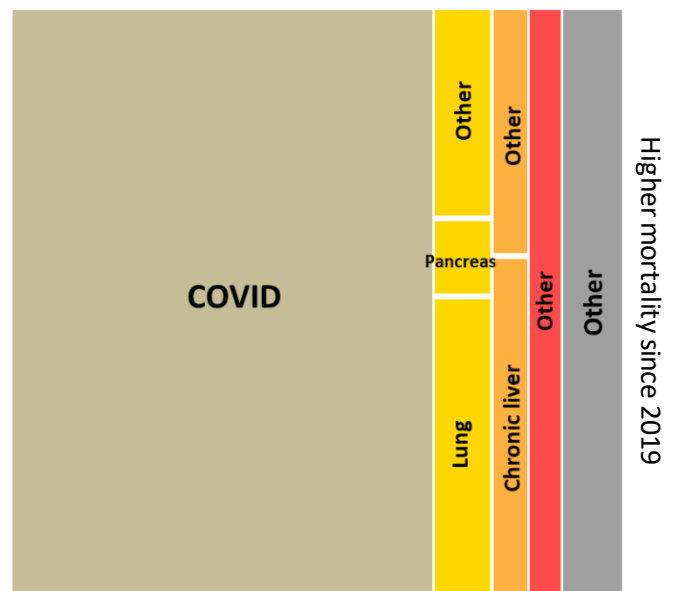
Decomposition of Change in Male Life Expectancy over Time by Cause of Death (2019 to 2020)



0.3 year increase from lower mortality*

0.9 Year Decrease

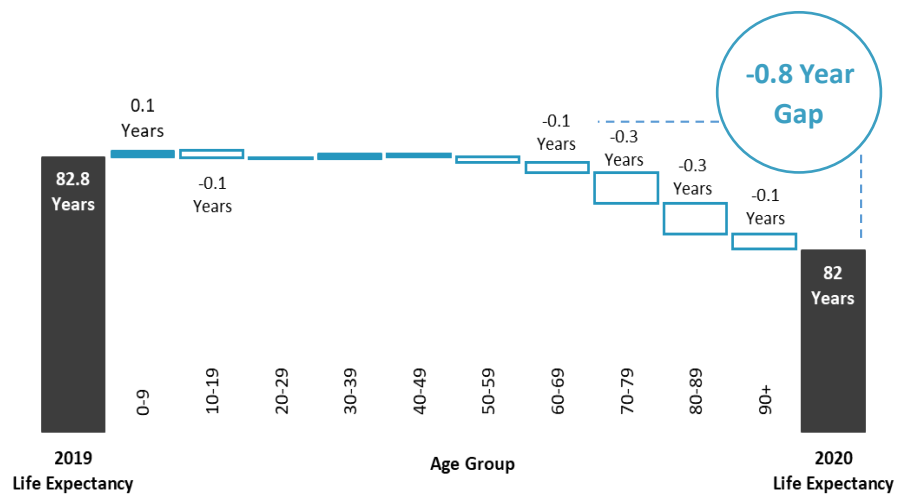
1.2 year decrease from higher mortality



Similar to males increased mortality rates among 60+ year olds contributed most to the decrease in female life expectancy (-0.8 years) between 2019 and 2020.

Those aged 70-79 and 80-89 had the largest contribution to the decrease in life expectancy (-0.3 years each). Life expectancy for ages 0-59 was much more stable, contributing only small changes. The largest of these was a 0.1 year increase for 0-9 year olds and a 0.1 year decrease for 10-19 year olds.

