www.mhfi.org

Men's Health in Numbers

TRENDS ON THE ISLAND OF IRELAND

Prepared for the Men's Health Forum in Ireland by
Dr Paula Devine and Dr Erin Early

December 2020

MEN'S HEALTH IN NUMBERS

men's health FORUM in ireland

THANKS AND ACKNOWLEDGEMENTS

The production of this report was only possible because of the generosity, goodwill, support, advice and practical assistance offered by a broad range of individuals and organisations.

The Men's Health Forum in Ireland (MHFI) would like to give special mention to …

- Health Service Executive (HSE) Health and Wellbeing – for providing the funding to undertake this data gathering process.
- The research team / report authors – Dr Paula Devine and Dr Erin Early from ARK (www.ark.ac.uk) within Queen's University Belfast (QUB).
- Prof Derek Griffith, from Vanderbilt University, USA, who generously shared his experience of developing the Tennessee Men's Health Report Card with us.
- All of the people who contributed to the Advisory Group for this initiative …
    - Prof Kevin Balanda: (ex-) Institute of Public Health in Ireland
    - Colin Fowler: Men's Health Forum in Ireland
    - Fergal Fox: HSE Health and Wellbeing
    - Dr Karen Galway: School of Nursing and Midwifery, QUB
    - Finian Murray: HSE Health and Wellbeing
    - Shane O'Donnell: Marie-Curie Early Stage Researcher
    - Biddy O'Neill: Department of Health, Republic of Ireland
    - Dr Gillian Prue: School of Nursing and Midwifery, QUB
    - Dr Noel Richardson: National Centre for Men's Health, IT Carlow

CITATION

Devine, P. and Early, E. (2020), Men's Health in Numbers: Trends on the Island of Ireland. Dublin: Men's Health Forum in Ireland.

This report is available online at: www.mhfi.org/MensHealthInNumbers1.pdf

WELCOME

The Men's Health Forum in Ireland (MHFI) is a diverse network of individuals and organisations, men and women, from both the Republic of Ireland and Northern Ireland.

The Forum was established in 1999, and operates on an all-island basis.

FOREWORD

MHFI seeks to promote all aspects of the health and wellbeing of men and boys on the island of Ireland through research, training, networking, piloting health initiatives and awareness raising. However, it is still, primarily, structured, organised and run using the knowledge, expertise, resourcefulness, contacts, enthusiasm and goodwill of volunteers.

The Forum was established in response to the growing recognition of the need to address the poor health status of males in Ireland. However, one of the first challenges facing it was to gain access to reliable data upon which to plan future interventions. This remains an ongoing concern - as the Forum seeks to work in an evidence informed way.

This barrier was, initially, overcome when MHFI launched its *Men's Health in Ireland* report in January 2004 (www.mhfi.org/fullreport.pdf). This document provided the most comprehensive overview of key statistics on men's health on the island of Ireland ever collated up to that time. It offered clear evidence of local males' health needs, and a roadmap for action. Importantly, it also provided a baseline against which to measure progress in the future.

To coincide with its twentieth anniversary in 2019, the Forum sought funding from the Health Service Executive (HSE) to undertake an initiative titled 'Men's Health in Numbers'. This sought to produce:

1. A *Trends Report* that describes changes in key markers of men's health on the island of Ireland between 2004 and 2019 - using *Men's Health in Ireland* as a baseline.

2. An *Irish Men's Health Report Card* that provides a current synopsis of men's health in the Republic of Ireland.

Towards the end of 2019, MHFI was informed that its funding application had been successful, and work began to develop these two resources. This report represents the first of these outputs.

The Republic of Ireland was the first country in the world to adopt a *National Men's Health Policy* and, subsequently, a *Healthy Ireland - Men Action Plan*. Therefore, Ireland was, and still is, an international leader in this field. We hope that our new research will add to this reputation. More importantly, we hope that these materials will be a practical resource for many organisations across the island in the future - by highlighting areas for concern, providing evidence of need, mapping the magnitude of the work which needs to be undertaken, and inspiring practical and realistic responses.

A lot has changed in Ireland - and the world - since our *Men's Health in Ireland* report in 2004. It was not easy, or sometimes even possible, to simply update the data gathered back then. Indeed, even at this time of publication, the range of data available to us is constantly evolving and changing. COVID-19 is also having a dramatic impact upon the health and wellbeing of everyone across the island. This report is, therefore, merely a snapshot in time. However, the evidence shows that men's health is, overall, moving in the right direction.

Michael Lynch, Chairperson,
Men's Health Forum in Ireland

CONTENTS...

LIST OF TABLES...

LIST OF FIGURES...

GLOSSARY

Age Standardised Rate: a rate that takes into account the age distribution of a population. This could be an incidence rate, a death rate, etc.

Age Standardised Net Survival: the theoretical proportion of patients who would survive if the only possible cause of death is a specific illness (for example, cancer).

CSO (Central Statistics Office): Ireland's national statistical office. CSO collects, analyses and makes available statistics about people, society and the economy in the Republic of Ireland (https://www.cso.ie).

Crude rate: the number of cases or deaths divided by the population at risk, usually expressed per 100,000 persons per year. This does not take other factors, such as age, into account.

Disability Free Life Expectancy: the number of years a person is expected to live in a health condition free of limitations due to persistent illness or disability.

EU28: the 28 countries that comprised the European Union (EU) until 31 January 2020 (https://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:EU_enlargements).

EU27: the 27 countries that comprised the European Union (EU) after the United Kingdom left the EU on 31 January 2020.

European Age Standardised Rate (EASR): the rate that would have been found if the population of a specific region had the same age composition (proportion of total population in each five year age class) as a hypothetical European population, known as the European Standard Population. There are two versions: 1976 (old) and 2013 (new). The use of the EASR allows for comparisons to be made across countries or regions, as long as the same European Standard Population is used.

Healthy Life Expectancy (HLE): the average number of years a person can expect to live in good health.

ICD (International Classification of Diseases): a classification system of diseases, disorders, injuries and other health conditions, which is the basis for the identification of health trends and statistics. For example, it is used to classify the cause of death listed on a death certificate. The classification is updated regularly. The current version is ICD-10, although ICD-11 will come into effect in 2022 (https://www.who.int/classifications/icd/en/).

Incidence: the number of people developing or being diagnosed with an illness within a specific time period.

Mean: one way of calculating an average figure. It is calculated by adding up all the values, and then dividing the total by the number of values.

Median: one way of calculating an average, and represents the middle value when all of the values are arranged in numerical order. Therefore, half the values are above the median, and half the values are below the median.

NISRA (Northern Ireland Statistics and Research Agency): the principal source of official statistics and social research on Northern Ireland (https://www.nisra.gov.uk).

NMSC: Non-melanoma skin cancer (ICD-10 C44). NMSC is relatively common and usually non-fatal, and so is often excluded from cancer statistics.

Prevalence: the number of people who have ever been diagnosed with a specific disease.

Standardised Death Rate or Standardised Mortality Rate (SMR): the death rate of a population adjusted to a standard age distribution. Differences in the age distribution across areas and across time will affect the comparability of death rates between different areas.

