

INFORMATION
ANALYSIS
DIRECTORATE



Life Expectancy in Northern Ireland 2019-21

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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Life Expectancy in Northern Ireland

2019-21

Authors: Robbyn Atcheson, Matthew Carson & Caolan Laverty

Public Health Information & Research Branch, Information Analysis Directorate

Lead Statistician: Bill Stewart

Department of Health
Castle Buildings, Belfast BT4 3SQ

☎ Tel: 028 905 22591

☎ Ext: 22591

✉: healthinequalities@health-ni.gov.uk

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

For information on other Government statistics contact:
The Northern Ireland Statistics and Research Agency (NISRA)
Colby House, Stranmillis Court, Belfast, BT9 5RR

☎ Tel: 02890388400 ✉ Email: info@nisra.gov.uk

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

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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.

Feedback

We invite you to feedback your comments on this publication to: healthinequalities@health-ni.gov.uk

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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. 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.

The analysis in this report is based on the latest official deaths statistics, which include deaths registered up to 2021 published in the [Registrar General Annual Report](#) and does not reflect deaths occurring in the past 12 months. Further provisional deaths statistics for more recent years are available from the Northern Ireland Statistics & Research Agency (NISRA) within the [Registrar General Quarterly Tables](#).

Figures in this release include deaths due to COVID in 2020 and 2021

When analysing life expectancy, deaths observed over 3 years are averaged 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 and 2021 compared with recent years. In order to show the true extent of the impact of deaths due to COVID on life expectancy, chapter 8 presents single-year life expectancy estimates. This chapter compares single year analysis of 2021 data with 2019 (where there were no deaths due to COVID), to illustrate the impact COVID has had on excess deaths. For the report as a whole, it should be noted that registrations of deaths due to COVID in 2020 only occurred from March (near the beginning of the pandemic), while registrations for deaths due to COVID in 2021 occurred throughout the year. This should be considered when making comparisons between the rate of deaths due to COVID in 2020 and 2021. **'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

Note that the two previous life expectancy annual reports did not report on suicide due to an ongoing review conducted by NISRA and the Coroners' Service into the classification of undetermined deaths between 2015 and 2020. As the review has since been completed, this publication now reports changes and gaps in life expectancy based on deaths due to suicide, in line with analysis included prior to the 2017-19 report. 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 2019-21, life expectancy in Northern Ireland (NI) was 78.4 years for males and 82.2 years for females.
- Since 1980-82, life expectancy at birth has increased by 6.7 years for females and 9.2 years for males. However, in recent years life expectancy growth has stalled for both males and females.
- Male life expectancy was highest in the Lisburn & Castlereagh LGD (80.2 years) and lowest in the Belfast LGD (75.6 years).
- As with males, life expectancy for females was highest in the Lisburn & Castlereagh LGD (83.2 years) and lowest in the Belfast LGD (80.5 years).

Decomposition of Life Expectancy² Trend over the Last 5 Years

- Since 2015-17, there has been no change in life expectancy for males or females.
- Increased mortality rates among 30-39 year olds had a negative effect on male life expectancy over the last 5 years, while decreased mortality among 60-79 year olds had a positive impact.
- Reduced mortality mainly from cancer, respiratory disease and circulatory disease increased male life expectancy. However, these gains were completely offset by increases in mortality from other causes including deaths due to COVID.
- A decrease of 0.9 years in female life expectancy, mainly due to higher mortality from deaths due to COVID, was offset by 0.8 years due to reduced mortality from respiratory disease, circulatory disease and other causes.

Gender Gap

- In 2019-21, females in NI could expect to live 3.8 years longer than males.
- Across all age groups, male mortality was higher than that of females, most notably within the 70-79 years age group which contributed 0.9 years to the gap.
- Higher male mortality from the combination of circulatory disease (1.1 years) and cancers (excluding breast) (1.1 years) accounted for 2.2 years of the 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.

Deprivation Gap

- In 2019-21, males living in the 20% most deprived areas of NI could expect to live 73.9 years, 7.3 years less than those living in the 20% least deprived areas (81.2 years).
- Female life expectancy in the 20% most deprived areas was 79.1 years, 5.1 years fewer than females in the 20% least deprived areas (84.2 years).
- For both males and females, with the exception of colorectal cancer in females, mortality across all categories of death was higher in the most deprived areas than in the least deprived.
- Higher mortality from circulatory disease (1.3 years) and cancer (1.2 years) combined contributed just under a third of the male life expectancy deprivation gap. There were also notable contributions from deaths due to COVID (0.4 years) and Suicide (0.5 years).
- Mortality from cancer (1.3 years) was the largest single contributor to the female deprivation gap, more than half of which (0.8 years) was due to lung cancer.

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 comparing 2021 with 2019. 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 78.1 years in 2021.
- The decrease in male life expectancy was due to increased mortality rates among 40+ year olds.
- COVID mortality accounted for the majority of the decrease in male life expectancy (-1.2 years). This reduction was offset slightly by several conditions, including respiratory diseases (0.2 years).
- Similar to males, female life expectancy decreased by 0.8 years from 82.8 years in 2019 to 82.0 years in 2021.
- This decrease was primarily due to increased mortality in those aged 60+.
- COVID mortality again accounted for the majority of the decrease in female life expectancy (-0.9 years) which was offset slightly by several conditions including respiratory diseases (0.2 years).

Healthy and Disability-Free Life Expectancy

- Male healthy life expectancy (HLE) stood at 60.6 in 2019-21 compared with 59.1 years in 2015-17. This change was not statistically significant.
- Over the same period, female healthy life expectancy increased significantly from 60.3 to 62.7 years.
- Between 2015-17 and 2019-21, disability-free life expectancy (DFLE) increased by 3.6 years for males from 55.0 to 58.6 years and by 3.3 years for females from 55.4 to 58.7 years.
- In 2019-21, the HLE gap between the 20% most and least deprived stood at 11.2 years for males and 15.1 years for females.
- The DFLE gap between the most and least deprived areas for males was 9.8 years in 2019-21, compared with 11.3 years for females.

Life expectancy at birth in 2019-21 was 78.4 years for males and 82.2 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 2019-21, females in Northern Ireland could expect to live 3.8 years longer than males.

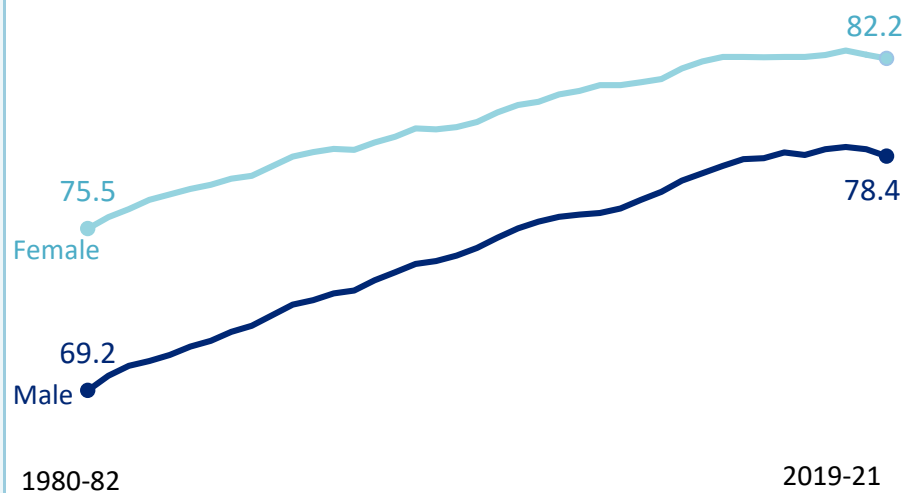
Male and Female Life Expectancy at Birth (2019-21)*



Life expectancy for both males and females has grown steadily since 1980-82, but has slowed in recent years.

Since 1980-82, life expectancy at birth has increased by 6.7 years for females and 9.2 years for males. However in recent years, life expectancy growth has stalled for both males and females. While the gender gap had generally narrowed since 1980-82, it has remained fairly steady in recent years.

Life Expectancy at Birth (1980-82 to 2019-21)*

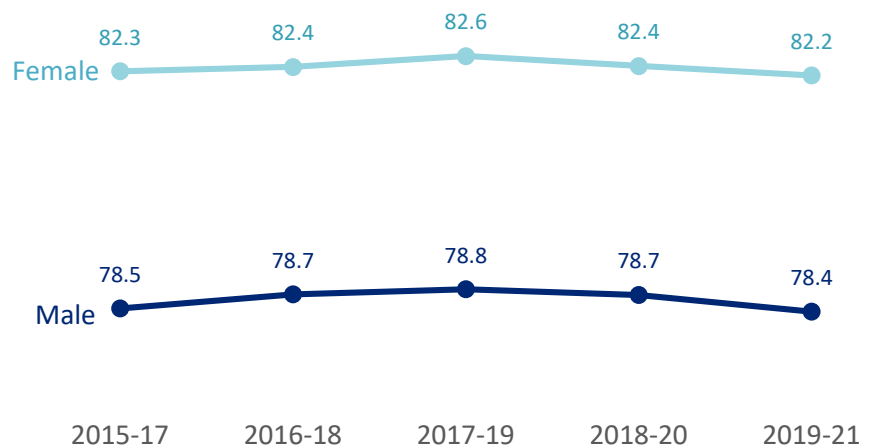


The increase in life expectancy has slowed in recent years.

Since 2015-17, there has been no significant change in life expectancy for males or females. This compares with a statistically significant increase of 0.4 years for males and no change for females in the previous five-year period (2011-13 to 2015-17).

* 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.

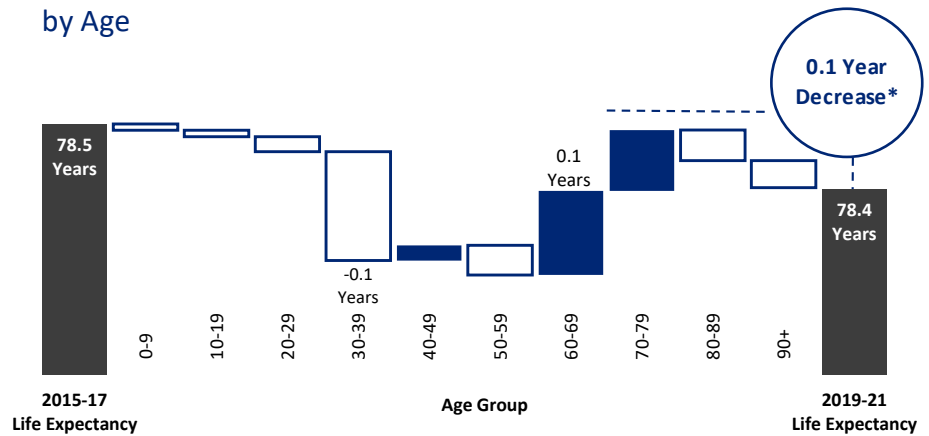
Life Expectancy at Birth (2015-17 to 2019-21)*



The majority of age groups had a negative contribution to the change in life expectancy between 2015-17 to 2019-21.

Increased mortality rates among 30-39 year olds had the most notable negative effect on male life expectancy over the last five years. This was mainly due to accidental deaths. The change was offset slightly by reduced mortality from other age groups, mainly among those aged 60-79. The overall 0.1 years decrease was not statistically significant.

Decomposition of Change in Male Life Expectancy over Time by Age



Reduced mortality mainly from cancer, respiratory disease, and circulatory disease, increased male life expectancy. However, these gains were 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 respiratory disease contributed a further 0.3 years.

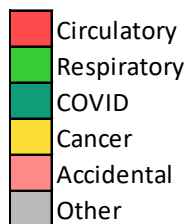
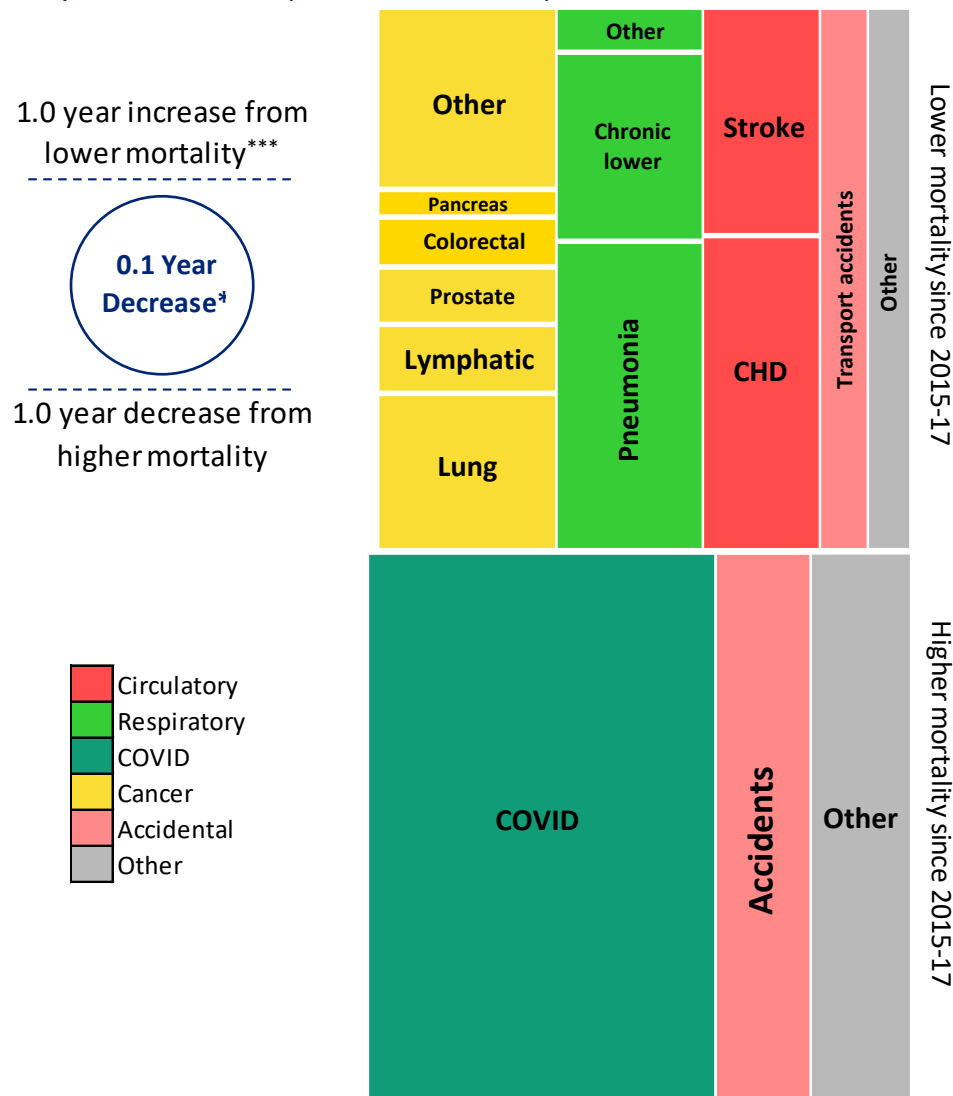
However, the overall 1.0 years increase was offset by 1.0 years due to increased mortality from a range of other causes, most notably from deaths due to COVID**.