Decomposition of Female Life Expectancy over Time by Age *



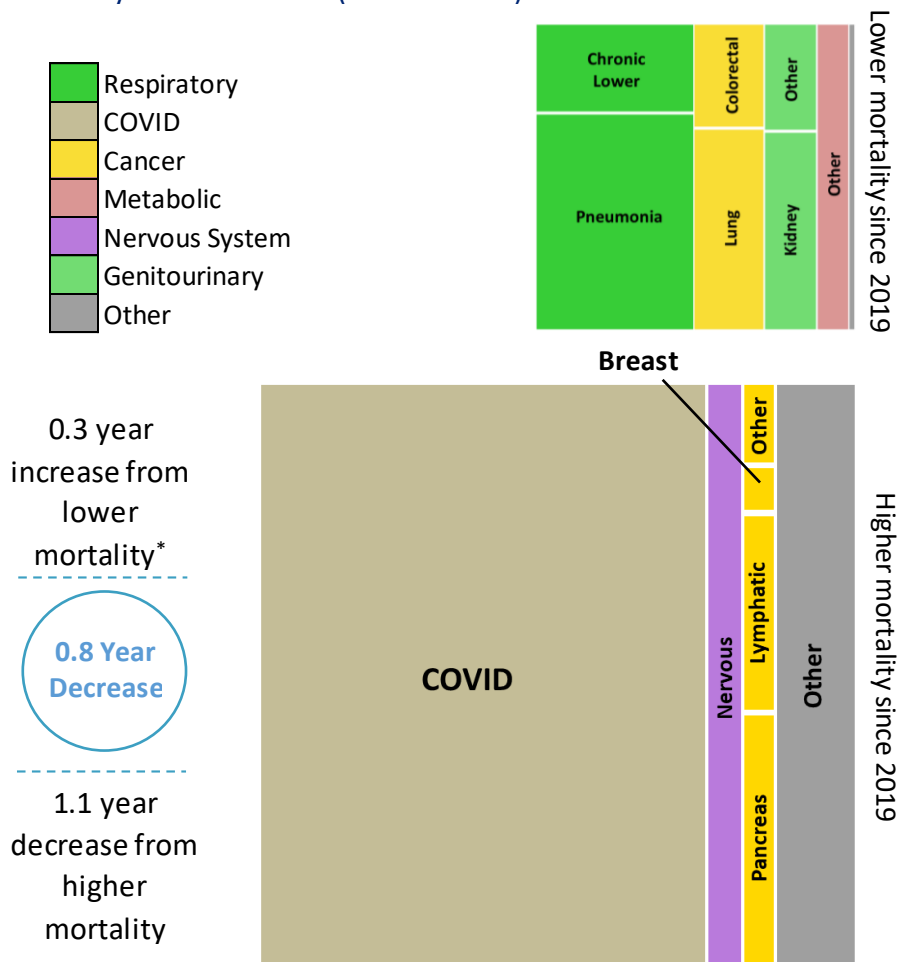
COVID mortality contributed most to the decrease in female life expectancy from 2019 to 2020. This reduction was partly offset by decreases in mortality from other causes of death.

Similar to males, COVID mortality accounted for the majority of the decrease in female life expectancy (-0.8 years). Small increases in mortality from cancer, nervous system disorders and other causes also contributed to the decrease. The reduction in life expectancy was offset by 0.3 years due to decreased mortality from several conditions, particularly pneumonia (0.1 years). **

* Values presented are rounded to one decimal place independently. As a result, the sum of component items may not therefore always add to the totals shown.

** Observed decreases may be as a result of those dying alternatively from COVID.

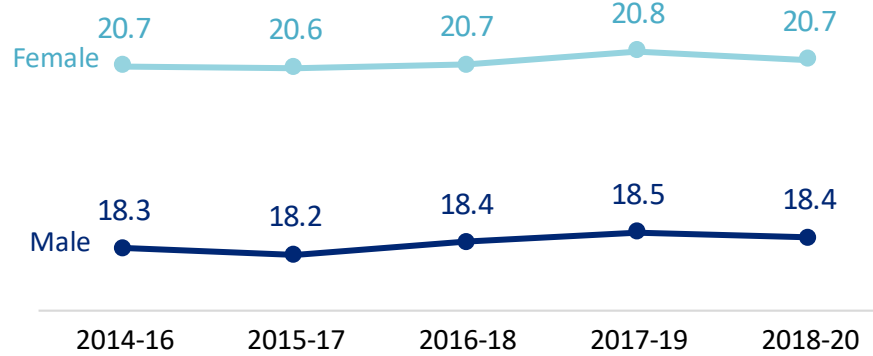
Decomposition of Change in Female Life Expectancy over Time by Cause of Death (2019 to 2020)*



Life expectancy at age 65 in 2018-20 was 18.4 years for males and 20.7 years for females.

Life expectancy at 65 showed a 0.1 year increase for both males and females from 2014-16, however these changes were not statistically significant.

Male and Female Life Expectancy at 65 (2014-16 to 2018-20)