EXECUTIVE SUMMARY

Section 1: Background

This report collates statistics and other information on the health of men and boys on the island of Ireland. It is based on the seminal *Men's Health in Ireland* report published by the Men's Health Forum in Ireland in 2004. This new report reflects issues that have emerged since 2004 due to a number of factors including: changing policy approaches; new screening programmes; the availability of different types of data; increasing concern about specific men's health issues; and global events such as migration, economic recession, and COVID-19.

The majority of statistics in this report are obtained from government data sources, which are collected by statutory agencies for their internal monitoring and evaluation purposes. This report takes a social determinants and gendered approach to collating and interpreting these statistics.

Male health policies

Male health policies and strategies can raise the profile of male health issues, provide a framework for action, a benchmark for evaluating the impact, and a mechanism for holding services accountable for their performance.

To date, only four countries worldwide have adopted national male health policies: Republic of Ireland (RoI), Australia, Brazil and Iran. There is no male health policy in Northern Ireland (NI), England, Scotland or Wales. However, several international strategies and frameworks, including the Vienna Declaration, have relevance for the development of national policies and strategies for improving male health.

Section 2: Key Trends in Men's Health

Population

- In 2019, 2,437,894 males lived in RoI – 36.7% higher than in 1994. 932,717 males lived in NI – 16.3% higher than in 1994.
- The population of males is ageing. Between 2008 and 2018, the number of men aged 85 years or over rose by 64.8% in RoI, and 50.9% in NI.
- Traveller men have a younger age profile. In RoI in 2016, 41% of Traveller males were aged under 15, compared with 22% of all males. Only 3% of Traveller men were aged 65 years or over, compared with 13% of all males.

Life expectancy

- In RoI, male life expectancy at birth rose by 9.7% between 1997 and 2018, from 73.4 to 80.5.
- In NI, male life expectancy at birth rose by 6.6% between 1997 and 2018, from 73.8 to 78.7.
- In RoI, male life expectancy at age 65 years rose by 36.4% between 1997 and 2018, from 14.0 to 19.1.
- In NI, male life expectancy at age 65 years increased by 25.3% between 1997 and 2018, from 14.6 to 18.3.
- Females have higher life expectancy than males, although the gap has decreased between 1997 and 2018.

- In 2018, the gender gap for life expectancy at birth in RoI was 3.6 years. In NI, the gap was 3.7 years.
- Life expectancy at birth, and at age 65 years, increased more for males than for females.
- In 2018, Healthy Life Expectancy (HLE) for males in NI (59.7 years) was lower than RoI (68.4 years) and the average across the EU28 countries (63.4). In 2018, RoI had the 3rd highest HLE for males in the EU28.
- Life expectancy varies according to socio-economic circumstances. In RoI in 2016-17, male life expectancy at birth in the most deprived areas was 79.4 years, compared with 84.4 years in the most affluent areas.
- In NI in 2016-18, the male life expectancy at birth in the most deprived areas was 74.6 years, compared with 81.7 years in the least deprived areas.
- Life expectancy for Traveller males across the island of Ireland in 2008 was 61.7 – a figure that has not changed since 1987.

Social and economic circumstances

A social determinants model of health recognises that there is a relationship between social and economic circumstances and health outcomes.

- In 2016, 195,519 males in RoI and 94,882 males in NI lived alone, including one fifth of men aged 65+ in each jurisdiction.
- In 2011, 8.8% of lone parent households in RoI and 13.6% in NI were headed by a father.
- The 2016 Census in RoI indicates that 4,018 men were homeless.
- In NI in 2018-19, 5,848 single males presented as homeless, and made up 32% of households presenting as homeless.
- In 2011, 56.6% of men in RoI were married, compared with 39.4% in NI.
- In both RoI and NI, females had higher educational attainment than males. The underachievement of working class Protestant boys in NI continues to be of particular concern.
- The male unemployment rate in RoI fell from 17.1% in 2010 to 5.6% in 2019.
- The male unemployment rate in NI is calculated differently than in RoI, and shows a fall from 9.2% in 2010 to 2.7% in 2019.
- In 2018, the median gross annual earning for males in RoI was €39,658. In NI in 2019, the median figure was £28,843, while the hourly rate for females working full-time was higher than for males. However, annual earnings for males are higher due to longer working hours and higher bonuses.

Self-reported health

The majority of men across the island of Ireland in 2018-19 rated their health as good or very good, with younger men more likely to do so.

Cause of death

- In 2018, the four main causes of death among males across the island of Ireland were neoplasms (invasive cancers), circulatory system diseases, respiratory system diseases, and external causes of injury and poisoning.
- The cause of death varied by age, for example, external causes of injury and poisoning was the main cause of death among younger males.
- Standardised Mortality Rates were highest among males in the most deprived areas, those with only primary education, unskilled workers, widowed men, those who were not carers, and males with a disability. Mortality rates were also higher among homeless men, farmers and agricultural workers, and Travellers.
- In RoI, the number of males killed in traffic accidents fell from 182 in 2009 to 116 in 2017.
- In NI, the number of males killed in traffic accidents fell from 87 in 2009 to 37 in 2019.

All cancers

- The incidence rate for all invasive cancers (excluding non-melanoma skin cancer [NMSC]) in RoI and NI is higher for males than for females.
- The European Age Standardised Rate (new) increased by 27% from 645 in 1995 to 821.7 in 2020 in RoI.

- In NI, the incidence rate increased by 1%, from 651.7 in 1995 to 657.7 in 2018.
- Incidence rates are higher among males living in the most deprived areas.
- Across the island of Ireland, prostate cancer is the most commonly diagnosed invasive cancer (excluding NMSC) among males, followed by colorectal and lung cancers.
- In RoI, the 5-year net cancer survival rate for males increased by 24 percentage points between 1994-1999 and 2011-2015, and is now higher than for females (63% and 60% respectively).
- In NI, the 5-year net cancer survival rate for men increased by 19 percentage points between 1994 and 2012-16 (estimates), from 37% to 56%.
- In RoI and NI, it is predicted that the number of cases of cancer among men will rise, although the age standardised incidence rates will fall.

Prostate cancer

- The number of cases of prostate cancer increased: from 1,097 in 1994 to 3,503 in 2020 for RoI, and from 485 in 1994 to 1,265 in 2018 for NI.
- The age standardised incidence rate increased over time in both RoI and NI.
- RoI has the highest incidence rate for prostate cancer among the EU27.
- In RoI, the average age at diagnosis declined from 74 years in 1994-1996 to 67 years in 2012-2014, and the proportion of men aged under 55 years at time of diagnosis quadrupled.
- The incidence rates for prostate cancer are lower in the least deprived areas.
- The use of Prostate Specific Antigen (PSA) testing is controversial, and has had an impact on current and future incidence rates for prostate cancer.
- The increased incidence rates and changing age profile are likely to reflect increases in PSA testing of younger and middle-aged men since the mid-1990s.
- The mortality rate is decreasing and the survival rate increasing in RoI and NI, most likely due to improvements in diagnosis and treatment.
- The number of cases of prostate cancer is expected to rise in the next 20 years, although the age standardised incidence rates are expected to fall.