*Change was not statistically significant.

** 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 (2015-17 to 2019-21)

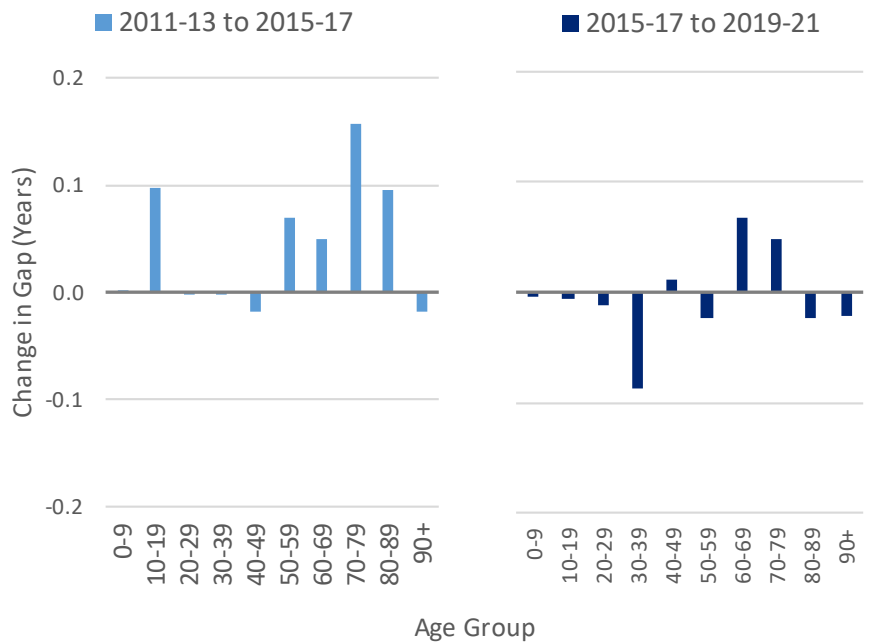


Compared with the previous 5-year period, improvements in mortality slowed for the majority of age groups between 2015-17 and 2019-21.

The recent slowdown in male life expectancy improvement can be examined by comparing the changes observed from 2015-17 to 2019-21 (0.1 year decrease)* with the previous 5-year period, when male life expectancy increased by 0.4 years.

Between 2015-17 and 2019-21, with the exception of those aged 60-69, all age groups have seen either less of an improvement in life expectancy, or declined when compared with the previous period.

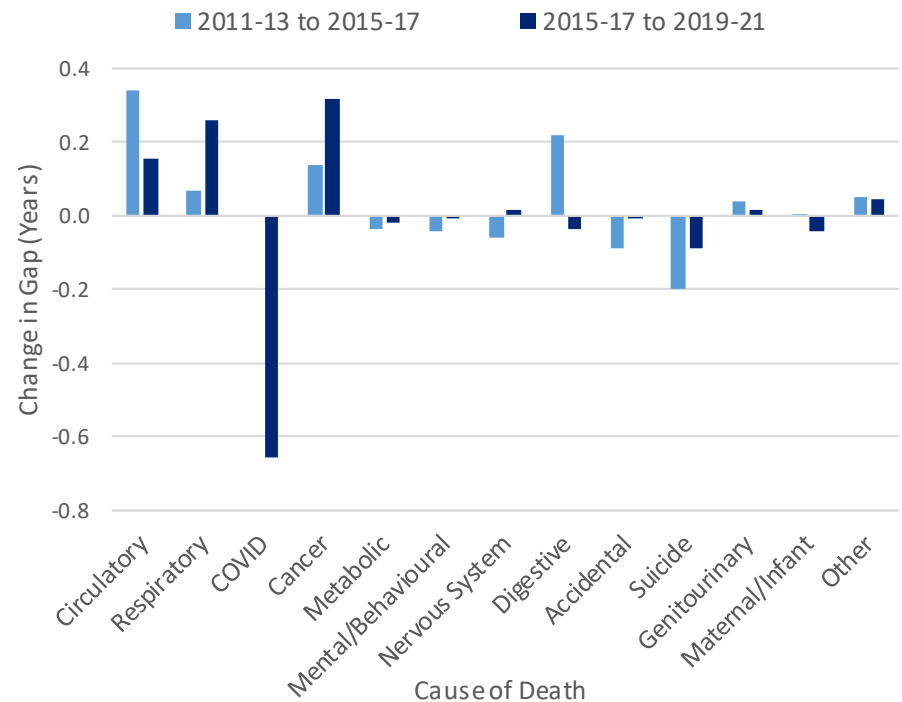
Decomposition of Change in Male Life Expectancy by Age



Between 2015-17 and 2019-21, in addition to the substantial negative impact from deaths due to COVID, there was a slower improvement in circulatory disease mortality (0.2 years) than that seen in the previous 5 year period (0.3 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 0.7 years*** when compared with the previous period.

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



*Change was not statistically significant.

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

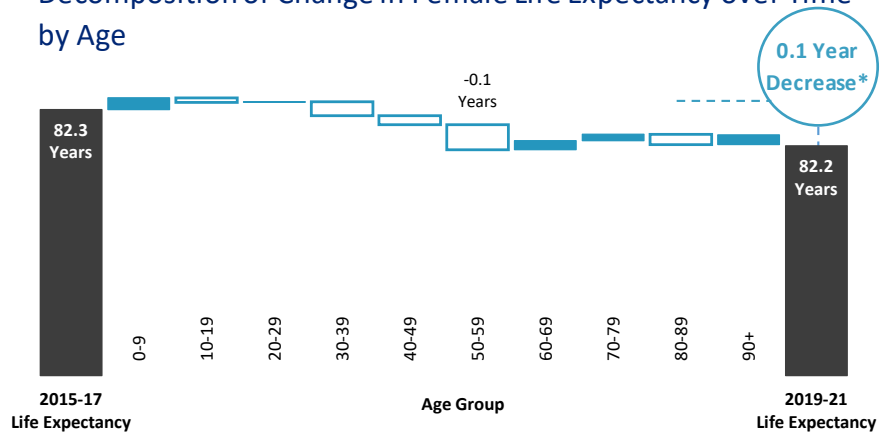
*** Due to use of 3 year aggregate values used in creating figures, the impact of COVID deaths (which only impacts 2020 and 2021) is not as profound. Chapter 8 shows the full impact of COVID on single year life expectancy estimates.

3. Female Life Expectancy Over Time Decomposition

Similar to males, there was no significant change in life expectancy for females over the last 5 years.

Higher mortality in 50-59 year olds had the largest negative contribution to the change (-0.1 years).

Decomposition of Change in Female Life Expectancy over Time by Age



While reduced mortality, mainly from respiratory and circulatory disease, contributed to a female life expectancy increase of 0.8 years, this increase was completely offset by deaths due to COVID and increased mortality from a range of other causes.

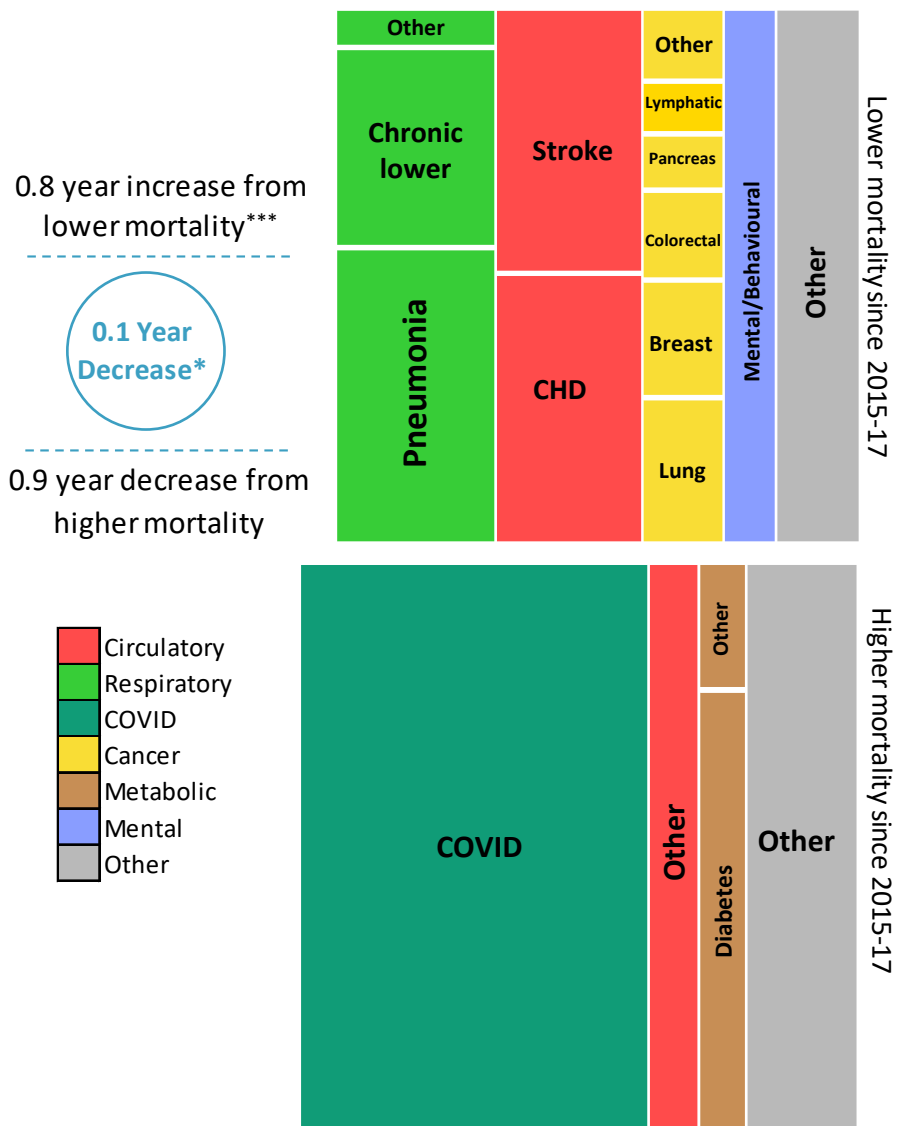
Lower mortality from respiratory disease, stroke and CHD accounted for over half (0.5 years) of the increase in female life expectancy. Reduced mortality from cancer and mental/behavioural diseases, as well as a range of 'Other' causes also contributed to the increase**.

However, this increase was offset by 0.9 years mainly due to COVID mortality (-0.6 years).

*Change was not statistically significant.
 **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.

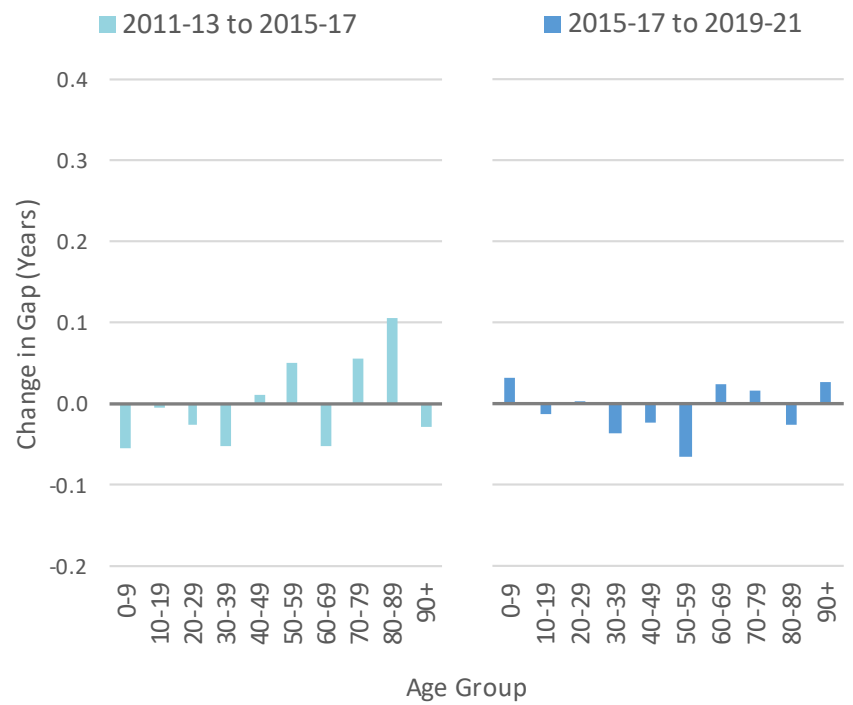
Decomposition of Change in Female Life Expectancy over Time by Cause of Death (2015-17 to 2019-21)



Similar to the previous 5 year period, broadly static mortality in all age groups made little or no change to female life expectancy from 2015-17 to 2019-21.

Changes in female life expectancy have remained similar to that during the 2011-13 to 2015-17 period, which also saw no overall change. Deaths among those aged 50-59 years saw a negative contribution of 0.1 years, as opposed to a small positive contribution in the previous five-year period. Mortality contributions from other age groups were similar, though mortality 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

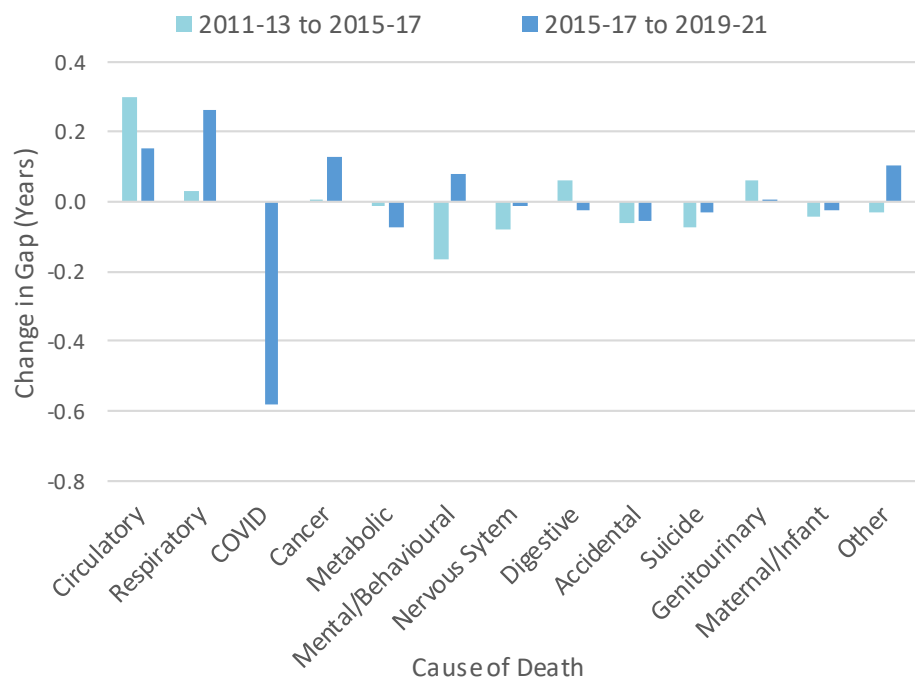


In addition to the notable negative contribution from deaths due to COVID, the positive contribution to female life expectancy from reduced circulatory mortality was just over half that seen in the previous 5 year period.