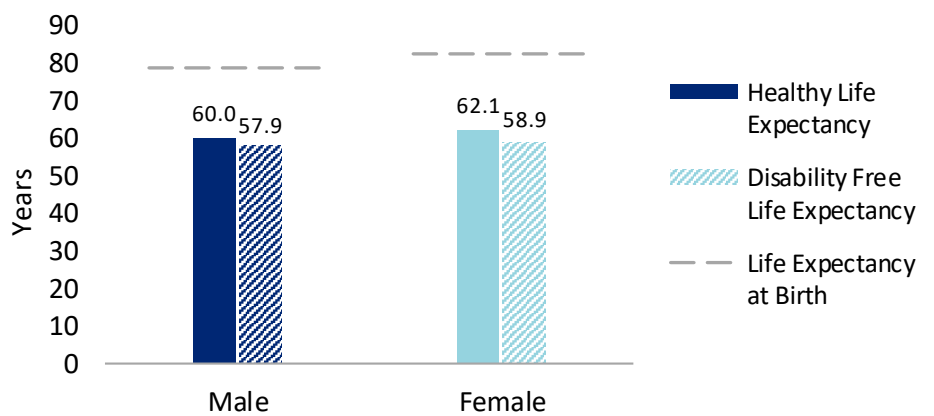


Males and females could both expect to live around three-quarters of their lives in good health.

In 2018-20, males could expect to live 60.0 years in good health, while females could expect to live 62.1 years. Disability free life expectancy (DFLE) was 57.9 years for males and 58.9 years for females.

For both Healthy Life Expectancy (HLE) and DFLE, the gender gap is not as wide as that for life expectancy at birth.

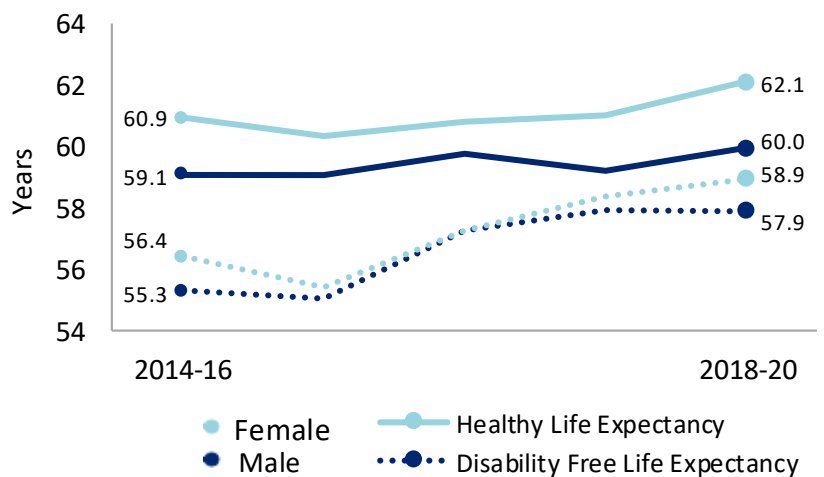
Healthy and Disability Free Life Expectancy (2018-20)



Since 2014-16, DFLE increased significantly for both males and females over the same period.

Male HLE estimates increased from 59.1 (2014-16) to 60.0 years (2018-20), and female HLE from 60.9 to 62.1 years however changes were not significant. Male DFLE increased by 2.6 years from 55.3 to 57.9 years and female DFLE increased by 2.5 years from 56.4 to 58.9 years over the same period.

Healthy and Disability Free Life Expectancy (2014-16 to 2018-20)

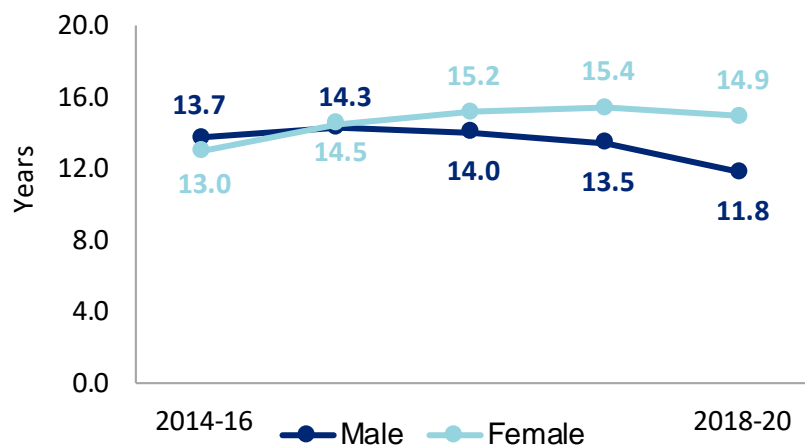


Since 2014-16 there have been no significant changes in the healthy life expectancy gap for females or for males.

In 2018-20, the HLE gap between the 20% most and least deprived stood at 11.8 years for males compared with 13.7 years in 2014-16. The female HLE gap stood at 14.9 years in 2018-20 compared with 13.0 years in 2014-16.

The deprivation gap for HLE was notably wider than the gap for life expectancy at birth.