Testicular cancer

- The number of cases of testicular cancer in RoI increased from 69 in 1994 to 204 in 2020.
- The incidence rate – European Age Standardised Rate (new) – in RoI increased from 3.9 in 1994 to 9.1 in 2020.
- The highest crude rates of incidence of testicular cancer are among younger males aged between 15 and 39 years.
- The number of cases of testicular cancer in NI increased from 46 in 1994 to 70 in 2018.
- The incidence rate – European Age Standardised Rate (new) – in NI increased from 5.4 in 1994 to 7.6 in 2018.
- In NI, the incidence of testicular cancer is highest among males living in the least deprived areas.
- The mortality rate for testicular cancer is low in RoI and NI.
- The survival rates for testicular cancer are high across the island of Ireland and have risen since 1994.

Breast cancer

- Breast cancer among males is rare.
- The number of cases of male breast cancer in RoI has risen from 14 in 1994 to 28 in 2017-19 (annual average).
- In 2018, there were 10 cases of breast cancer among males in NI.
- The survival rates for male breast cancer have increased in RoI.

Non-melanoma skin cancer (NMSC)

- In RoI, the number of cases of NMSC more than doubled from 2,826 in 1994 to 6,621 in 2017-19.
- In RoI, the incidence rate – European Age Standardised Rate (old) – increased from 188.3 in 1994 to 241.2 in 2017-19 (annual average).

- In NI, the number of cases of NMSC more than doubled from 1,005 in 1994 to 2,417 in 2018.
- In NI, the incidence rate – European Age Standardised Rate (new) – increased from 220.5 in 1994 to 336.0 in 2018.
- The incidence of NMSC increases with age.
- The incidence of NMSC is higher among males living in the least deprived areas.
- Mortality for NMSC is low.

Circulatory diseases

- Circulatory diseases are one of the leading causes of male death in RoI and NI.
- In RoI, the proportion of male deaths due to circulatory diseases fell from 34.4% in 2008 to 29.6% in 2018.
- In NI, the proportion of male deaths due to diseases of the circulatory system decreased from 31.7% in 2008 to 24.1% in 2018.
- The age standardised death rate from circulatory diseases has fallen in RoI and NI, and for the EU28 average.
- The age standardised death rate for circulatory diseases for RoI is lower than for the EU28 average, but higher than NI.
- The crude death rate from circulatory diseases increases with age.

Respiratory diseases

- Respiratory diseases are one of the four leading causes of male deaths in RoI and NI.
- The proportion of deaths due to respiratory diseases in RoI is slightly lower than in NI.
- The proportion of deaths due to respiratory diseases in RoI has risen from 11.4% in 2008 to 12.5 in 2018.
- The proportion of deaths due to respiratory diseases in NI did not change between 2008 and 2018: 13.1% and 13.2% respectively.
- The age standardised death rate from respiratory diseases in RoI has decreased from 171.7 in 2011 to 161.73 in 2017.
- In 2017, the age standardised death rate from respiratory diseases in RoI is higher than the average across the EU28 countries.

Benign Prostatic Hyperplasia (BPH)

- Benign prostatic hyperplasia (BPH) is the non-malignant enlargement of the prostate.
- There is little statistical information on the incidence and prevalence of BPH.
- In 2018, there were 24 consultant urologists in NI. This represents 1 per 78,658 people, compared with 1:103,000 in 2008.
- In 2018, there were 43 consultant urologists in RoI (1:111,627 people).
- In Spain in 2018, there was 1 urologist per 19,890 people.

Sexually transmitted infections and HIV

- In RoI, the number of male diagnoses of chlamydia, herpes and warts fell between 2010 and 2018, and increased for gonorrhoea.
- In NI, the rate of male diagnoses of chlamydia and ano-genital warts decreased between 2010 and 2018, whereas cases of gonorrhoea and herpes increased.
- Men who have sex with men have a disproportionate rate of some STIs, and this has increased since 2010.
- In RoI, the number of men diagnosed with HIV rose from 258 in 2009 to 411 in 2018.
- In NI, the number of men diagnosed with HIV rose from 49 in 2009 to 61 in 2018.

Mental health

- The mental health of males in the Republic of Ireland and Northern Ireland is of increasing concern. The strong link between mental health and physical health is also now being recognised.
- In RoI in 2018, 327 males and 110 females died by suicide.
- The number of male suicides in RoI was highest between 2009 and 2014, which coincided with the economic recession.
- The age standardised death rate for suicide by males in RoI fell from 22.5 in 2001 to 14.3 in 2018.
- In RoI since 2010, the highest rates have been among middle-aged men. The exception was 2017, when the highest rate was among 25-34 year olds.
- In NI in 2018, 145 males and 39 females died by suicide (based on a similar classification to RoI). Based on a more comprehensive classification, 228 males and 79 females died by suicide in 2018 in NI.
- In NI, the European Age Standardised rate (new) for male suicide in NI was 27.2 in 2011 and 28.0 in 2018.

- The European Age Standardised rate (new) for male intentional self-harm fell in RoI and NI since 2011, and is lower than the EU28 average.
- In RoI, there was an increase in the rate of males presenting at emergency departments with self-harm between 2007 and 2018, from 162 to 193.
- In RoI, the most frequent method of self-harm presentations amongst men involved a drug overdose (55.8%), alcohol (33.9%), cutting (31%), and attempted hanging (12.4%).
- In NI, the rate of presentation for self-harm at emergency departments was similar in 2012/2013 and 2017/2018.
- In NI, the peak age for self-harm amongst males was 20-24 year olds.
- In NI, the most commonly-used methods of self-harm among males were drug overdose (61.3%), self-cutting (29.7%), and attempted hanging (6.6%).

Criminal justice system

- The majority of prisoners across the island of Ireland are male.
- In 2017, there were 6,403 male prisoners in RoI, compared with 8,556 in 2007.
- In 2014/15, there were 1,734 male prisoners in NI, and 1,442 in 2019/20.
- Compared with general adult populations, prison populations have poorer physical, mental and social health.
- In RoI, the majority of victims of murder or manslaughter, dangerous driving leading to death, and attempts/threats to murder, assault, harassments and related offences are male.
- In RoI, male victims make up less than one fifth of victims of sexual offences.
- In RoI, the number of male victims of sexual offences rose from 439 in 2015 to 528 in 2019.
- In NI, approximately half of all crimes had a male victim, as did criminal damage.
- The majority of crimes in NI involving violence with injury, robbery and different forms of theft had a male victim.
- In NI, less than one quarter of victims of sexual offences were male.
- In NI, there were 2,371 drink/drug driving offences by males in 2017, and this rose to 2,435 in 2019.
- In NI, the number of male domestic abuse crime victims more than doubled from 2,103 in 2004/5 to 4,779 in 2018/19.
- In NI, the majority of offenders of domestic abuse detected crimes are male.

Lifestyle

- In RoI, the rate of overweight and obesity in males increased from 63.1% to 66% between 2014 and 2019.
- In NI in 2018/19, 68% of males were overweight or obese, as were 27% of boys aged 2-15 years.
- In RoI, the proportion of males who smoke fell from 31% in 2007 to 19% in 2019.
- In NI, the proportion of males who smoke decreased from 25% in 2010/2011 to 20% in 2018/2019.
- In RoI in 2014, 20.8% of males aged 18 or over engaged in binge drinking at least once a week. This was the highest rate across the EU28 countries.
- In NI in 2017/18, 31% of males reported drinking above the recommended weekly limit of 14 units, which is lower than in 2010/11 (37%).
- In NI in 2000, 62.2% of 11-16 year old males had taken an alcoholic drink. This fell to 31.9% by 2019.
- The number of males being treated for problem drug use (excluding alcohol) in RoI increased from 5,826 to 7,626 between 2012 and 2018.
- In NI, the number of males being treated for problem drug use increased from 2,252 in 2012 to 2,946 in 2019 (Foster, Scarlett and Stewart, 2019).
- In RoI and NI, males account for approximately two thirds of those receiving treatment for problem drug use.
- In RoI in 2019, 54% of males achieved the recommended level of physical activity.
- In RoI, a higher proportion of males than females get the recommended level of activity.
- In NI, the proportion of males participating in physical activity at least once a week decreased from 67% in 2014/2015 to 57% in 2018/2019.