Deaths due to COVID had the largest negative contribution (0.6 years) to the change in life expectancy for 2015-17 to 2019-21, when compared with the previous period which predates the pandemic.

In contrast, there were improvements in mortality from respiratory disease, mental/behavioural disease and cancer compared with the previous five-year period, as well as a reduction in the negative contribution from nervous system disorders.

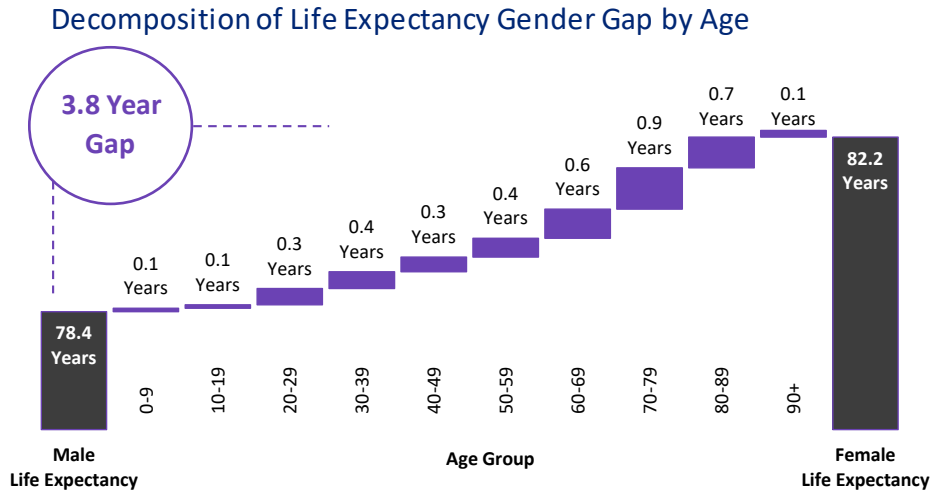
Decomposition of Change in Female Life Expectancy by Cause of Death*



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

In 2019-21, females in NI could expect to live 3.8 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 circulatory disease and cancer, contributed 4.3 years to the gender gap in life expectancy.

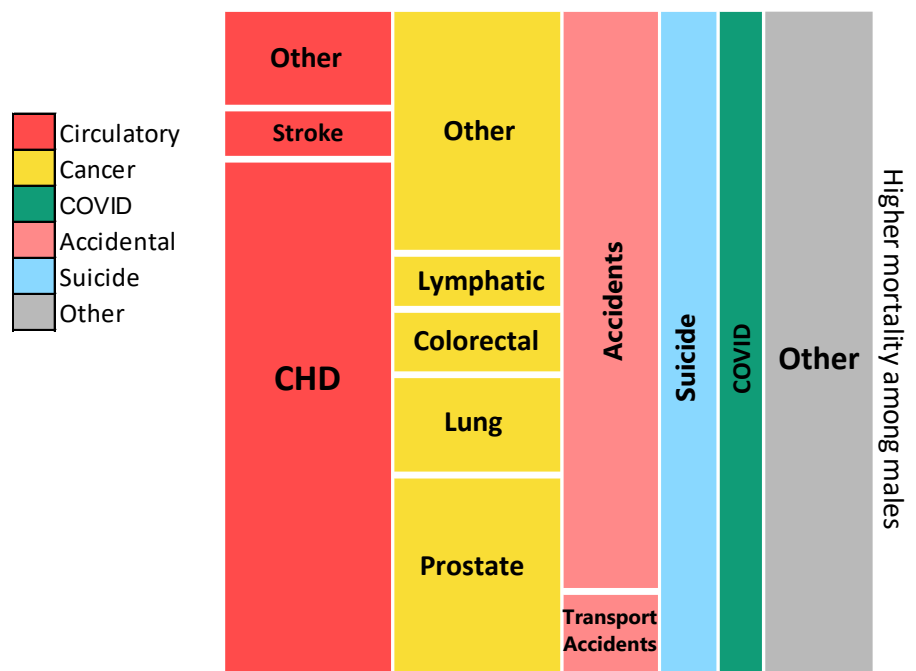
In 2019-21, higher mortality among males for a range of cancers (1.1 years) and circulatory causes (1.1 years) contributed 2.2 years to the life expectancy gender gap. A further 1.3 years of the gap was attributable to higher mortality among males in accidental deaths (0.6 years), suicide (0.4 years) and deaths due to COVID (0.3 years). ‘Other’ causes – which contain a combination of relatively less common causes of death, contributed a further 0.7 years to the gap.

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

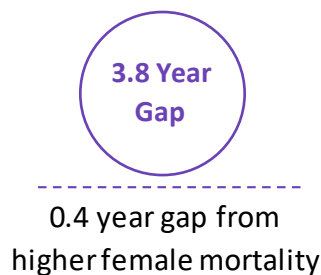
* A more detailed breakdown of the various contributions from different causes of death is available in [Appendix A](#).

** 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 Life Expectancy Gender Gap by Cause of Death*



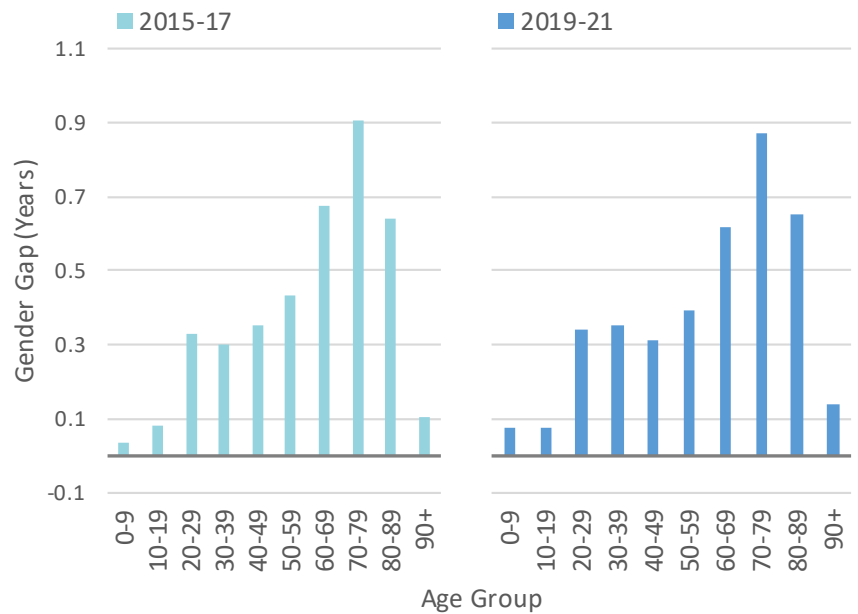
4.3 year gap from higher male mortality**



The contribution of each age group to the gender gap in 2019-21 was similar to that in 2015-17. 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 2015-17. However, in terms of the gender gap, the age contribution to the gap has remained largely similar with no notable change since 2015-17.

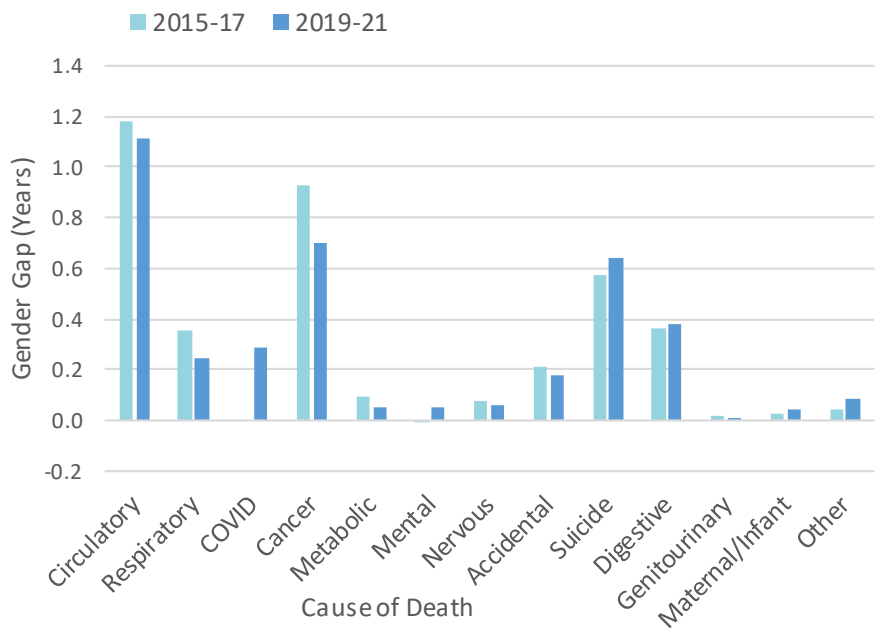
Contribution of Age Groups to Differences in the Life Expectancy Gender Gap



There has been little change in the pattern of contribution to the life expectancy gender gap by different causes of death since 2015-17.

Higher mortality among males from circulatory disease, cancer, and suicide continue to be the largest contributors to the life expectancy gender gap, though there were slight reductions in the contribution of male mortality for respiratory and cancer when compared to 2015-17.

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

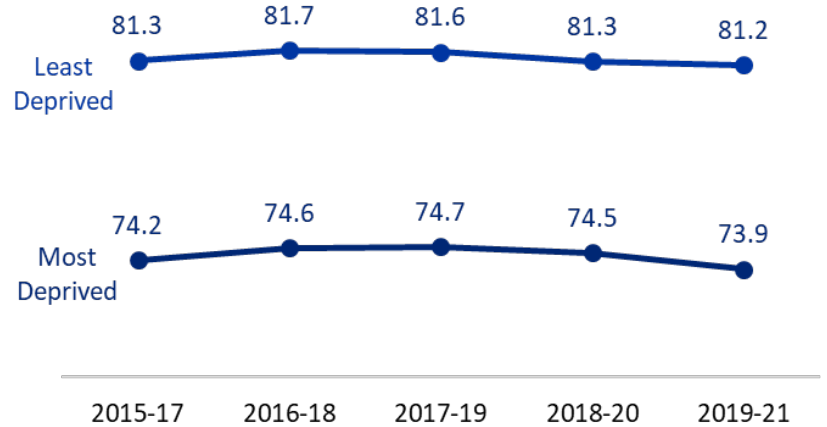


Values above 0 on the y-axis represent greater mortality among males, with values below 0 representing greater female mortality.

Between 2015-17 and 2019-21 male life expectancy in 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 74.2 years in 2015-17 compared with 73.9 years 2019-21. Life expectancy in the least deprived remained unchanged at 81.2 years in 2019-21 compared with 81.3 years in 2015-17.

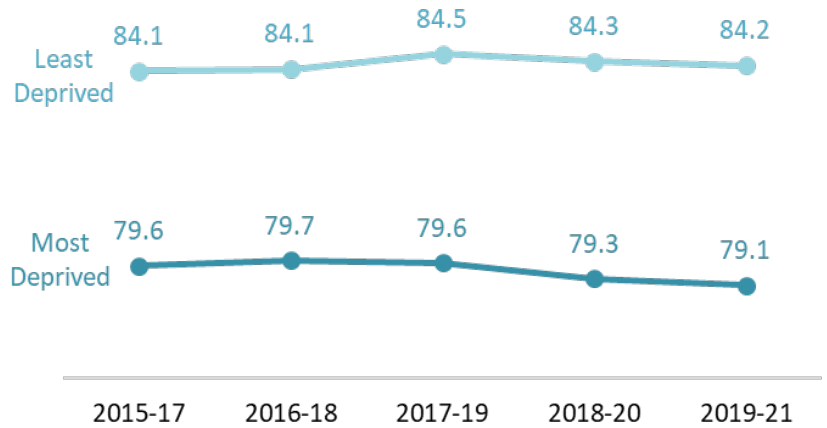
Male Life Expectancy by Deprivation (2015-17 to 2019-21)



There was no significant change in life expectancy for females living in the 20% most or least deprived areas between 2015-17 and 2019-21.

Female life expectancy in the least deprived areas stood at 84.2 years in 2019-21 compared with 84.1 years in 2015-17. In the most deprived areas life expectancy was 79.1 years in 2019-21, compared with 79.6 years in 2015-17. These changes were not statistically significant.

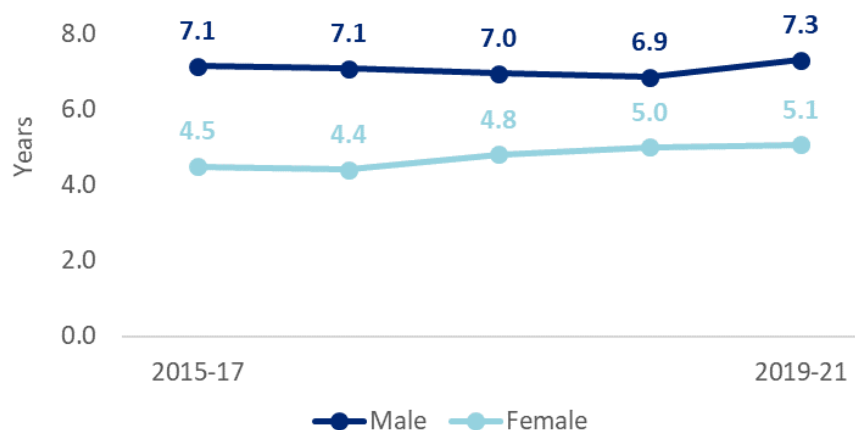
Female Life Expectancy by Deprivation (2015-17 to 2019-21)



The female life expectancy gap between the 20% most and least deprived areas widened significantly by 0.6 years between 2015-17 and 2019-21.

While the male life expectancy gap between the 20% most and least deprived areas widened slightly from 7.1 to 7.3 years since 2015-17, the change was not statistically significant.