Healthy Life Expectancy Gap (2014-16 to 2018-20)

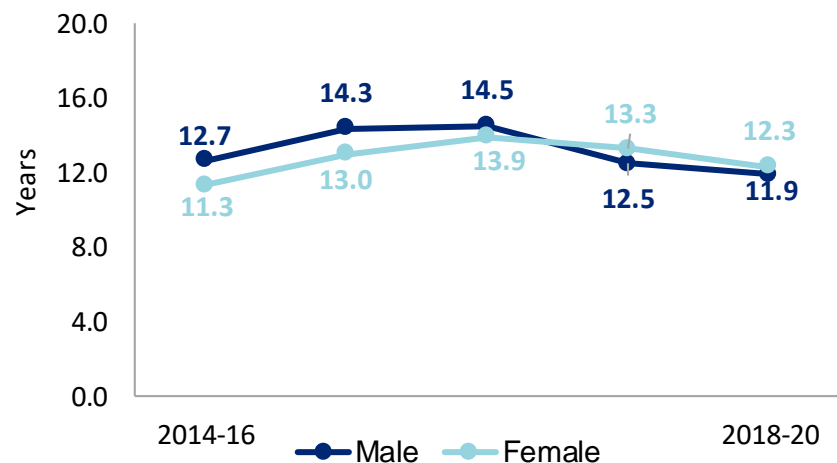


The disability-free life expectancy gap did not change significantly between 2014-16 and 2018-20.

The DFLE gap between the most and least deprived areas for males was 12.7 years in 2014-16 and 11.9 years in 2018-20. For females, the gap was 11.3 years in 2014-16 and 12.3 years in 2018-20.

Similar to HLE, the deprivation gap for DFLE was notably wider than the gap for life expectancy at birth.

Disability-Free Life Expectancy Gap (2014-16 to 2018-20)



NI Life Expectancies (All figures in Years)		2014-16	2015-17	2016-18	2017-19	2018-20
Male	Life Expectancy at Birth	78.5	78.5	78.7	78.8	78.7
	Life Expectancy at 65	18.3	18.2	18.4	18.5	18.4
	Healthy Life Expectancy	59.1	59.1	59.7	59.2	60.0
	Disability-Free Life Expectancy	55.3	55.0	57.3	57.9	57.9
Female	Life Expectancy at Birth	82.3	82.3	82.4	82.6	82.4
	Life Expectancy at 65	20.7	20.6	20.7	20.8	20.7
	Healthy Life Expectancy	60.9	60.3	60.8	61.0	62.1
	Disability-Free Life Expectancy	56.4	55.4	57.2	58.4	58.9

NI Life Expectancy Gaps (All figures in Years)		2014-16 to 2018-20		Gender Gap	
		Male	Female	2014-16	2018-20
Total Gap		0.1	0.1	3.8	3.7
Age Bands	0-9	0.1	0.0	0.1	0.0
	10-19	0.0	0.0	0.1	0.1
	20-29	0.0	0.0	0.3	0.3
	30-39	-0.1	0.0	0.3	0.4
	40-49	0.0	0.0	0.3	0.3
	50-59	0.0	0.0	0.4	0.4
	60-69	0.1	0.1	0.7	0.7
	70-79	0.1	0.0	0.9	0.8
	80-89	0.0	0.0	0.6	0.6
90+	0.0	0.0	0.1	0.1	
Circulatory	CHD	0.1	0.2	0.9	0.9
	Stroke	0.1	0.1	0.1	0.1
	Other	-0.1	-0.1	0.1	0.2
Respiratory	Pneumonia	0.1	0.1	0.1	0.1
	Chronic Lower	0.0	0.0	0.1	0.1
	Other	0.0	0.0	0.1	0.1
COVID	COVID	-0.3	-0.3	0.0	0.1
Cancer	Lung	0.1	0.0	0.2	0.2
	Breast	0.0	0.0	-0.5	-0.4
	Prostate	0.0	0.0	0.4	0.3
	Colon	0.0	0.0	0.1	0.1
	Lymph	0.1	0.0	0.1	0.1
	Pancreas	0.0	0.0	0.0	0.1
	Other	0.1	0.1	0.5	0.4
Metabolic	Diabetes	0.0	0.0	0.1	0.0
	Other	0.0	0.0	0.0	0.0
Mental	Mental & BD	-0.1	0.0	0.0	0.0
Nervous	Nervous	0.0	0.0	0.0	0.0
Digestive	Chronic Liver	0.0	0.0	0.1	0.1
	Other	0.0	0.0	0.1	0.1
Genitourinary	Kidney	0.0	0.0	0.0	0.0
	Other	0.0	0.0	0.0	0.0
Maternal/Infant	Perinatal	0.0	0.0	0.1	0.0
	Congenital	0.0	0.0	0.0	0.0
Other	Other	-0.2	-0.1	1.0	1.1