Section 3: Focus on...

Three themes relating to male health on the island of Ireland are highlighted. Within each theme, there is a discussion of a topic that has received much attention, as well as a topic which has received less attention. In addition, there is a discussion of statistics and risk factors related to males and COVID-19.

Mental health

- Mental health is increasingly being recognised as a major issue at the individual and the national level, especially within the context of COVID-19.
- In NI, the 2017/18 *Health Survey* identified females aged 45-64 and males aged 16-24 as being most at risk of a possible mental disorder.

Suicide

- Explanations for male suicide trends are complex, and include factors associated with gender and masculinities, economic and employment stress, middle-age, legacy of the NI conflict, isolation and social connections, and sexual identity.

Eating disorders

- In NI in 2018/19, 53 out of 518 (almost 1 in 10) patients that had an eating disorder were male.
- In RoI, males accounted for 3 out of 157 hospital admissions (2%) for eating disorders in 2018.
- Statistics on eating disorders focus on hospital admissions, and there are no community-wide statistics on the number of people diagnosed with eating disorders.
- Research and statistics tend to focus on females' experience of eating disorders. This may lead to greater stigmatisation of males who experience an eating disorder, and a lack of appropriate services.
- Explanations for eating disorders amongst males include media pressure, body dissatisfaction, social stress, family, trauma, and cultural factors.

Physical conditions

- Physical health is the most common indicator used to assess our health and wellbeing.
- There is a reported correlation between poor physical health and poor mental health.
- It is much easier to obtain data on the number of people dying from a particular condition than it is to obtain data on the number of people diagnosed and living with it.

Cardiovascular Disease (CVD)

- In 2018, 70% of people in NI living with ischaemic heart disease were male. The figure was similar in RoI (71%).
- In NI in 2018, the number of potential years of life lost for males who died from ischaemic heart disease, aged between 1-74 years, was 5,413.
- Standardised death rate for ischaemic heart disease was higher amongst males than females in both NI and RoI. While there was an overall downward trend, the rate for males in NI increased in 2017.
- Factors that help to explain the higher prevalence and mortality rates among males for CVD include lifestyle (smoking, alcohol, obesity and poor diet), other physical health conditions (such as raised blood pressure), gene expression and hormones from sex chromosomes.

Arthritis

- Arthritis is the most prevalent chronic condition amongst older adults in RoI.
- Females are more likely to be affected by arthritis than males.
- Risk factors affecting males include lifestyle (smoking, diet and obesity) and specific occupational factors.

Use of health care services

- Explanations for the lower rates of help-seeking behaviours among males include masculine norms, attitudes and behaviour, perception of the severity of the health problem, engagement in risky behaviours, and lack of health-related knowledge.

Visits to health professionals

- In RoI, the 2015 *Health Survey* showed that a higher proportion of females than males consulted health professionals.
- In NI, the number of visits to GPs increases with age.
- Factors explaining these patterns include gender norms, economic factors including the different health care system in RoI and NI, and isolation.

Use of screening and preventative services

- RoI and NI each have three national cancer screening programmes (breast, cervical and bowel), of which only bowel cancer screening is offered to males.
- In NI in 2018/19, 8,138 out of 9,732 eligible males were screened within the Abdominal Aortic Aneurysm Screening Programme. This is an uptake rate of 83.6%.
- The uptake rate of screening programmes can be affected by social factors (such as social norms, ineffective use of health services, fear and denial), economic factors, lack of time, and health literacy.

COVID-19

- The global outbreak of COVID-19 originated in Wuhan in China, and was declared a pandemic in March 2020.
- The most common symptoms of COVID-19 are fever, dry cough and tiredness.
- Across the island of Ireland, lockdown and restrictions have been introduced at different times and in specific places.
- The rate of COVID-19 infections and deaths remains extremely fluid as the pandemic progresses.
- In Northern Ireland, the Department of Health and the Northern Ireland Statistics and Research Agency (NISRA) calculate the number of deaths in different ways.
- At the time of writing (September 2020) the majority of COVID-related deaths are among males. There are biological, health and social explanations for this difference.
- The impact of economic and social factors, along with the political context, are of great importance as the pandemic evolves. Specific concerns include loneliness, use of alcohol, suicide and self-harm, and domestic violence.

Section 4: Men's health in Ireland – figuring it out

The availability of data from government and other sources allowed us to identify trends and key issues relating to the health of men and boys across the island of Ireland. However, we also encountered a range of data-related issues.

Key trends

- Since 2008, the four main causes of death among males across the island of Ireland continue to be neoplasms, circulatory system diseases, respiratory system diseases, and external causes of injury and poisoning.
- In 2008, circulatory diseases were the leading cause of death. Since then, the death rate for circulatory diseases has fallen. This could be linked to factors such as the decrease in smoking levels and better treatment options.
- Neoplasms are now the leading cause of death among males across the island of Ireland. Reflecting this, the incidence of invasive cancer (excluding non-melanoma skin cancer) has increased since 2008. While this is a cause for concern, it may also reflect the impact of successful screening programmes and better diagnostic tools, as well as improvements in health literacy and help-seeking behaviours among males.
- The three mostly commonly diagnosed cancers across the island of Ireland for males are prostate, colorectal and lung. These are especially high for middle-aged and older men. The incidence of prostate cancer in the Republic of Ireland is the highest in the European Union and may, at least in part, be a consequence of high levels of PSA testing. The most commonly-diagnosed cancer among males aged under 45 years is testicular cancer.
- In general, incidence rates are higher within areas of deprivation (although the reverse is true for testicular cancer and NMSC).
- Overall, survival rates for many cancers are improving.
- The number of males dying by suicide across the island of Ireland has fallen since 2008, although it was highest during 2008 and 2012. The highest crude rate of male suicide is among males aged 45-54 in RoI, and males aged 25-34 years in NI.
- The number of cases of gonorrhoea and HIV among males is rising in both jurisdictions.

Key messages

- Males are not an homogenous group, and there are significant differences in the circumstances of males' lives, their health behaviours and their health outcomes.
- The increase in life expectancy, and the decrease in mortality rates, means that the population of males across the island of Ireland is ageing. Thus, we can expect higher incidence of some cancers and other conditions in the future.
- Understanding the relationship between physical health and mental health is essential.

Data-related issues

- There is a lack of data available on specific health conditions and illnesses.
- There are gaps and inconsistencies in the way that data is disaggregated. Data should be disaggregated by key variables, such as male/female, socio-economic status, age, ethnicity, location and marital status. However, the need to maintain anonymity is acknowledged.
- It is only by exploring the relationships between socio-demographic variables that we will gain more meaningful insights into, and understanding of, male health and health trends over time.
- There is a need for greater consistency in the reporting of statistics across RoI and NI, such as the consistent use of ICD-10 codes and the calculations used for European Age Standardised Rates.
- Having greater availability of disaggregated data for health outcomes and behaviours, as well as greater consistency in data collection and classification across the island of Ireland, would allow for comprehensive understanding of male health and wellbeing to inform appropriate policy, practice and interventions.