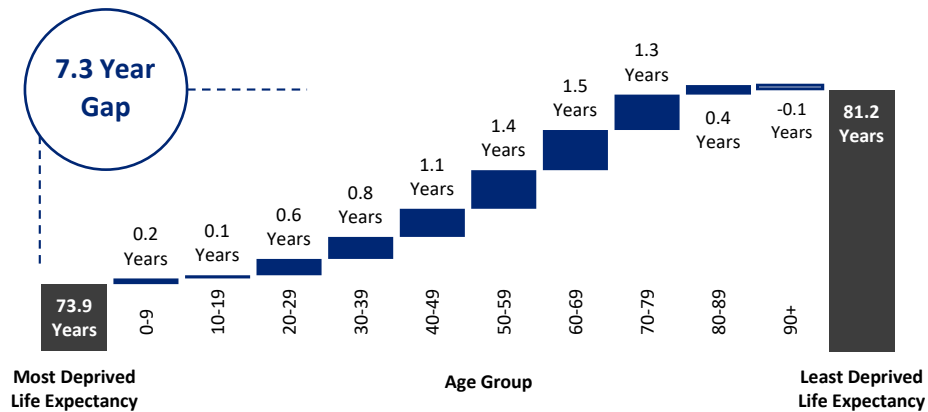
Male and Female Life Expectancy Deprivation Gap (2015-17 to 2019-21)



In 2019-21, life expectancy for males living in the 20% most deprived areas of NI was 73.9 years. This was 7.3 years less than those in the 20% least deprived areas (81.2 years).

Mortality across almost all age groups contributed towards the male life expectancy deprivation gap, with higher mortality in the most deprived areas compared with the least deprived. The exception was mortality rates for males aged 90 and over, which were higher in the least deprived areas. This was 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



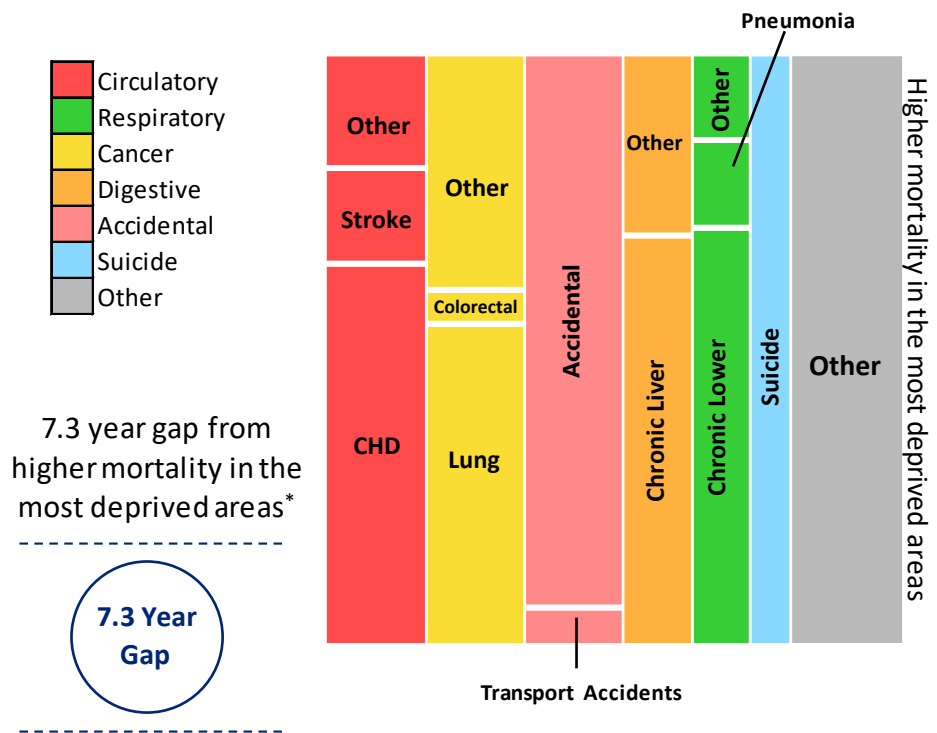
Mortality across all causes of death was higher in the most deprived areas than in the least deprived.

All causes of death** for males were higher in the 20% most deprived areas when compared with the 20% least deprived areas. Higher mortality from circulatory disease (1.3 years), cancer (1.2 years) and accidental (1.2 years) combined, contributed just over half the male life expectancy deprivation gap. 'Other' causes contributed 1.4 years to the gap which included deaths due to COVID (0.4 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.

**Analysis refers to broad categories of death. There may be specific classifications within these categories for which the observation does not apply.

Decomposition of Male Life Expectancy Deprivation Gap by Cause of Death



Pneumonia

Higher mortality in the most deprived areas

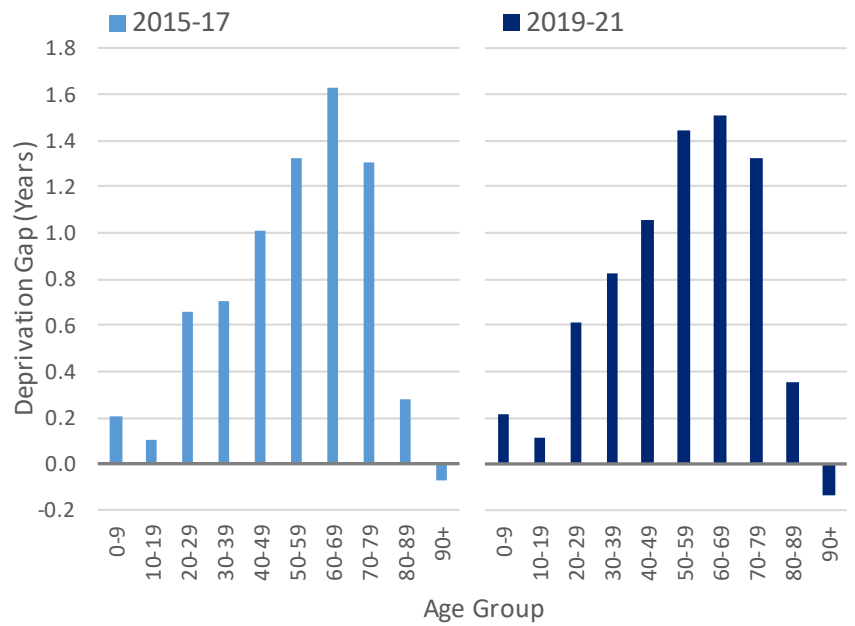
7.3 year gap from higher mortality in the most deprived areas*



The age contribution to the male deprivation gap in 2019-21 is similar to that in 2015-17, with higher mortality among males at older ages the largest contributor.

The total value for the male deprivation gap in 2015-17 (7.1 years) is also similar to the gap in 2019-21 (7.3 years). Although the gap for most age groups remained similar, there were slight increases in the contribution for those aged 30-39, 40-49, 50-59 and 80-89 years which increased by 0.1 years each in 2019-21. These negative contributions were offset slightly by decreased impact from the 20-29 and 60-69 age groups.

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

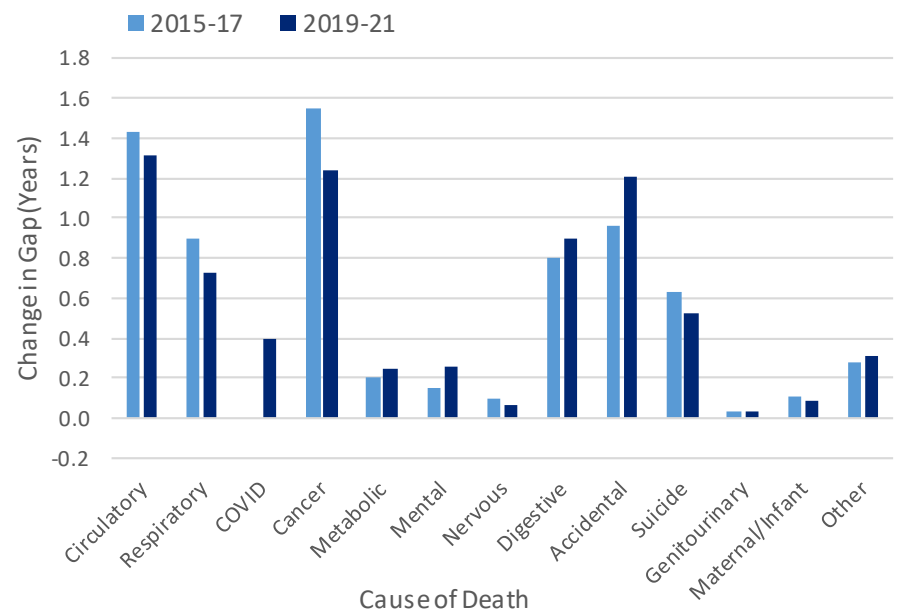


The contribution by different causes of death to the male life expectancy deprivation gap has followed a similar pattern since 2015-17.

Higher mortality from circulatory disease, cancer, digestive disease and accidents 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 0.3 years for circulatory disease and cancer respectively since 2015-17, whilst contributions from digestive disease and accidental have increased by 0.1 and 0.2 years respectively.

Deaths due to COVID accounted for a 0.4 year increase in the deprivation gap.

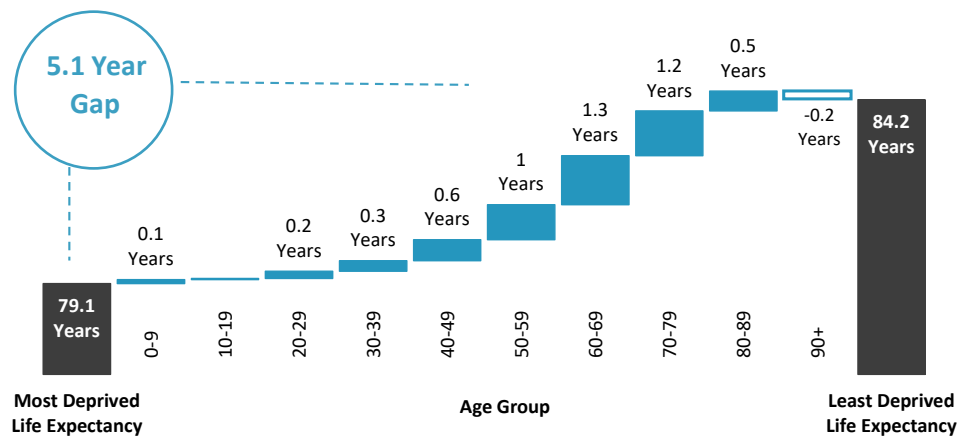
Contribution of Cause of Death to Differences in the Male Life Expectancy Deprivation Gap



Life expectancy for females living in the 20% most deprived areas in NI was 79.1 years. This was 5.1 years less than those in the 20% least deprived areas (84.2 years).

Approximately, half of the contribution to the total female life expectancy deprivation gap was from the 60-79 age group (2.6 years). This was largely attributable to higher mortality from chronic lower respiratory disease and lung cancer combined (1.0 years) 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.

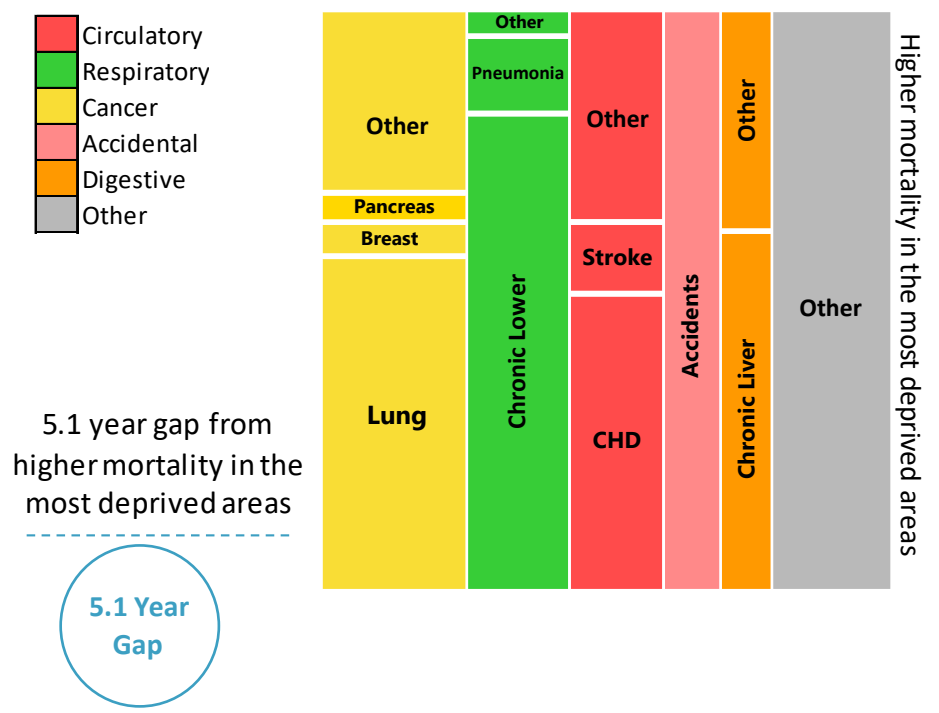
Decomposition of Female Life Expectancy Deprivation Gap by Age



Mortality from cancer (1.3 years) was the largest single contributor to the female deprivation gap, more than half of which (0.8 years) was due to lung cancer.

Respiratory diseases contributed 0.9 years to the gap, of which 0.8 years were attributable to chronic lower respiratory illnesses. Circulatory disease also contributed markedly to the gap (0.8 years). Deaths from a range of 'Other' causes contributed 1.0 years to the gap, while accidental and digestive-related causes each contributed 0.5 years.

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

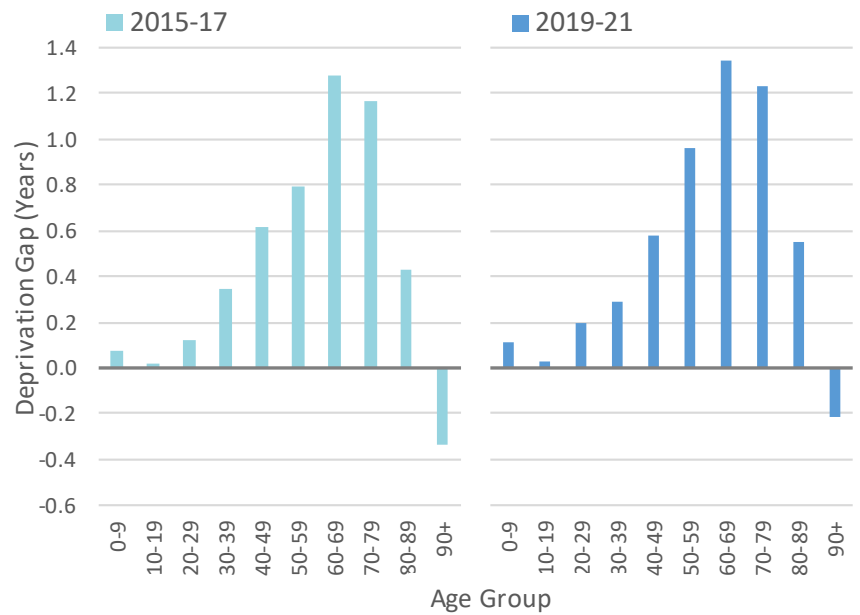


* A more detailed breakdown of the various contributions from different causes of death is available in [Appendix A](#).