NI Life Expectancy Gaps (All figures in Years)		Male Deprivation Gap		Female Deprivation Gap	
		2014-16	2018-20	2014-16	2018-20
Total Gap		6.6	6.9	4.5	5.0
Age Bands	0-9	0.0	0.2	0.1	0.1
	10-19	0.2	0.1	0.0	0.1
	20-29	0.6	0.6	0.2	0.1
	30-39	0.7	0.7	0.3	0.3
	40-49	0.9	1.0	0.6	0.6
	50-59	1.2	1.3	0.8	0.9
	60-69	1.5	1.5	1.3	1.3
	70-79	1.3	1.2	1.2	1.3
	80-89	0.3	0.4	0.4	0.6
	90+	-0.1	-0.2	-0.4	-0.2
Circulatory	CHD	0.9	0.8	0.5	0.4
	Stroke	0.2	0.2	0.2	0.1
	Other	0.3	0.3	0.3	0.3
Respiratory	Pneumonia	0.2	0.1	0.0	0.1
	Chronic Lower	0.5	0.6	0.7	0.8
	Other	0.1	0.1	0.1	0.1
COVID	COVID	0.0	0.1	0.0	0.1
Cancer	Lung	0.8	0.7	0.8	0.8
	Breast	0.0	0.0	0.0	0.0
	Prostate	0.0	0.0	0.0	0.0
	Colon	0.1	0.0	0.1	0.0
	Lymph	0.0	0.0	0.0	0.1
	Pancreas	0.1	0.0	0.0	0.1
	Other	0.6	0.4	0.4	0.4
Metabolic	Diabetes	0.1	0.1	0.1	0.2
	Other	0.1	0.1	0.0	0.1
Mental	Mental & BD	0.1	0.3	0.0	0.1
Nervous	Nervous	0.1	0.1	-0.1	0.0
Digestive	Chronic Liver	0.5	0.5	0.3	0.2
	Other	0.3	0.3	0.2	0.2
Genitourinary	Kidney	0.0	0.0	0.0	0.1
	Other	0.0	0.0	0.0	0.0
Maternal/Infant	Perinatal	0.0	0.1	0.1	0.0
	Congenital	0.0	0.0	0.0	0.1
Other	Other	1.7	1.9	0.6	0.9

Male Life Expectancy at Birth

Trust	2014-16	2015-17	2016-18	2017-19	2018-20
Belfast Trust	76.4	76.3	76.7	76.6	76.3
Northern Trust	79.2	79.2	79.3	79.5	79.4
South Eastern Trust	79.5	79.3	79.5	79.4	79.4
Southern Trust	79.1	78.9	78.9	79.3	79.3
Western Trust	78.3	78.3	78.6	78.5	78.6

Female Life Expectancy at Birth

Trust	2014-16	2015-17	2016-18	2017-19	2018-20
Belfast Trust	81.3	81.3	81.3	81.2	80.9
Northern Trust	82.9	82.7	82.7	82.9	82.7
South Eastern Trust	83.1	82.8	82.7	83.1	82.9
Southern Trust	82.5	82.5	82.8	83.1	83.1
Western Trust	82.2	82.0	82.1	82.2	82.2

Male Life Expectancy at Birth

Local Government District	2014-16	2015-17	2016-18	2017-19	2018-20
Antrim and Newtownabbey	78.8	79.1	79.4	79.5	78.8
Ards and North Down	79.7	79.5	79.7	79.5	79.6
Armagh City, Banbridge and Craigavon	79.2	79.0	79.1	79.5	79.3
Belfast	76.0	75.8	76.3	76.1	75.8
Causeway Coast and Glens	79.8	79.6	79.3	79.5	79.7
Derry City and Strabane	77.6	77.7	78.0	77.8	78.0
Fermanagh and Omagh	78.6	78.7	79.2	79.3	79.2
Lisburn and Castlereagh	80.1	79.8	80.2	80.1	80.3
Mid and East Antrim	78.8	78.6	78.9	79.1	79.0
Mid Ulster	79.6	79.4	79.3	79.7	79.6
Newry, Mourne and Down	79.0	78.9	78.9	79.2	79.3