Concluding remarks

- There are no quick fixes to improving male health on the island of Ireland.
- Addressing the breadth of the issues highlighted in this report involves change at a personal, societal and policy level.
- The development of a male health policy in Northern Ireland is vital. This needs political will and financial support, alongside an accountability, monitoring and evaluation process.
- Government datasets do not include data on small or hidden groups (such as homeless or trans males, some minority ethnic communities). Therefore, survey data is vital for providing information on these groups.
- The COVID-19 pandemic is likely to have lasting effects upon the physical, mental, social and financial wellbeing of men and boys long into the future. It is vital that appropriate support services are put in place to support those most affected.

SECTION 1: BACKGROUND

1.1 Introduction

This report collates statistics and other information on the health of men and boys on the island of Ireland. It is based on the influential *Men's Health in Ireland* report published by the Men's Health Forum in Ireland in 2004. The figures and topics within that document provide a baseline picture of health at that time.

This current report explores how the situation has changed since then. It also reflects issues that have emerged, or increased in importance or visibility, since 2004. This may be due to: new policy approaches; the introduction of screening programmes; the availability of different types of data (for example, the establishment of longitudinal studies of ageing in Northern Ireland and the Republic of Ireland); and increasing concern about specific issues (for example, suicide). In addition, global events such as migration, economic recession, and the COVID-19 pandemic have impacted the health of men and boys in specific ways.

1.1.1 Health across Ireland

Whilst Northern Ireland and the Republic of Ireland are situated on the same island, each jurisdiction has its own administration and policy context and different services. In particular, each health care system has a specific approach to funding, policy, coverage and structures (Breen, 2010). One clear example of the differing policy context across the island of Ireland relates to men's health policy: The *National Men's Health Policy* in the Republic of Ireland, as well as the *Healthy Ireland – Men Action Plan,* are significant policy developments that are missing in Northern Ireland. A comprehensive exploration of national male health policies is available in Chapter 1.2.

In Northern Ireland, the health care system is free at the point of delivery for the majority of residents, and is funded through general taxation. There is an integrated system of health and social care, and the Department of Health has overall authority over policy and funding. Services are commissioned by the Health and Social Care Board, and are provided by the Health and Social Care Trusts and primary care practitioners (although these operate independently of the Trusts).

In the Republic of Ireland, however, health care is mostly based on health insurance, although some groups in the population are entitled to free health care through the General Medical Services (GMS) scheme. The Department of Health has strategic policy responsibility, while the Health Services Executive (HSE) runs the public health care services.

Whilst some research studies show similar rates of GP consultation and hospitalisation in the Republic of Ireland compared with Northern Ireland, other studies have shown that some socio-economic groups in the Republic of Ireland do not consult their GP due to the cost of the appointments (Cruise et al., 2017).

1.1.2 Social determinants of health

This report takes into account the social determinants of health, which the World Health Organization (not dated, a) describes as the conditions in which people are born, grow, live, work and age. This approach recognises that health and ill-health are not solely due to biology; they are influenced by a range of political, policy, social, cultural and structural issues at the local, regional, national and international level. For example, socio-economic factors (such as income, wealth, and education) are seen as the fundamental causes of a wide range of health outcomes such as life expectancy or infant mortality rates (Braveman and Gottlieb, 2014).

1.1.3 Gendered approach

This report also acknowledges the role of gender in shaping health outcomes. Gender refers to socially constructed roles, behaviours, attributes and opportunities for males and females (World Health Organization, 2018a). In other words, what it means to be a boy/man or a girl/woman at a particular place and time. In particular, the concept of masculinities is useful in relation to health, as it highlights the culturally-specific roles and patterns of behaviour that are associated with males. As will be highlighted throughout this report, this is relevant to health-related issues such as lifestyle behaviours, risk taking, engagement with social networks, and help-seeking behaviour (Man Matters, 2011).

1.1.4 About the report

Section 1 provides background to the report and highlights important contextual information. Section 2 outlines statistics relating to key markers of the health of men and boys across the island of Ireland, with a focus on trends over time. Section 3 explores three of these themes: mental health, physical conditions, and the use of health care services. In addition, the report provides relevant statistics and a discussion of risk factors related to males and COVID-19. Section 4 discusses the main issues for the health of males across the island of Ireland, highlights important data-related concerns, and makes recommendations for future data collection and reporting.

A glossary of key terms is included at the start of this document. At the end of most chapters, we have suggested useful sources of information or key reading. Within Section 2, Trend Tables are based on a traffic light system. Red suggests a negative trend, for example, an increase in the number of diagnosed cases or a fall in survival rates. Orange suggests that there has been little change. Green suggests a positive trend, for example a decrease in the number of diagnosed cases or a rise in survival rates. However, we acknowledge that an increase in the number of diagnosed cases should not, necessarily, be viewed as negative, as it may reflect a successful screening programme. Therefore, we use a variety of words to describe a trend (for example, better, increase, worse, decrease, similar).

The majority of statistics in this report are obtained from government data sources, collected by government departments and agencies for internal monitoring and evaluation purposes. Thus, the data often reflect the priorities of the collecting organisation. Statistics on the number and cause of death are more readily available than those relating to illness. The main exceptions are cancer and infectious diseases (such as COVID-19).

Where possible, comparisons are made with statistics for the European Union (EU); either for the EU28 (the 28 countries that comprised the EU until 31 January 2020), or EU27 (the 27 countries in the EU from 1 February 2020), depending on the data source.

For clarity and standardisation throughout this report, the following terms are used to represent three geographic areas:

- Republic of Ireland (RoI) – the jurisdiction of the Republic of Ireland.
- Northern Ireland (NI) – the jurisdiction of Northern Ireland.
- Island of Ireland – comprising the Republic of Ireland and Northern Ireland.

There are often methodological discrepancies in the recording and presentation of data between the two jurisdictions, and some of these issues are explored in Section 4. Therefore, it may be impossible to combine statistics for both jurisdictions in order to produce data at an all-island level. Where appropriate, statistics for each jurisdiction are presented separately and explained accordingly.

Population and other health-related figures can be presented in a variety of formats, such as round numbers, or thousands. In addition, some statistics (for example, mid-year population estimates) are quoted in rounded form, as population counts from the Census and updates involving births, death and migration cannot be precise. For example, the Northern Ireland Statistics and Research Agency (NISRA) warn that the precision of population estimates should be considered as being no better than to the nearest 1000.

Statistical agencies may also manipulate statistics (especially those involving small numbers) in order to maintain anonymity.

The figures presented in tables may be rounded, and so column or row percentage totals may not always add to 100.

The International Classification of Diseases (ICD) is used for the identification of health trends and statistics. The ICD codes used in this report are the 10th and most recent edition (ICD-10).

There are two methods used to calculate a European Age Standardised Rate (EASR). One is based on a 1976 population, and one based on a 2013 population (further information is provided in the glossary). Throughout this report, we will refer to an EASR based on the 1976 population as EASR (old), while an EASR (new) is based on the 2013 population.