As with males, in 2019-21 the age contribution to the female life expectancy deprivation gap remains similar to that in 2015-17. The deprivation gap widened from 4.5 years in 2015-17 to 5.1 years in 2019-21.

Those age groups that contributed to a change in the female life expectancy deprivation gap showed a 0.1 year increase. The exception was 50-59 year olds and those aged 90 or over, where the effect of higher mortality in the least deprived areas was less pronounced in 2019-21 when compared with 2015-17.

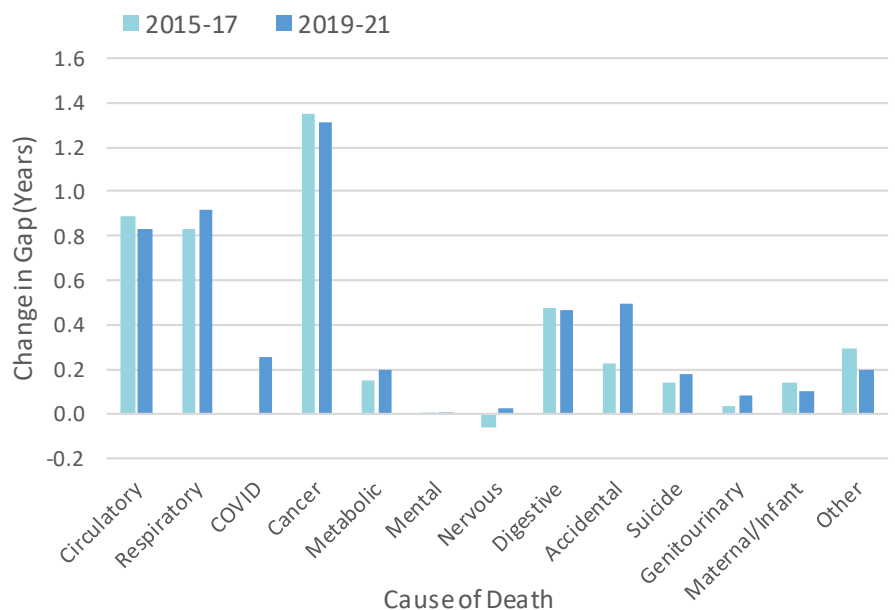
Contribution of Age Groups to Differences in the Female Life Expectancy Deprivation Gap



Between 2015-17 and 2019-21, with the exception of deaths due to COVID and accidental deaths, there has been little change in the causes of death that contributed to the female life expectancy deprivation gap.

The contribution to the female deprivation gap from accidental deaths have more than doubled in 2019-21 (0.5 years) compared with 2015-17 (0.2 years). In addition, deaths due to COVID contributed a decrease of 0.3 years in 2019-21. However, small positive contributions from circulatory disease, cancer, maternal/infant and 'Other' deaths slightly offset this increase.

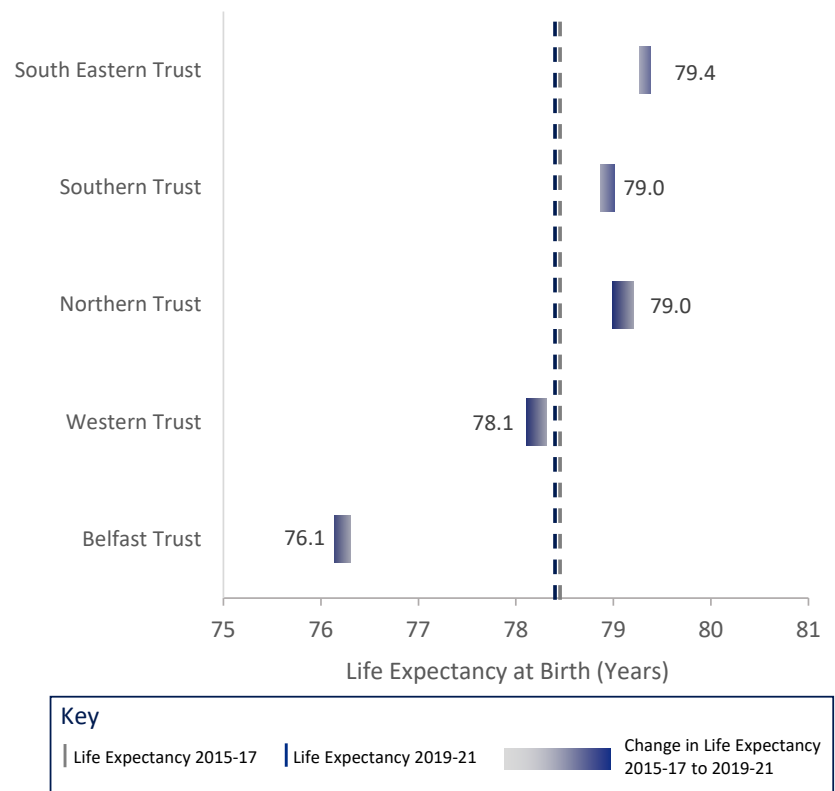
Contribution of Cause of Death to Differences in the Female Life Expectancy Deprivation Gap



In 2019-21, male life expectancy at birth ranged from 76.1 years in the Belfast Trust to 79.4 years in the South Eastern Trust.

Since 2015-17, there were no statistically significant changes in male life expectancy within any of the five HSC Trust areas.

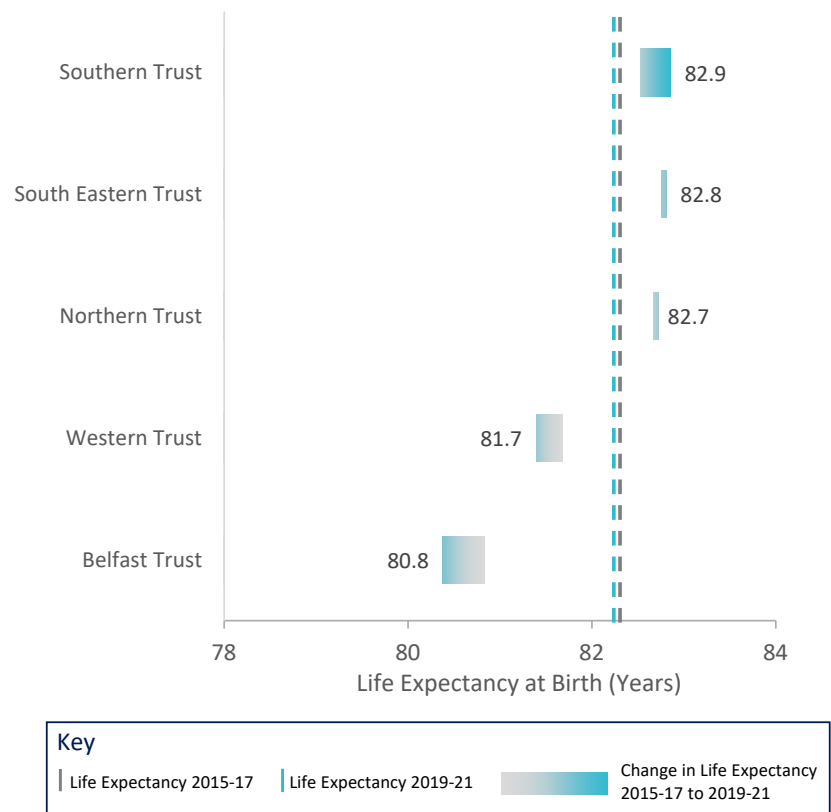
Male Life Expectancy at Birth by Trust (2015-17 to 2019-21)



Life expectancy at birth for females ranged from 80.8 years in the Belfast Trust to 82.9 years in the Southern Trust.

Between 2015-17 and 2019-21, female life expectancy increased by 0.3 years in the Southern Trust and decreased by 0.4 years in the Belfast Trust.

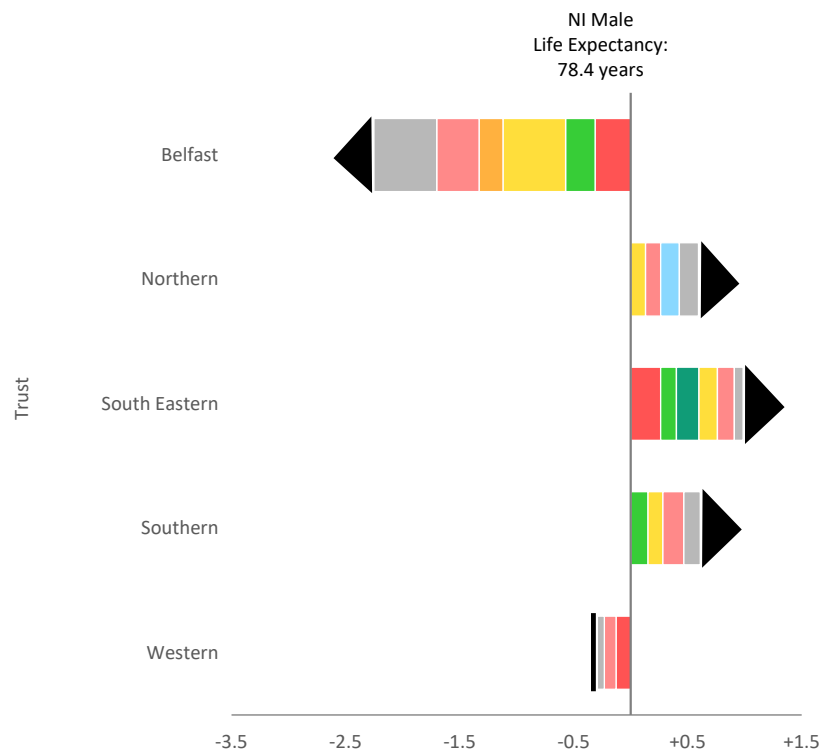
Female Life Expectancy at Birth by Trust (2015-17 to 2019-21)



In addition to grouped 'Other' causes, deaths from cancer, accidents and circulatory disease were the main contributors to the male life expectancy gap between Trusts and the NI average.

In 2019-21, 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 mainly due to higher mortality from 'Other' causes of death, cancer, accidental deaths, and circulatory disease.

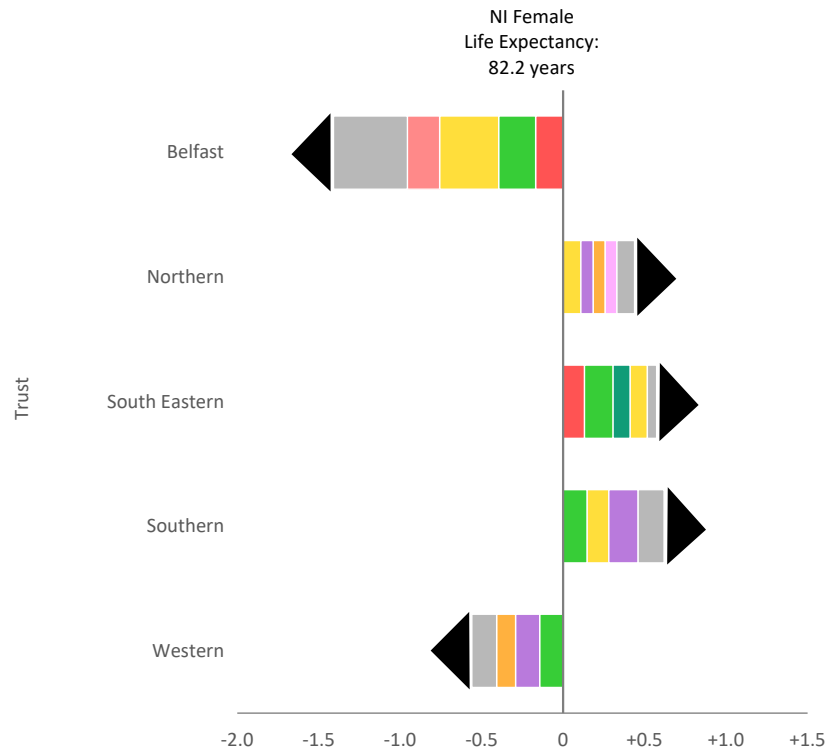
Decomposition of Male Life Expectancy (2019-21): Trust with NI



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.

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

Decomposition of Female Life Expectancy (2019-21): Trust with NI



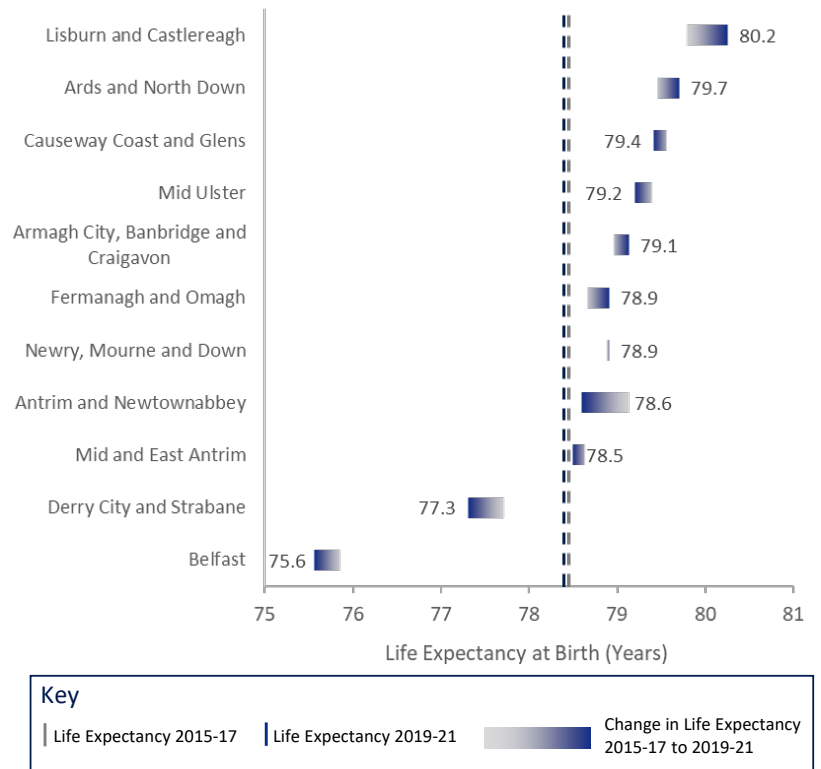
For each area, the life expectancy gap with the NI average has been broken down into its largest contributory causes of death. The contribution from other causes are combined into the 'Other' category. A more detailed breakdown is available in the accompanying tables available [online](#).