Female Life Expectancy at Birth

Local Government District	2014-16	2015-17	2016-18	2017-19	2018-20
Antrim and Newtownabbey	82.1	82.0	82.0	82.7	82.6
Ards and North Down	82.9	82.6	82.6	82.9	82.7
Armagh City, Banbridge and Craigavon	82.5	82.7	82.9	83.1	83.2
Belfast	81.1	81.0	81.1	81.0	80.5
Causeway Coast and Glens	83.0	83.2	83.1	82.9	82.6
Derry City and Strabane	81.9	81.4	81.3	81.4	81.6
Fermanagh and Omagh	82.6	82.5	83.0	83.2	83.2
Lisburn and Castlereagh	83.5	83.4	83.2	83.5	83.3
Mid and East Antrim	82.8	82.7	82.5	82.7	82.3
Mid Ulster	83.4	82.7	82.7	83.2	83.1
Newry, Mourne and Down	82.6	82.6	83.1	83.3	83.2

NI Total deaths Cause of death category	Male			Female		
	2019	2020	Change	2019	2020	Change
Circulatory	1,914	1,976	62	1,772	1,812	40
Respiratory	953	823	-130	1,017	892	-125
COVID	-	796	-	-	829	-
Cancer	2,344	2,428	84	2,133	2,188	55
Metabolic	160	167	7	180	196	16
Mental & Behavioural	527	554	27	880	886	6
Nervous	445	462	17	647	695	48
Digestive	408	485	77	437	472	35
Genitourinary	106	116	10	178	140	-38
Maternal/Infant	76	77	1	58	69	11
Other	857	849	-8	666	702	36

Note: 'change' column refers to the number of deaths registered in 2020 minus the number registered in 2019 deaths for each cause of death category.

Source: NISRA, <https://www.nisra.gov.uk/statistics/births-deaths-and-marriages/registrars-general-annual-report>

Official Figures

This report produced by Information Analysis Directorate (IAD) presents the latest official life expectancy estimates for NI, Local Government Districts and Health & Social Care Trust areas. The latest official Healthy Life Expectancy (HLE) and Disability Free Life Expectancy (DFLE) are also presented for NI.

Life Expectancy

The average number of years an individual born within a specified period can expect to live providing mortality patterns remain constant. Life expectancy figures are calculated using the [Chiang II](#)³ abridged life table method. This method has been adapted to extend the open-ended final age group to those aged 90 and over. Figures are presented for the expected years of life at time of birth, or at age 65, for both males and females and are aggregated by three years. Figures for the 'COVID Impact on Single-year Life Expectancy chapter' use the same life expectancy method, but are presented by single year.

Life Expectancy Gap

This is defined as the difference between life expectancy estimates, either between two populations at a given point in time, or within a single population between two points of time. Further life expectancy gaps between the most & least deprived areas and between rural & urban areas are routinely calculated for the Health Inequalities Annual Report⁴.

Contributions to Life Expectancy Gap

Life expectancy gaps exist due to differences in mortality patterns between areas, which can be assessed by the contribution of differences in death rates within age bands and across different causes of death. Contributions to gaps presented within this report represent the amount that life expectancy would improve in the area with lower life expectancy if its mortality rate was reduced to that in the area it is being compared with, assuming all other rates remained constant. Within this report, contributions that widen the inequality gap (i.e. where mortality rate is higher in the area with lower life expectancy) are represented with a positive value, while contributions that offset the gap (i.e. where mortality rate is higher in the area with higher life expectancy) are represented with a negative value.

Life Expectancy Decomposition Methodology

To measure the contribution of age-specific mortality changes to the change in the life expectancy gap over time, a life table decomposition method⁵ for both age and cause of death is used. It assumes that the distribution of deaths by cause is constant within five year age bands in each population. The difference in all-cause mortality between populations can then be distributed into contributions from each cause of death within each age group, proportionate to the difference in mortality from each cause of death within each age group.

³ http://apps.who.int/iris/bitstream/10665/62916/1/15736_eng.pdf

⁴ <https://www.health-ni.gov.uk/articles/health-inequalities-statistics>

⁵ Arriaga, Eduardo. 1984 "Measuring and Explaining the Changes in Life Expectancies".

Healthy Life Expectancy and Disability-Free Life Expectancy

Healthy Life Expectancy 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). Disability-Free Life Expectancy 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. Each figure is calculated using the [Sullivan](#)⁶ method excluding populations that reside in communal establishments.

Rounded Figures

Values presented are rounded to one decimal place independently. As a result, the sum of component items may not therefore always add to the totals shown.

Sources of Information

All life expectancy analyses and calculations are based on official deaths data sourced from the General Register Office and population data published by NISRA. Information used to calculate Healthy Life Expectancy (HLE) and Disability Free Life Expectancy (DFLE) have been sourced from the Health Survey Northern Ireland (DoH), Interim Life Tables (ONS), NI Household Projections (NISRA), and the Mid-Year Population Estimates (NISRA).