CASE STUDY

IRELAND: WORLD LEADER IN MALE HEALTH

The Republic of Ireland was the first country in the world to adopt a National Men's Health Policy. This policy highlighted the broad range of health and wellbeing issues facing men, and outlined frameworks and strategies to address these needs. In 2017, this Policy was succeeded by the 'Healthy Ireland - Men' Action Plan. This cemented Ireland's reputation as a world-leader in addressing male health needs.

www.mhfi.org/menshealthpolicy.pdf
www.mhfi.org/HI-M.pdf

1.2 Male health policies

Male health policies and strategies are vital at local, national, regional and global levels in raising the profile of the health issues affecting boys and men. In addition, they can provide a framework for action, a benchmark for evaluating impact, and a mechanism for holding services accountable for their performance (Baker and Brown, 2018). However, to date, national male health policies have been adopted by only four countries: Ireland, Australia, Brazil and Iran (Table 1). There are also a range of relevant strategies and policies at the international level.

Table 1: Male health policies

Year	Country	Strategy
2009	Republic of Ireland	National Men's Health Policy 2008-2013
2017	Republic of Ireland	Healthy Ireland – Men 2017-2021 Action Plan
2009	Brazil	National Healthcare Policy for Men (PNAISH)
2010	Australia	The National Male Health Policy: Building on the Strengths of Australian Males
2020	Australia	National Men's Health Strategy 2020-2030
2013	Iran	Strategic plan to address men's health

1.2.1 Ireland

Ireland was the first country in the world to adopt a National Men's Health Policy, and there were three underlying factors behind the rationale to develop this. Firstly, there were particular concerns about differences in health outcomes between males and females, and between different groups of males. This led to a call for a specific policy focus on men's health in Ireland's National Health Strategy in 2001. Secondly, there was a recognition of the need to develop a gendered approach to men's health in order to more effectively engage men in services and programmes. Thirdly, concerns within wider grass roots men's health organisations about the state of men's health, and the health status of specific population groups of men, contributed bottom-up momentum to policy development (Health Service Executive, 2016).

Male health issues were defined in the *National Men's Health Policy 2008-2013* as:

> '...any issue that can be seen to impact on men's quality of life and for which there is a need for gender-competent responses to enable men to achieve optimal health and wellbeing at both an individual and a population level' (Department of Health and Children, 2009, p.17).

The policy reflected a clear social determinants approach, and highlighted the need for a whole system response across government and non-government sectors to effectively address the issues in men's health (Baker, 2015). Importantly, the policy moved beyond the traditional medical model, and emphasised the importance of prevention and supporting men to become active agents and advocates of their own health. However, there was also an absence of ring-fenced resources or funding to implement the policy, which undermined the capacity to deliver its objectives (Richardson and Smith, 2011).

A review into the men's health policy in Ireland was commissioned by the Department of Health [Ireland] and the Health Service Executive (HSE) to inform and align the future direction of the men's health policy in Ireland within the *Healthy Ireland* framework. This review, undertaken by Peter Baker, concluded that, despite the absence of a framework to monitor the impact of policy against changes in men's health outcomes over time, substantial progress had been achieved by the policy in the following areas:

1. Promoting an increased focus on men's health research in Ireland.
2. Developing health promotion initiatives that support men to adopt positive health behaviours and to increase control over their lives.
3. Building social capital within communities for men.
4. Developing and delivering men's health training for health and other professionals.
5. Developing partnerships in the area of men's health involving statutory, community, voluntary and academic sectors.

(Health Service Executive, 2016).

A new men's health policy was not developed. Instead, men's health fell within the remit of the *Healthy Ireland* framework. This framework has the aim of improving the health and wellbeing of people in the Republic of Ireland, with a focus on prevention and keeping people healthier for longer. A *National Men's Health Action Plan* was developed within this framework, based on the same theoretical and philosophical principles as the earlier policy (Health Service Executive, 2016). Four themes were identified in order to:

- Establish appropriate governance structures that are aligned with Healthy Ireland to oversee the implementation of *Healthy Ireland – Men 2017-2021.*
- Contribute to the implementation of the priority programmes for *Healthy Ireland* – healthy eating and active living, wellbeing and mental health, positive ageing, alcohol, tobacco free, and healthy childhood – with a particular emphasis on addressing health inequalities between different sub-populations of men.
- Build capacity with those who work with men and boys to adopt a gender-competent and male-friendly approach to engaging them at both an individual and an organisational level.
- Ensure that research continues to underpin the development of men's health practice in Ireland and contributes to the *Healthy Ireland* agenda.

Within these themes sit a total of 28 actions. Baker (2015) noted that the high-level political support, and governance and implementation structures of *Healthy Ireland*, mean that the framework is more likely to achieve its goals through cross-sectoral activity.

1.2.2 Brazil

Brazil launched its National Men's Health Policy, PNAISH, in 2009. Its main aim was to improve men's use of primary care services (Baker, 2015). The policy was specifically targeted towards enhancing the health needs and outcomes of males aged between 20 and 59 years, by improving their access to health care services (Spindler, 2015). To meet this overarching aim, the policy had two objectives. Firstly, to implement the policy across Brazil to improve men's primary health care services, whilst also improving training for health care providers. Secondly, to implement sexual health services in primary health care units to improve male sexual and reproductive health (Spindler, 2015).

The policy had nine priorities:

1. Implement the policy as part of state and municipal level health plans.
2. Develop health promotion strategies to increase men's health service demands.
3. Increase access to information and communication to men and their families, to improve motivation for self-care and healthy habits.
4. Align government actions with civil society initiatives around men's health.
5. Expand and strengthen comprehensive health services for men at the primary and municipal health care level.
6. Improve the training and education of health care professionals in attending to men's health needs.
7. Monitor and evaluate human resources, equipment, and supplies needed to offer adequate health services to men.
8. Improve health information and data collection systems related to men's health.
9. Conduct research and studies of pilot municipal projects.

(Spindler, 2015)

In addition, the policy had five strategic areas:

1. Mobilisation and increased access of male populations to health services – through campaigns and training.
2. Violence and accident prevention among men – including domestic violence.
3. Prevention of chronic diseases among men – including preventive actions around screening and promotion of issues such as nutrition.
4. Engagement of men in sexual and reproductive health initiatives.
5. Encouragement of men as active and positive participants in prenatal, delivery and post-partum care, as a way to engage in the health and wellbeing of their partners and children, as well as a space for men to take preventive tests and have check-ups.

(Spindler, 2015)

Lima and Schwarz (2018) argue that the efforts of PNAISH to use a sociocultural focus towards men's health is one of its major achievements. In particular, fatherhood and caregiving have captured the attention of policy makers, health professionals and the general population in relation to men's health and gender equality. One perceived strength of the policy is that it is integrated and evaluated within the national health structures (Macdonald, 2018). There was evidence that some health clinics extended their opening hours to attract more men, and that the demand for primary care services did increase (Lima and Schwarz, 2018).

However, the policy was criticised for: paying too much attention to men's individual responsibility for their health and overlooking wider social determinants of health; a poor implementation strategy (including a lack of resources and staff training); not introducing tools for measuring its impact (Baker, 2015). Lima and Schwarz (2018) highlight that the threat to PNAISH was posed by a backlash in Brazil against gender policies.