Key					Below NI Average	Similar to NI Average	Above NI Average
Circulatory	Respiratory	COVID	Cancer	Accidental	◀		▶
Mental & BD	Nervous	Digestive	Maternal/Infant	Other			
		Suicide					

Across LGDs in 2019-21, male life expectancy at birth ranged from 75.6 years in Belfast to 80.2 years in Lisburn and Castlereagh.

Since 2015-17, there were no statistically significant changes in male life expectancy within any of the LGD areas.

Male Life Expectancy at Birth by Local Government District (2015-17 to 2019-21)

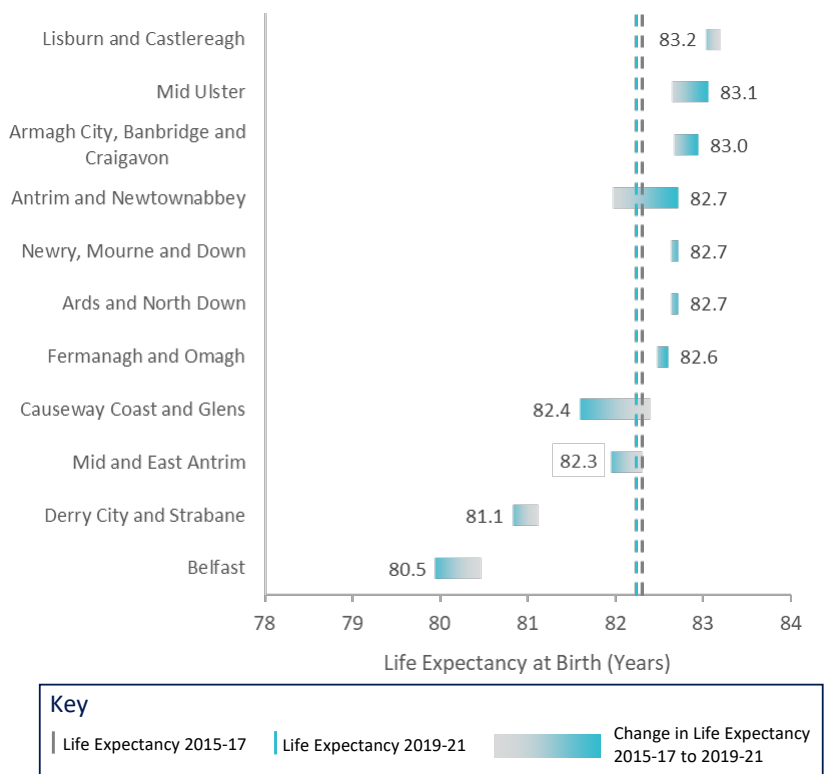


As with males, female life expectancy was highest in Lisburn and Castlereagh (83.2 years) and lowest in Belfast (80.5 years).

Female life expectancy decreased by 0.8 years in Causeway Coast and Glens between 2015-17 and 2019-21. Over the same period, life expectancy increased by 0.7 years in Antrim & Newtownabbey. Changes observed in the remaining LGDs were not statistically significant.

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

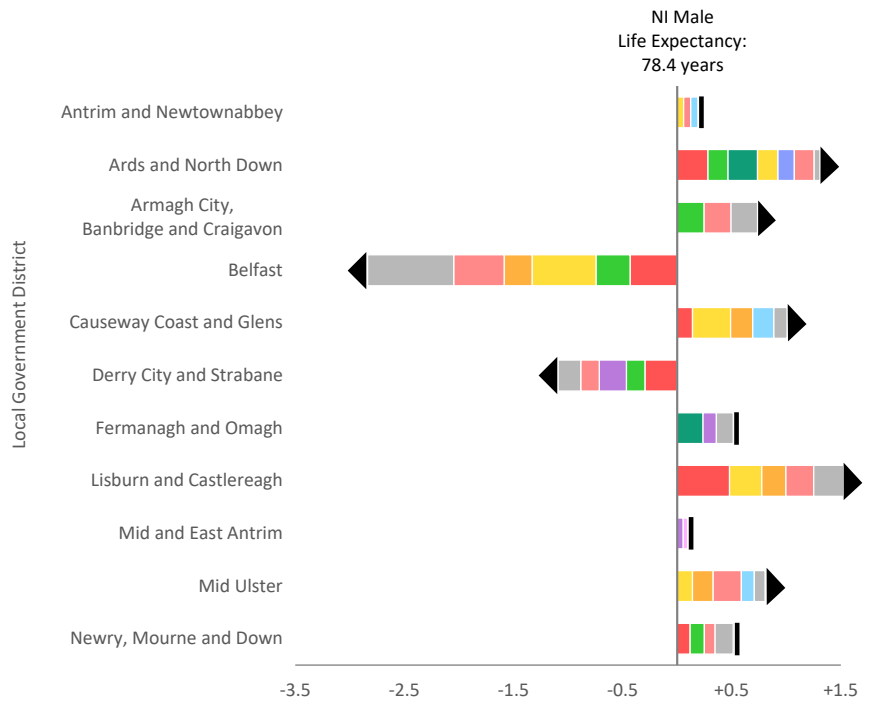
Female Life Expectancy at Birth by Local Government District (2015-17 to 2019-21)



Deaths from cancer, circulatory disease, accidental causes and 'Other' causes 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, accidental, circulatory disease, respiratory illness and digestive disorders. Life expectancy in Lisburn & Castlereagh LGD showed the greatest increase from the NI average, with circulatory disease being the largest contributor to the gap.

Decomposition of Male Life Expectancy (2019-21): Local Government Districts Compared with NI



Deaths from cancer, circulatory disease and 'Other' causes 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. Life expectancy was higher than the NI average in the majority of LGDs, however these differences were only significant in Armagh City, Banbridge & Craigavon, Lisburn & Castlereagh, and Mid Ulster LGDs.

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 are combined into the 'Other' category. A more detailed breakdown is available in the accompanying tables available [online](#).

Decomposition of Female Life Expectancy (2019-21): Local Government Districts Compared with NI



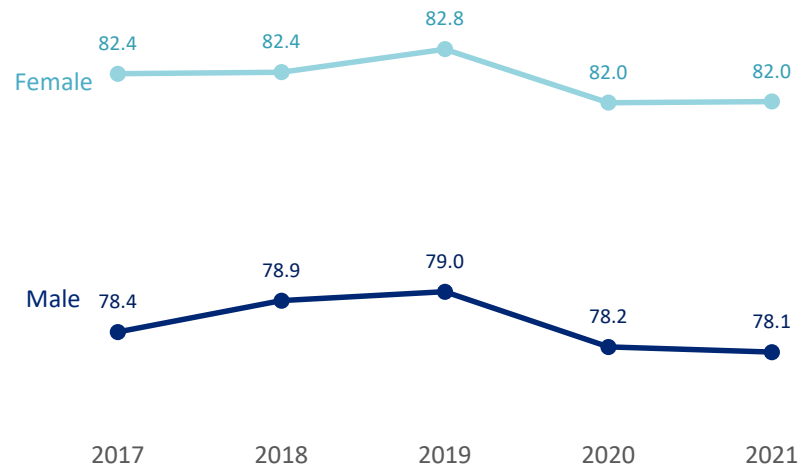
Key							
Circulatory	Respiratory	COVID	Cancer	Accidental	◀ Below NI Average	Similar to NI Average	▶ Above NI Average
Mental & BD	Nervous	Digestive	Maternal/Infant	Other			
		Suicide					

To better highlight the impact of COVID deaths in 2021, 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 decreased by 0.9 years for males and 0.8 years for females, between 2019 and 2021.

Life expectancy had been on an upward trend for males between 2017 and 2019, before decreasing by 0.9 years between 2019 and 2021. Female life expectancy was also on an upward trend between 2017 and 2019, before decreasing by 0.8 years in 2020, remaining at 82.0 years in 2021.

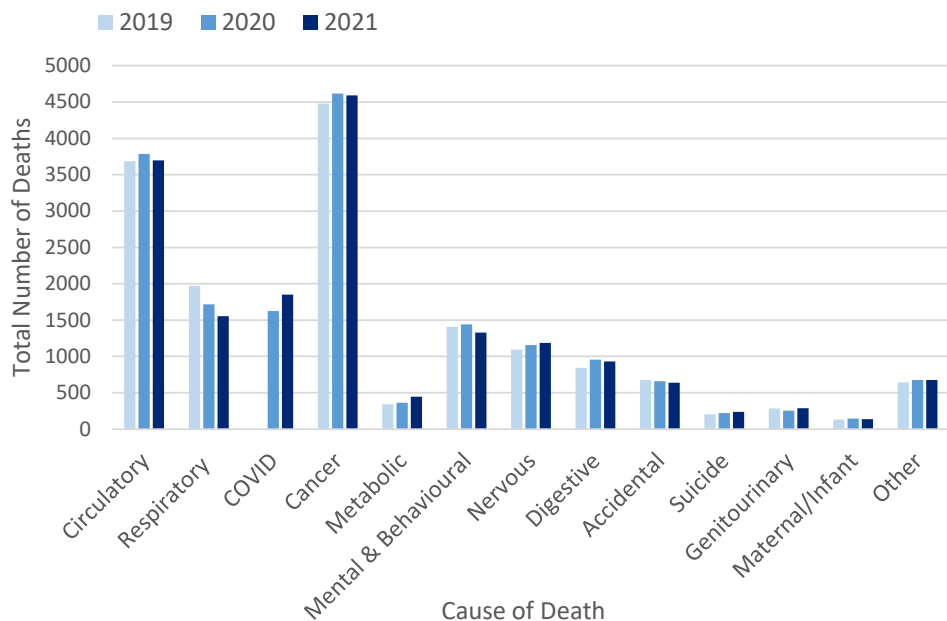
Single-year Life Expectancy at Birth (2017 to 2021)



Overall death numbers (for both males and females) increased by 11.4% from 15,758 in 2019 to 17,558 in 2021.

Deaths due to COVID were a major factor in the increase, accounting for 1,849 deaths (10.5%) in 2021. Deaths in most categories remained similar to levels seen in 2019, with slight increases in deaths due to cancer and metabolic disorders. Respiratory related deaths decreased by 418 (22.2%), though this decrease may have been affected by deaths due to COVID (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.

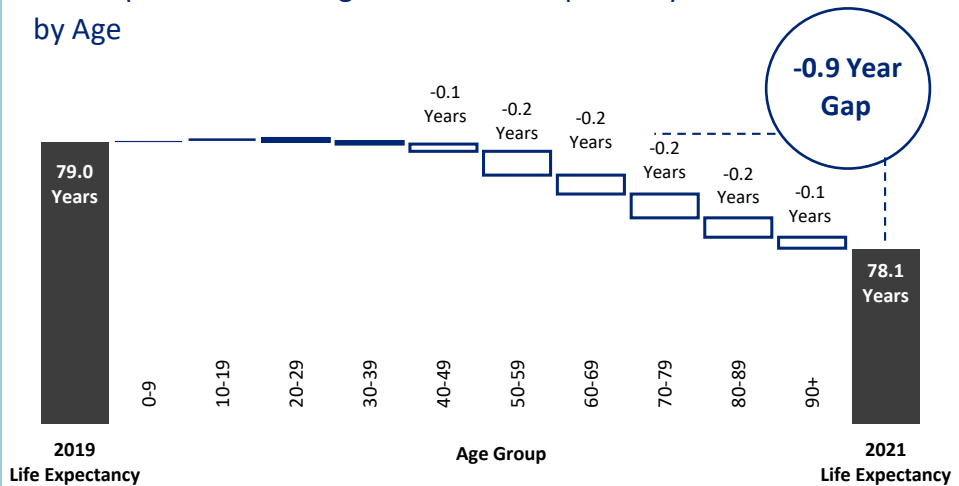
Total Number of Deaths by Cause in 2019, 2020 and 2021



Increased mortality rates among 40+ year olds accounted for the majority of the decrease in male life expectancy (-0.9 years) between 2019 and 2021.

Those aged 60-89 years accounted for two thirds of the life expectancy decrease in 2021. This was largely attributable to deaths due to COVID which accounted for over four-fifths of the contribution from this age group. Mortality among 0-39 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 2021. This reduction was partly offset by decreases in mortality from other causes including respiratory disease.

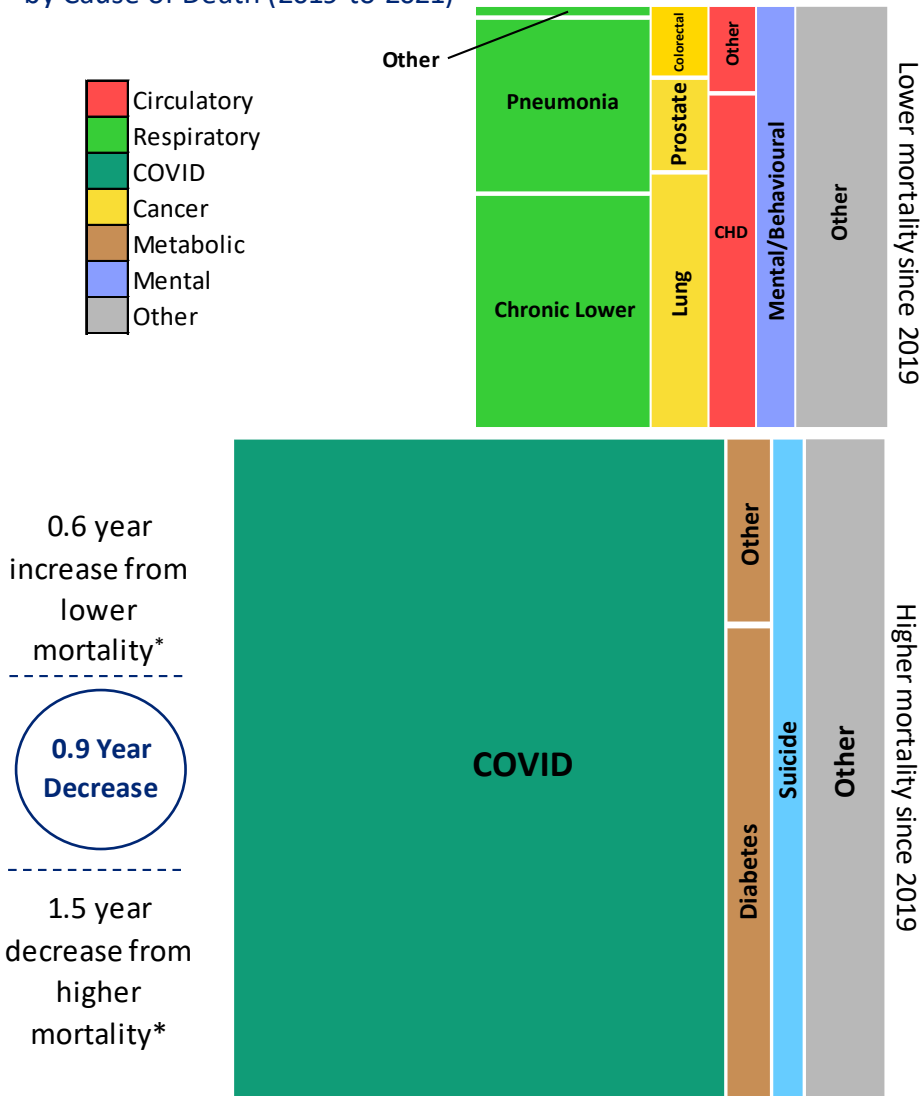
COVID mortality accounted for over three quarters of the decrease in male life expectancy (-1.2 years). Relatively small increases in mortality from metabolic diseases, suicide and 'Other' causes of death also contributed to the decrease.