Year of Death

All death figures used in this report are based on the year in which the death was registered, and therefore not necessarily the year in which the death occurred. While the majority of deaths are registered shortly after death, there may be some delay in registering others, particularly involving events such as infant death or suicide.

Cause of Death Classification

Analyses contained within this report are based on the single main underlying cause of death classification, which simplifies the fact that a death can be the result of a variety of different causes. Causes of death have been disaggregated into 11 broad causes, further broken down into 22 specific sub-causes, defined according to the International Classification of Diseases, Tenth Revision (ICD-10). A full breakdown of ICD-10 codes grouped into each cause of death can be found on page 37. Note that, due to the ongoing review of suicide statistics, the 'Accidental' and 'Intentional self-harm and event of undetermined intent (Suicide)' categories are not present in this report. Both categories have been temporarily grouped in 'Other causes' until completion of the review.

⁶ https://webgate.ec.europa.eu/chafea_pdb/assets/files/pdb/2006109/2006109_d5sullivan_guide_final_jun2007.pdf

Other regular reports in this series include⁷:

Health Inequalities Annual Report – This annual publication analyses health inequality gaps within NI and presents a comprehensive analysis of health inequality gaps between the most and least deprived areas of NI, and within HSC Trust and LGD areas across a range of indicators.

Making Life Better: 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 NI.

Coronavirus Related Health Inequalities – assessment of differences in positive COVID-19 test cases, COVID-19 admissions and deaths between the most and least deprived areas of Northern Ireland.

Review of Suicide Statistics in Northern Ireland

Suicide deaths in Northern Ireland are defined as deaths from Self-inflicted Injury (also referred to as intentional self-harm) as well as Events of Undetermined Intent. This is consistent with the UK National Statistics definition. A death which is suspected to be suicide must be referred to the Coroner, with the information provided by coroners at registration of the death then used to code the underlying cause of death. In some instances, it can be difficult to establish whether the cause of death was suicide. If it is not clear, or the Coroner has not specifically stated that it is a suicide, these are coded as 'Undetermined'.

Following a quality exercise between NISRA Vital Statistics Unit and the Coroners' Service, to better understand drug related deaths and intent, improvements are being made in order to reduce the number of deaths coded as 'Undetermined'. This process highlighted that some deaths coded as 'Undetermined' would be better classified as 'Drug-related', 'Accidental' or 'Intentional self-harm and event of undetermined intent (Suicide)'. The review of suicide statistics should be completed in spring 2022. However, whilst the review is ongoing individual values will not be reported for 'Accidental' or 'Intentional self-harm and event of undetermined intent (Suicide)' categories. Instead, these categories have been added to the 'Other causes' category within this report (see below for a full list of ICD-10 codes). It is envisaged that the review will create a statistical discontinuity for these categories from 2015 onwards, and figures will therefore be updated in future releases of this report.

Further information on this review and detailed statistics on the number of suicides registered each year in Northern Ireland can be accessed at the link below.

<https://www.nisra.gov.uk/publications/suicide-statistics>

Changes in reporting of death categories for the current report

In previous iterations of this report, and other reports produced by PHIRB, mortality for 'Intentional self-harm and event of undetermined intent (Suicide)' and 'Accidental' causes was reported. However, due to the ongoing review of suicide statistics deaths with these codes have now been added to the 'Other causes' category. This includes:

ICD-10 Underlying Cause Code	Description
X60-84, Y87.0	Self-inflicted Injury
Y10-Y34, Y87.2	Events of Undetermined Intent
V01-X59, Y85, Y86	Accidents
V01-V99	Transport accidents

⁷ <https://www.health-ni.gov.uk/topics/dhssps-statistics-and-research/health-inequalities-statistics>

COVID deaths

In order to show the true extent of the impact of coronavirus-related deaths on life expectancy, chapter 8 presents single-year life expectancy estimates highlighting the contribution of COVID deaths to the change in life expectancy between 2019 and 2020. COVID, as defined in this report, refers to ‘deaths due to COVID-19’, according to the definition employed by NISRA in the reporting of deaths in the 2020 Registrar General Annual Report (<https://www.nisra.gov.uk/statistics/births-deaths-and-marriages/registrars-general-annual-report>). A full listing of ICD-10 codes used in the definition are as follows:

ICD-10 Underlying Cause Code	Description
U07.1	COVID-19, virus identified (positive test)
U07.2	COVID-19, virus not identified (clinically-epidemiologically diagnosed COVID-19, probable, suspected)

Charts Presented in this Report

This report contains charts examining each of the observed life expectancy gaps. An explanation of how to interpret these charts is illustrated below.