In addition, the lack of an organised men's health movement in Brazil reduced the capacity of the policy to address existing gaps, such as the integration of gay, bisexual and transgender men, and a comprehensive debate on men's mental health, suicide, alcohol and drug use.

1.2.3 Australia

An Australian-wide male health policy – *The National Male Health Policy: Building on the Strengths of Australian Males* – was launched in 2010 (Department of Health and Ageing, 2010). This followed the previous introduction of similar policies in the states of South Australia in 2008 and New South Wales in 2009. This national policy acknowledges the effects of social and cultural factors as key determinants of health (social determinants approach), in addition to biomedical and behavioural factors (Baker, 2015). Importantly, the policy refers to 'males' rather than 'men', in order to emphasise that the policy relates to boys and men. The policy also paid attention to specific groups, such as Aboriginal and Torres Strait Islander males, and fathers (Richardson and Smith, 2011). As a result, this policy provided a practical framework for improving the health of all males and gaining equal health outcomes for subgroups of males that are at risk of health issues.

The policy is based on the following assumptions:

- The health of Australian males is important.
- There are health inequities between males and females.
- Not all male population groups have the same health outcomes.
- Health is holistic.

The policy has six priority areas that aim to promote the following:

1. Optimal health outcomes for males.
2. Health equity between population groups of males.
3. Improved health for males at different life stages.
4. A focus on preventative health for males, particularly regarding chronic disease and injury.
5. Building a strong evidence base on male health and using it to inform policies, programmes and initiatives.
6. Improved access to health care for males through initiatives and tailored health care services, particularly for male population groups at risk of poor health.

Unlike the Irish Men's Health Policy, which did not include any ring-fenced funding, the Australian Federal Government committed $16.7 million to implement the policy, including $6.9 million for the establishment of a national longitudinal study into the social determinants of male health (Richardson and Smith, 2011).

Macdonald (2018) argues that the Australian policy is stronger than the Brazilian and Irish policies in two main ways: the initiation of a national longitudinal study of male health that will provide evidence-based data; and the emphasis on a social determinants of health approach that will assist the development of new approaches in policy and practice. For example, dedicated government support for the National Men's Shed Movement is a practical way of endorsing a social determinants approach.

Nevertheless, the policy has been criticised for: being too modest in its scope, ambition and impact; poor governance and a lack of long-term high-level support; the absence of timeframes for delivery; no funding for the individual states to take action; a lack of training for staff; no independent evaluation framework (Baker, 2015).

Unlike the 'top-down' approach in Brazil, the Australian policy grew out of non-government organisations, leading to little evidence of implementation or accountability targets at government level (Macdonald, 2018).

A new strategy has been published in Australia – *The National Men's Health Strategy 2020-2030* (Department of Health [Australia], 2020a) – which builds on the earlier policy. This new framework for action has the goal that every man and boy in Australia is supported to live a long, fulfilling and healthy life. Interestingly, the title refers to men's health, rather than male health, as in the previous policy. The three core objectives are to:

- Empower and support men and boys to optimise their own and each other's health and wellbeing.
- Build the evidence base for improving men's health.
- Strengthen the capacity of the health system to provide quality appropriate care for men and boys.

The strategy lists five priority health issues:

- Mental health.
- Chronic conditions.
- Sexual and reproductive health, and conditions where men are over-represented.
- Injuries and risk taking.
- Healthy ageing.

Given the focus on health ageing, the strategy highlights a life-course approach to appropriate interventions.

1.2.4 Iran

Iran implemented a national men's health policy in 2013 to promote the positive physical, psychological and social health of males. The national policy focused on the increase of diseases in males and their lower uptake of health services compared with females. The policy centred upon two key themes:

- Supportive environments (the workplace, social spaces, family and home environment, and education environments).
- Supportive services (educational services, social services, and health and care services).

In relation to health and care services, the key elements were to:

- Provide free physical activity facilities for all.
- Establish a comprehensive health system based on Primary Health Services.
- Provide unconditional and immediate treatment for victims of road accidents.
- Develop the health system based on different age and gender groups.

(Esmailzade et al., 2016)

1.2.5 Northern Ireland

There is no male health policy or strategy in Northern Ireland. However, *A Gender Equality Strategy for Northern Ireland 2006-2016* highlighted that health needs and suicide are key issues for men and boys, and that these should be addressed via an associated men's action plan (Office of the First Minister and Deputy First Minister, 2010). This strategy has now expired, and no replacement strategy has been put in place. In September 2020, the Northern Ireland Executive approved the development of a number of new social inclusion strategies to be published by the end of 2021 covering disability, poverty, sexual orientation and gender. The work on the strategies is being led by the Department for Communities, which has indicated that these will be evidence-based and targeted to address objective need (Department for Communities, 2020).

Two documents published in 2011 pushed forward the men's health agenda. Firstly, *Men's Health in Northern Ireland: Tackling the Root Causes of Men's [ill]-Health* (Man Matters, 2011) highlighted key priorities to address men's health needs in Northern Ireland. This included the need to adopt a Men's Health and Wellbeing Policy for Northern Ireland. Other recommendations included the need to:

- Ensure that men's issues and needs are reflected in government departments' Gender Action Plans.
- Commission new research into the issues facing/needs of men, young men and boys, and systematically collate and analyse existing data.
- Develop gender-competent health and social services with an increased focus on preventative health.
- Provide a more explicit focus on health for boys in schools.
- Place greater emphasis on men's health in the workplace
- Support the increased involvement of men in family life.
- Develop appropriate mental and emotional support services.
- Provide an increased focus on men's health through health communication and awareness raising strategies.

Secondly, *Improving Men's Health in Northern Ireland* (British Medical Association Northern Ireland, 2011) focused on initiatives to improve men's health and the need to engage men around their health. The document argued that improving male health should be a responsibility shared by government, health professionals, community organisations and men themselves. A series of recommendations included increasing research to develop a men's health policy, improving services in a supportive environment, and promoting responsibility.

There are also a range of international initiatives that are relevant to male health policy development.

1.2.6 Vienna Declaration

In 2005, the Vienna Declaration, instigated by the European Men's Health Forum (2005), called upon governments, providers of health services, and other relevant bodies in European countries to:

- Recognise men's health as a distinct and important issue.
- Develop a better understanding of men's attitudes to health.
- Invest in 'male sensitive' approaches to providing health care.
- Initiate work on health for boys and young men in school and community settings.
- Develop co-ordinated health and social policies that promote men's health.

1.2.7 United Nations 2030 Agenda for Sustainable Development

The United Nations 2030 Agenda for Sustainable Development (United Nations, 2015) provides a set of goals and targets with the aim of achieving economic, social and environmental development.

In particular, 3 of the 17 Sustainable Development Goals (SDG) are relevant to male health: good health and wellbeing (SDG3), gender equality (SDG5), and reduced inequalities (SDG10).

1.2.8 Health and wellbeing of men in the WHO European Region

In September 2018, the World Health Organization (WHO) Europe Regional Committee published a strategy on the health and wellbeing of men in the WHO European Region (World Health Organization, 2018b). This strategy was designed within the context of Sustainable Development Goals 3 (good health and wellbeing) and 5 (gender equality), as well as Goal 10 (reduced inequalities). The aim of the strategy is to improve men's health and wellbeing through evidence-informed, gender-responsive and equity-driven approaches that transform the gender roles, norms and structures that affect men's exposure to risk factors and act as a barrier to gender equality and health equity achievements in Europe.