The reduction in life expectancy was offset by 0.6 years due to decreased mortality from several conditions, particularly respiratory diseases (0.2 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.

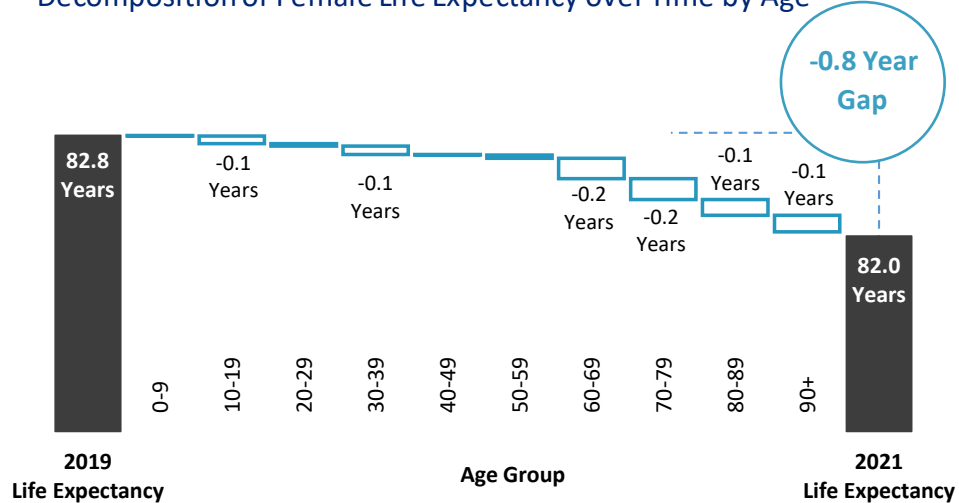
Decomposition of Change in Male Life Expectancy over Time by Cause of Death (2019 to 2021)



Similar to males, increased mortality rates among 60+ year olds (-0.6 years) contributed most to the decrease in female life expectancy (-0.8 years) between 2019 and 2021.

Those aged 60-79 had the largest contribution to the decrease in life expectancy (-0.3 years)*. As with males, the majority of this increase in mortality was accounted for by deaths due to COVID. Life expectancy for ages 0-59 was much more stable, contributing only small changes.

Decomposition of Female Life Expectancy over Time by Age*



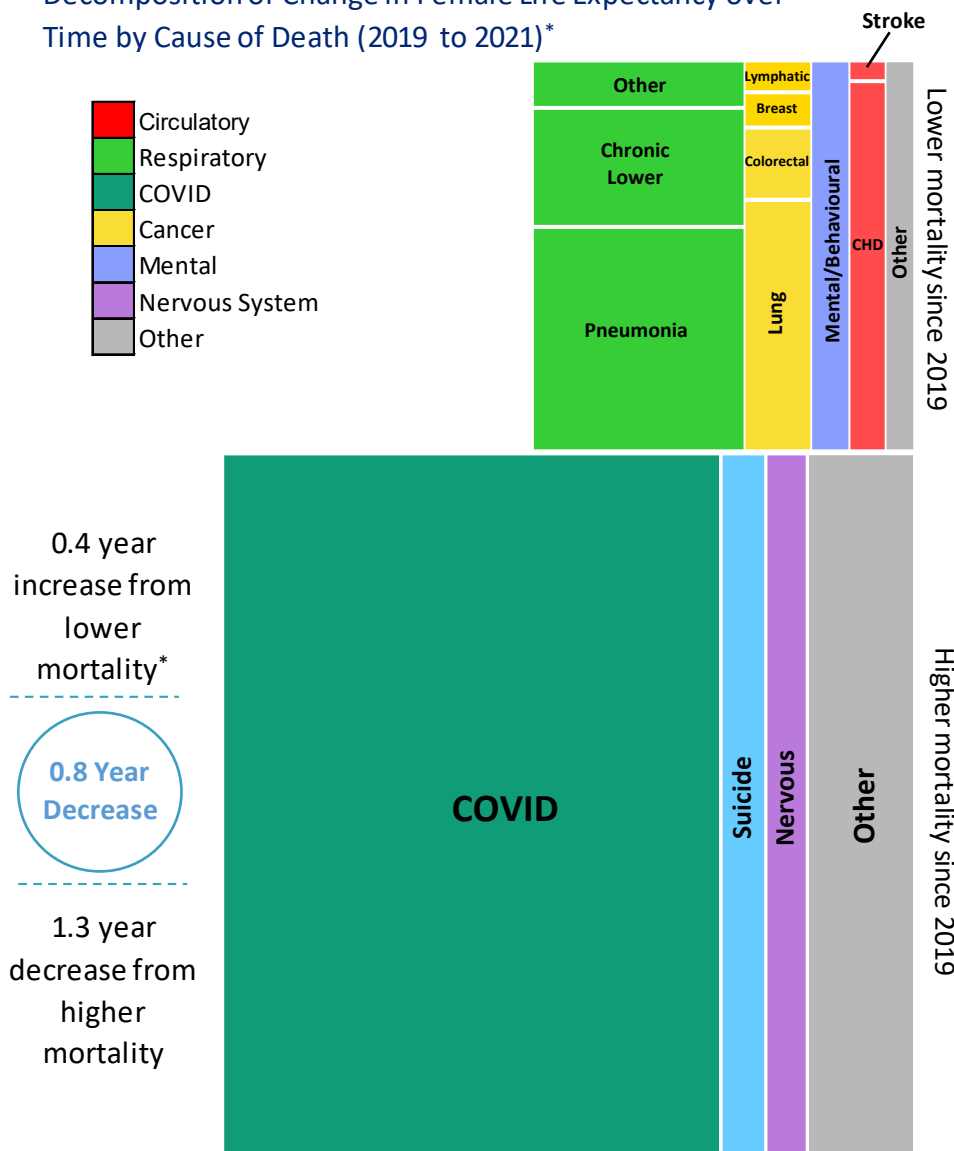
COVID mortality contributed most to the decrease in female life expectancy from 2019 to 2021. This reduction was partly offset by decreases in mortality from other causes of death, most notably respiratory disease.

Similar to males, COVID mortality accounted for the majority of the decrease in female life expectancy (-0.9 years). Relatively small increases in mortality from suicide, nervous system disorders and 'Other' causes also contributed to the decrease. The reduction in life expectancy was offset by 0.4 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.

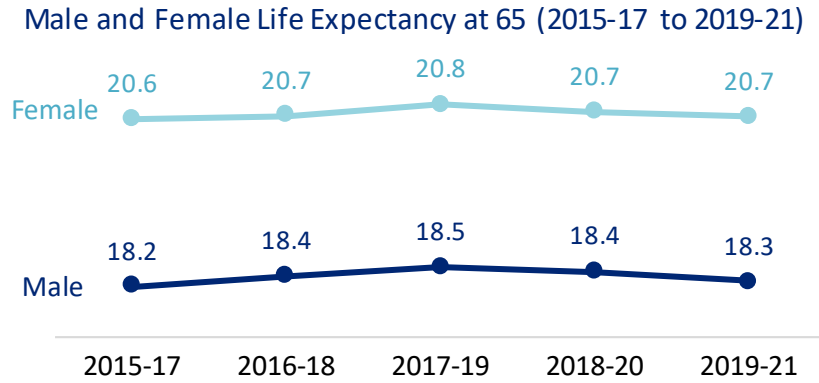
** Observed decreases may be as a result of those dying alternatively from COVID.

Decomposition of Change in Female Life Expectancy over Time by Cause of Death (2019 to 2021)*



Life expectancy at age 65 in 2019-21 was 18.3 years for males and 20.7 years for females.

Life expectancy at 65 remained similar for both males and females between 2015-17 and 2019-21.

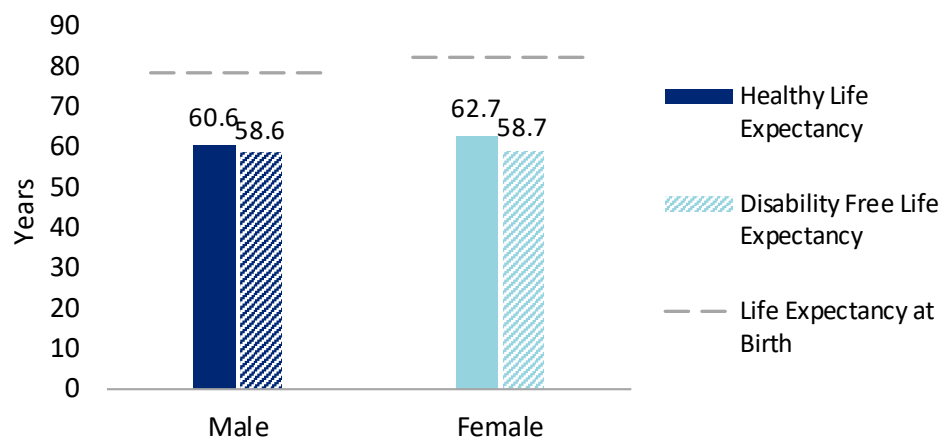


Males and females could both expect to live around three-quarters of their lives in good health.³

In 2019-21, males could expect to live 60.6 years in good health, while females could expect to live 62.7 years. Disability free life expectancy (DFLE) was 58.6 years for males and 58.7 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.

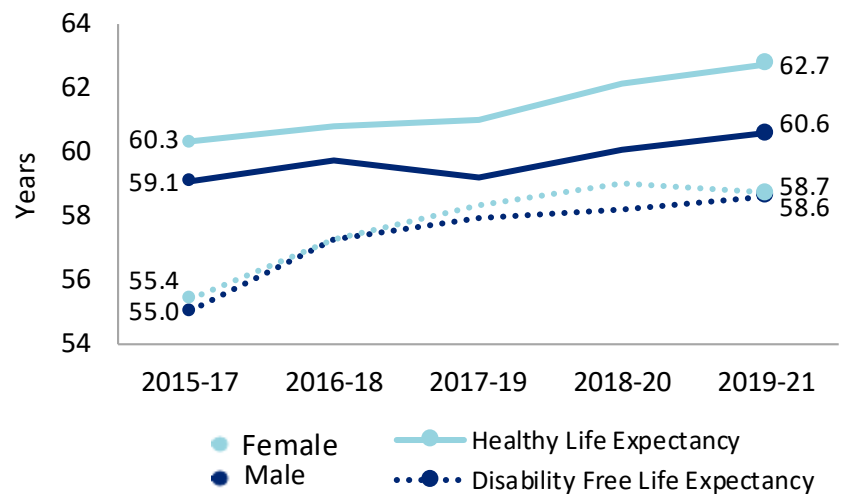
Healthy and Disability Free Life Expectancy (2019-21)



Between 2015-17 and 2019-21, DFLE increased significantly for both males and females.

Male HLE stood at 60.6 years in 2019-21 compared with 59.1 years in 2015-17, however, the change was not statistically significant. Over the same period, female HLE increased significantly from 60.3 to 62.7 years. Male DFLE increased by 3.6 years from 55.0 in 2015-17 to 58.6 years in 2019-21, and female DFLE increased by 3.3 years from 55.4 to 58.7 years over the same period.

Healthy and Disability Free Life Expectancy (2015-17 to 2019-21)



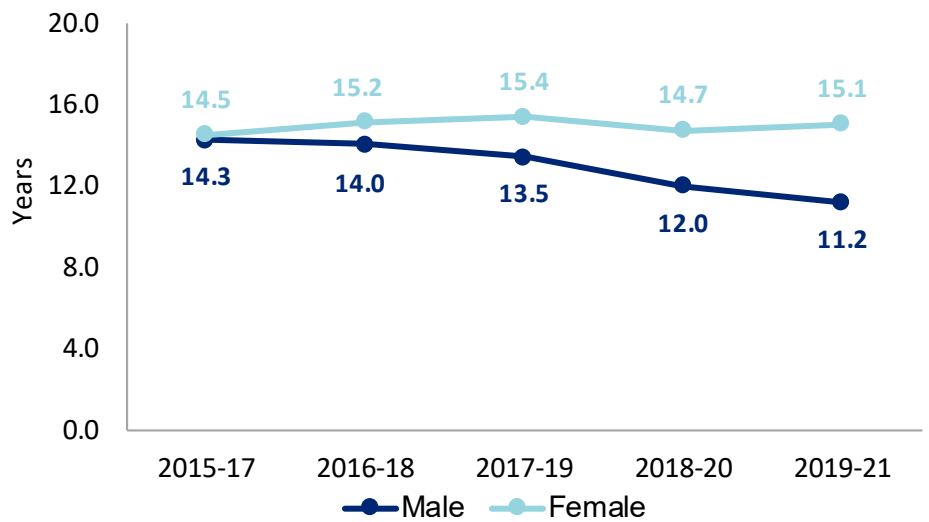
³ HLE figures for 2018-20 have been revised. For further information see [Appendix B](#).

Since 2015-17 the healthy life expectancy gap has narrowed significantly for males.

In 2019-21, the HLE gap between the 20% most and least deprived stood at 11.2 years for males compared with 14.3 years in 2015-17. The female HLE gap stood at 15.1 years in 2019-21 compared with 14.5 years in 2015-17 - this change was not statistically significant.