The sample charts below analyse two fictional areas or time period, “A” and “B”, in which area “A” has a life expectancy 5 years lower than that in area “B”.

Decomposition by Age

The chart to the right is used to illustrate the proportion of each life expectancy gap attributable to various age bands.

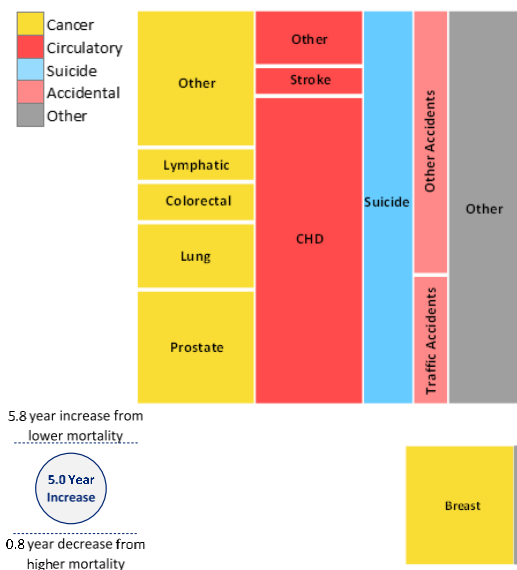
The lower life expectancy (Area A) is presented on the left, while the higher life expectancy (Area B) is presented to the right.



Between these columns, the contribution of mortality within each age band is represented by the height of the floating column. Age bands which offset the gap are presented as hollow squares.

Decomposition by Cause of Death

Throughout this report, grid charts (as below) set out the contribution of various causes of death to the difference in life expectancy between two areas or time periods. Those causes depicted in the square to the top represent causes of death which were more prevalent in Area A, while the square at the bottom presents the causes that had higher mortality in Area B, which offset the inequality gap.



The greater the area allocated to a cause, the greater the contribution of that cause to the difference in life expectancy.

Next to the grids (in the bottom left corner), the total positive and negative contributions are presented as well as the overall differential. A full breakdown of the contribution from individual causes can be found in tables in Appendix A. Causes labelled “Other” indicate the combined contribution of causes which were individually too small to present, as well as the ‘other’ cause of death category.

Causes of Death ICD-10 Definitions

	Cause of death	ICD-10 code
Red	Diseases of the circulatory system (Circulatory)	I00-I99
	Ischaemic heart disease (CHD)	I20-I25
	Cerebrovascular disease (stroke)	I60-I69
	All other diseases of the circulatory system	
Green	Diseases of the respiratory system (Respiratory)	J00-J99
	Pneumonia	J12-J18
	Chronic lower respiratory diseases	J40-J47
	All other diseases of the respiratory system	
Grey	COVID	U07.1, U07.2
Yellow	Malignant neoplasms (Cancer)	C00-C99
	Malignant neoplasm of trachea, bronchus or lung	C33-C34
	Malignant neoplasm of breast	C50
	Malignant neoplasm of prostate	C61
	Malignant neoplasm of colon, rectum and anus	C18-C21
	Malignant neoplasm of lymphatic, haematopoietic tissue	C81-C96
	Malignant neoplasm of pancreas	C25
	All other malignant neoplasms	
Brown	Endocrine, nutritional and metabolic diseases (Metabolic)	E00-E90
	Diabetes mellitus	E10-E14
	All other endocrine, nutritional and metabolic diseases	
Blue	Mental and behavioural diseases (Mental)	F00-F99
Purple	Diseases of the nervous system and the sense organs (Nervous)	G00-H95
Orange	Diseases of the digestive system (Digestive)	K00-K93
	Chronic liver disease	K70, K73-K74
	All other diseases of the digestive system	
Light Green	Diseases of the genitourinary system (Genitourinary)	N00-N99
	Diseases of the kidney and ureter	N00-N29
	All other diseases of the genitourinary system	
Pink	Maternal/Infant	
	Certain conditions originating in the perinatal period	P00-P96
	Congenital malformations, deformations and chromosomal abnormalities	Q00-Q99
Grey	Other causes including all causes not covered by the above categories + accidents (V01-X59, Y85, Y86) and Intentional self-harm and event of undetermined intent [Suicide] (X60-X84, Y10-Y34, Y87.0, Y87.2)	

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Link to reports: <http://www.health-ni.gov.uk/topics/dhssps-statistics-and-research/health-inequalities-statistics>

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<http://www.nisra.gov.uk/>

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