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

Healthy Life Expectancy Gap (2015-17 to 2019-21)

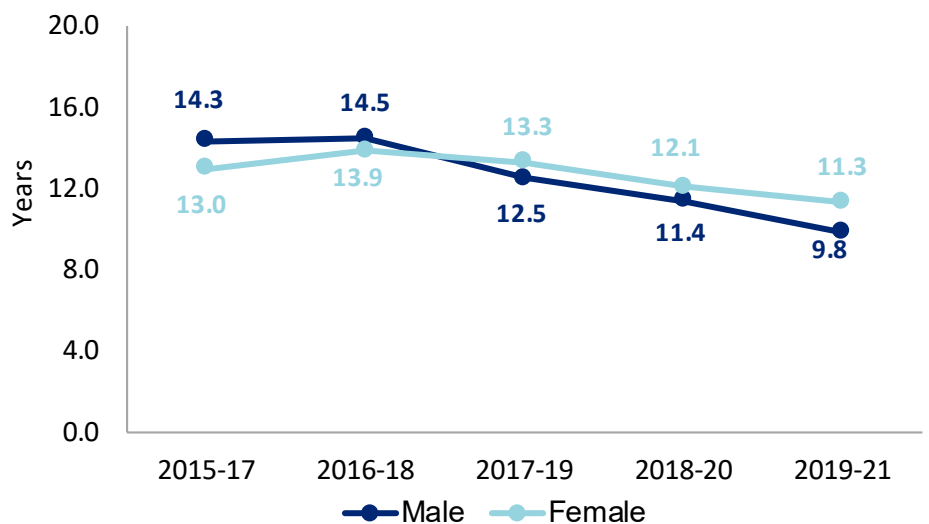


The disability-free life expectancy gap narrowed between 2015-17 and 2019-21 for both males and females.

The DFLE gap between the most and least deprived males narrowed from 14.3 years in 2015-17 to 9.8 years in 2019-21. For females, the gap narrowed from 13.0 years in 2015-17 to 11.3 years in 2019-21.

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

Disability-Free Life Expectancy Gap (2015-17 to 2019-21)



NI Life Expectancies (All figures in Years)		2015-17	2016-18	2017-19	2018-20	2019-21
Male	Life Expectancy at Birth	78.5	78.7	78.8	78.7	78.4
	Life Expectancy at 65	18.2	18.4	18.5	18.4	18.3
	Healthy Life Expectancy	59.1	59.7	59.2	60.1	60.6
	Disability-Free Life Expectancy	55.0	57.3	57.9	58.2	58.6
Female	Life Expectancy at Birth	82.3	82.4	82.6	82.4	82.2
	Life Expectancy at 65	20.6	20.7	20.8	20.7	20.7
	Healthy Life Expectancy	60.3	60.8	61.0	62.1	62.7
	Disability-Free Life Expectancy	55.4	57.2	58.4	59.0	58.7

NI Life Expectancy Gaps (All figures in Years)		2015-17 to 2019-21		Gender Gap	
		Male	Female	2015-17	2019-21
Total Gap		-0.1	-0.1	3.9	3.8
Age Bands	0-9	0.0	0.0	0.0	0.1
	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	0.4	0.3
	50-59	0.0	-0.1	0.4	0.4
	60-69	0.1	0.0	0.7	0.6
	70-79	0.0	0.0	0.9	0.9
	80-89	0.0	0.0	0.6	0.7
90+	0.0	0.0	0.1	0.1	
Circulatory	CHD	0.1	0.1	0.9	0.9
	Stroke	0.1	0.1	0.1	0.1
	Other	-0.1	-0.1	0.2	0.2
Respiratory	Pneumonia	0.1	0.1	0.1	0.0
	Chronic Lower	0.1	0.1	0.1	0.1
	Other	0.0	0.0	0.1	0.1
COVID	COVID	-0.7	-0.6	0.0	0.3
Cancer	Lung	0.1	0.0	0.2	0.2
	Breast	0.0	0.0	-0.4	-0.4
	Prostate	0.0	0.0	0.4	0.3
	Colon	0.0	0.0	0.1	0.1
	Lymph	0.0	0.0	0.1	0.1
	Pancreas	0.0	0.0	0.1	0.1
	Other	0.1	0.0	0.5	0.4
Metabolic	Diabetes	0.0	-0.1	0.1	0.0
	Other	0.0	0.0	0.0	0.0
Mental	Mental & BD	0.0	0.1	0.0	0.1
Nervous	Nervous	0.0	0.0	0.1	0.1
Digestive	Chronic Liver	0.0	0.0	0.2	0.1
	Other	0.0	0.0	0.1	0.1
Accidental	Transport Accidents	0.1	0.0	0.2	0.1
	Accidents	-0.2	-0.1	0.4	0.6
Suicide	Suicide	0.0	0.0	0.4	0.4
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	0.0	0.0
	Congenital	0.0	0.0	0.0	0.0
Other	Other	0.0	0.1	0.0	0.1

NI Life Expectancy Gaps (All figures in Years)		Male Deprivation Gap		Female Deprivation Gap	
		2015-17	2019-21	2015-17	2019-21
Total Gap		7.1	7.3	4.5	5.1
Age Bands	0-9	0.2	0.2	0.1	0.1
	10-19	0.1	0.1	0.0	0.0
	20-29	0.7	0.6	0.1	0.2
	30-39	0.7	0.8	0.3	0.3
	40-49	1.0	1.1	0.6	0.6
	50-59	1.3	1.4	0.8	1.0
	60-69	1.6	1.5	1.3	1.3
	70-79	1.3	1.3	1.2	1.2
	80-89	0.3	0.4	0.4	0.5
	90+	-0.1	-0.1	-0.3	-0.2
Circulatory	CHD	0.9	0.8	0.5	0.4
	Stroke	0.2	0.2	0.2	0.1
	Other	0.2	0.3	0.3	0.3
Respiratory	Pneumonia	0.2	0.1	0.0	0.1
	Chronic Lower	0.5	0.5	0.7	0.8
	Other	0.2	0.1	0.1	0.0
COVID	COVID	0.0	0.4	0.0	0.3
Cancer	Lung	0.7	0.7	0.8	0.8
	Breast	0.0	0.0	0.0	0.1
	Prostate	0.0	0.0	0.0	0.0
	Colon	0.1	0.1	0.1	0.0
	Lymph	0.1	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	0.1
	Other	0.1	0.1	0.1	0.1
Mental	Mental & BD	0.2	0.3	0.0	0.0
Nervous	Nervous	0.1	0.1	-0.1	0.0
Digestive	Chronic Liver	0.5	0.6	0.3	0.3
	Other	0.3	0.3	0.2	0.2
Accidental	Transport Accidents	0.1	0.1	0.0	0.0
	Accidents	0.9	1.1	0.2	0.5
Suicide	Suicide	0.6	0.5	0.1	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	0.0	0.1	0.0
	Congenital	0.1	0.1	0.0	0.1
Other	Other	0.3	0.3	0.3	0.2

Male Life Expectancy at Birth

Trust	2015-17	2016-18	2017-19	2018-20	2019-21
Belfast Trust	76.3	76.7	76.6	76.3	76.1
Northern Trust	79.2	79.3	79.5	79.4	79.0
South Eastern Trust	79.3	79.5	79.4	79.4	79.4
Southern Trust	78.9	78.9	79.3	79.3	79.0
Western Trust	78.3	78.6	78.5	78.6	78.1

Female Life Expectancy at Birth

Trust	2015-17	2016-18	2017-19	2018-20	2019-21
Belfast Trust	81.3	81.3	81.2	80.9	80.8
Northern Trust	82.7	82.7	82.9	82.7	82.7
South Eastern Trust	82.8	82.7	83.1	82.9	82.8
Southern Trust	82.5	82.8	83.1	83.1	82.9
Western Trust	82.0	82.1	82.2	82.2	81.7

Male Life Expectancy at Birth

Local Government District	2015-17	2016-18	2017-19	2018-20	2019-21
Antrim and Newtownabbey	79.1	79.4	79.5	78.8	78.6
Ards and North Down	79.5	79.7	79.5	79.6	79.7
Armagh City, Banbridge and Craigavon	79.0	79.1	79.5	79.3	79.1
Belfast	75.8	76.3	76.1	75.8	75.6
Causeway Coast and Glens	79.6	79.3	79.5	79.7	79.4
Derry City and Strabane	77.7	78.0	77.8	78.0	77.3
Fermanagh and Omagh	78.7	79.2	79.3	79.2	78.9
Lisburn and Castlereagh	79.8	80.2	80.1	80.3	80.2
Mid and East Antrim	78.6	78.9	79.1	79.0	78.5
Mid Ulster	79.4	79.3	79.7	79.6	79.2
Newry, Mourne and Down	78.9	78.9	79.2	79.3	78.9

Female Life Expectancy at Birth

Local Government District	2015-17	2016-18	2017-19	2018-20	2019-21
Antrim and Newtownabbey	82.0	82.0	82.7	82.6	82.7
Ards and North Down	82.6	82.6	82.9	82.7	82.7
Armagh City, Banbridge and Craigavon	82.7	82.9	83.1	83.2	83.0
Belfast	81.0	81.1	81.0	80.5	80.5
Causeway Coast and Glens	83.2	83.1	82.9	82.6	82.4
Derry City and Strabane	81.4	81.3	81.4	81.6	81.1
Fermanagh and Omagh	82.5	83.0	83.2	83.2	82.6
Lisburn and Castlereagh	83.4	83.2	83.5	83.3	83.2
Mid and East Antrim	82.7	82.5	82.7	82.3	82.3
Mid Ulster	82.7	82.7	83.2	83.1	83.1
Newry, Mourne and Down	82.6	83.1	83.3	83.2	82.7

NI Total deaths Cause of death category	Male					Female				
	2019	2020	2021	Change 2019- 2021	Change 2020- 2021	2019	2020	2021	Change 2019- 2021	Change 2020- 2021
Circulatory	1,914	1,975	1,931	17	-44	1,772	1,811	1,768	-4	-43
Respiratory	953	823	755	-198	-68	1,017	892	797	-220	-95
COVID	-	796	1,040	1,040	244	-	829	809	809	-20
Cancer	2,344	2,428	2,407	63	-21	2,133	2,188	2,184	51	-4
Metabolic	160	167	239	79	72	180	196	208	28	12
Mental & Behavioural	527	554	496	-31	-58	880	886	831	-49	-55
Nervous	445	462	487	42	25	647	695	697	50	2
Digestive	408	485	443	35	-42	437	472	490	53	18
Accidental	410	414	394	-16	-20	265	245	243	-22	-2
Suicide	155	160	176	21	16	50	59	61	11	2
Genitourinary	106	116	115	9	-1	178	140	174	-4	34
Maternal/Infant	76	77	78	2	1	58	69	58	0	-11
Other	292	276	277	-15	1	351	399	400	49	1

Note: 'change in 2019-2021' column refers to the number of deaths registered in 2021 minus the number of deaths registered in 2019 and 'change in 2020-2021' column refers to the number of deaths registered in 2021 minus the number of deaths registered in 2020 for each cause of death category.

Source: NISRA, <https://www.nisra.gov.uk/statistics/births-deaths-and-marriages/registrar-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 II⁴](#) 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 Report⁵.

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 method⁶ 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.

⁴ http://apps.who.int/iris/bitstream/10665/62916/1/15736_eng.pdf

⁵ <https://www.health-ni.gov.uk/articles/health-inequalities-statistics>

⁶ 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](#)⁷ 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 13 broad causes, further broken down into 23 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.

⁷ https://webgate.ec.europa.eu/chafea_pdb/assets/files/pdb/2006109/2006109_d5sullivan_guide_final_jun2007.pdf

Other regular reports in this series include⁸:

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.

Revision of 2018-20 HLE and DFLE figures

The Health Survey NI, from which HLE and DFLE estimates are derived, did not sample children in 2020/21 and 2021/22 due to methodological changes in response to the COVID impact. As a result, data relating to children in 2019 has been held constant in 2020 and 2021 and this has led to slight changes in some 2018-20 HLE and DFLE figures presented in previous reports.

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 have been 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 was completed in November 2022. In previous reports issued while the review was ongoing, individual values were not reported for 'Accidental' or 'Intentional self-harm and event of undetermined intent (Suicide)' categories. Instead, these categories were added to the 'Other causes' category. As the review has now been completed, this publication now reports changes and gaps in life expectancy based deaths due to suicide, in line with analysis included prior to the 2017-19 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>

⁸ <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 2021. 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 and 2021 Registrar General Annual Reports (<https://www.nisra.gov.uk/statistics/births-deaths-and-marriages/registrar-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)
U10.9	Multisystem inflammatory syndrome associated with COVID-19, unspecified

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.

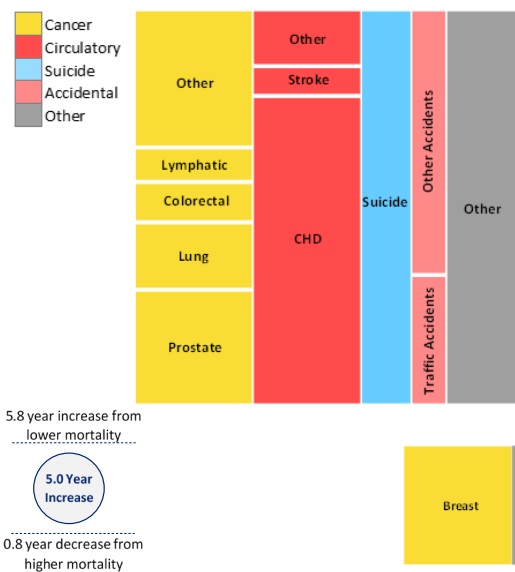
The lower life expectancy (Area A) is presented on the left, while the higher life expectancy (Area B) is presented to the right.



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	
Teal	Deaths due to COVID	U07.1, U07.2, U10.9
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	
Pink	Accidents	V01-X59, Y85, Y86
	Transport accidents	V01-V99
	All other accidents	
Light Blue	Intentional self-harm and event of undetermined intent (Suicide)	X60-X84, Y10-Y34, Y87.0, Y87.2
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	
Light Purple	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	

Authors: Robbyn Atcheson, Matthew Carson & Caolan Laverty

Public Health Information & Research Branch, Information Analysis Directorate

Lead Statistician: Bill Stewart

Department of Health
Castle Buildings, Belfast BT4 3SQ

☎ Tel: 028 905 22591

☎ Ext: 22591

✉ Email: healthinequalities@health-ni.gov.uk

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

For information on other Government statistics contact:
The Northern Ireland Statistics and Research Agency (NISRA)
Colby House, Stranmillis Court, Belfast, BT9 5RR
☎ Tel: 02890388400 ✉ Email: info@nisra.gov.uk
<http://www.nisra.gov.uk/>

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