The main objectives of the strategy are to:

- Reduce premature mortality among men due to non-communicable diseases and unintentional and intentional injuries.
- Improve health and wellbeing among men of all ages, while reducing inequalities between and within countries of the Region.
- Improve gender equality through structures and policies that advance men's engagement in self-care, fatherhood, unpaid care, violence prevention and sexual and reproductive health.

This strategy takes several approaches, relating to gender, human rights, outcomes, life-course, equity, people-centred health system, whole-of-government, whole-of-society, assets-based, participatory and public health.

1.2.9 Challenges to implementing policy

All policies face challenges to how well they can be implemented, and these vary according to the political, financial, social and global context. Richardson and Smith (2011) highlighted key lessons, based on the Irish and Australian policies:

- Ring-fenced resources or funding to support the policy's action plans are needed.
- A policy can provide a platform for increased activities among government, practitioner and third-sector organisations.
- Men's health should be included within a wider gender mainstreaming framework.
- There is a danger that men's health can be seen as solely the responsibility of the individual, without focusing on structural issues (for example, socio-economic status and ethnicity).
- There is a danger of treating all men the same, and ignoring the diversity that exists among men and the gendered values within which men live and work.
- Policy makers should identify how they make key policy decisions, especially when there are competing needs among different groups. In addition, they should manage the expectations of those who input into the process.
- It is important to get buy-in from government departments. This can be undermined by staff turnover, and the impact of austerity measures which reduce funding.
- Governance and accountability are important and, so, evaluation needs to begin at the start of the policy timeframe. There should also be a timeframe associated with any action plan.
- Success should be documented, in order to provide evidence of 'what works'. However, this requires funding and expertise.

USEFUL SOURCES OF INFORMATION

Men's Health Forum in Ireland: https://www.mhfi.org/resources/research-policies-and-reports.html

Global Action on Men's Health: https://gamh.org/mens-health-policy-reports

SECTION 2: KEY TRENDS IN MEN'S HEALTH

2.1 Population

Population data can be accessed from the Central Statistics Office (CSO) in the Republic of Ireland, and the Northern Ireland Statistics and Research Agency (NISRA) in Northern Ireland. These government agencies provide data from the relevant Census, as well as other sources. The Census is carried out every five years in the Republic of Ireland, most recently in 2016. However, the Census takes place every ten years in Northern Ireland and, so, the most recent Census data is from 2011. In Northern Ireland, the next Census is due to take place on 21 March 2021, whilst the 2021 Census in the Republic of Ireland has been postponed to 2022 due to COVID-19.

2.1.1 Number of males on the island of Ireland

In 2019, the latest year for which there are population estimates for both jurisdictions, there were nearly 3.4 million men and boys living on the island of Ireland. Table 2 indicates that just under one million lived in Northern Ireland, and approximately 2.4 million lived in the Republic of Ireland.

Since 1994, the number of males living on the island of Ireland has increased by 30%. However, Table 2 shows that the rate of increase for the Republic of Ireland is more than twice that for Northern Ireland (37% and 16% respectively).

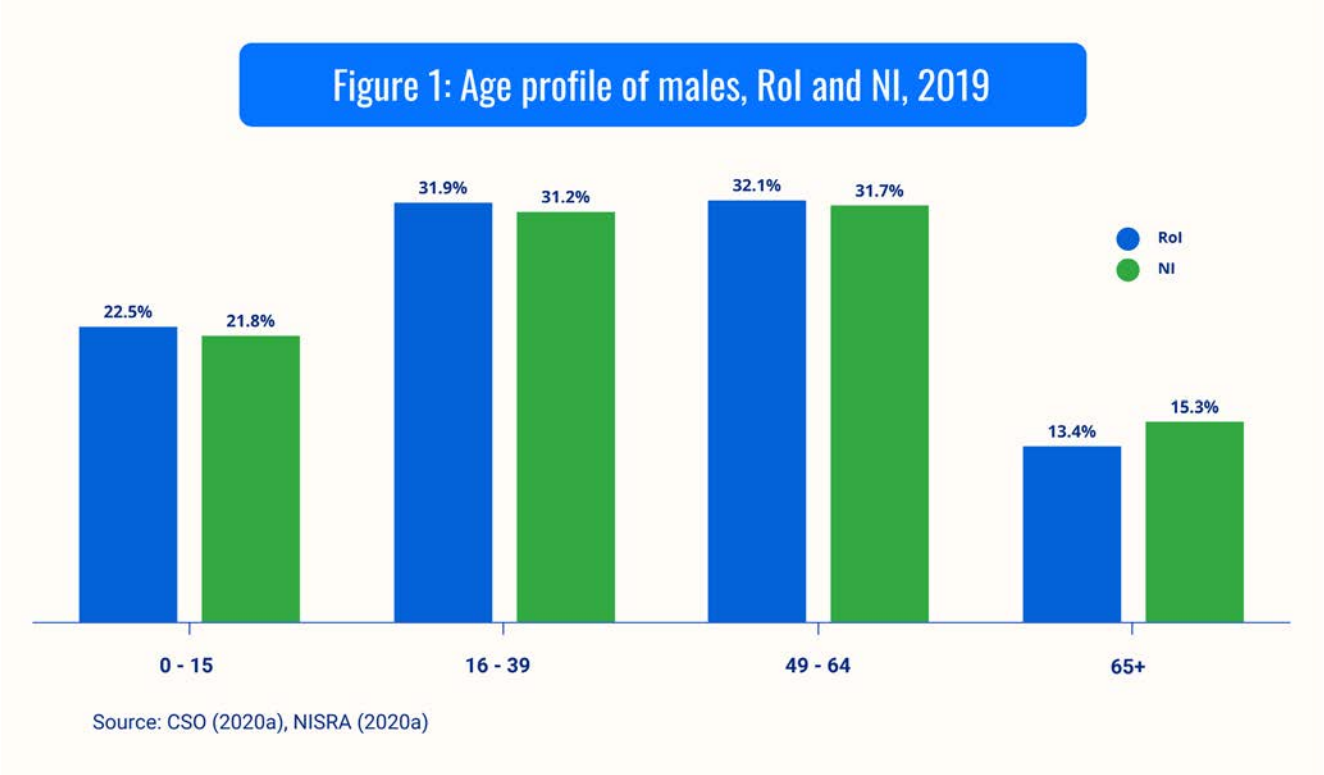
Table 2: Number of males, RoI and NI, 1994 to 2019

	RoI	NI	Island of Ireland
1994	1,783,300	801,946	2,585,246
1999	1,858,666	818,498	2,677,164
2004	2,011,900	838,251	2,850,151
2009	2,257,300	878,562	3,135,862
2014	2,299,000	902,711	3,201,711
2019	2,437,894	932,717	3,370,611
% change 1994-2019	37	16	30

Source: CSO Statbank Table PEA01, NISRA (2020a)

2.1.2 Age profile of men and boys

In 2019, the age profile for males was similar in both jurisdictions, although a slightly higher proportion of males in Northern Ireland were aged 65 years or over (15.3%) compared with those in the Republic of Ireland (13.4%) – see Figure 1.



2.1.3 Proportion of males in the population

Overall, males make up one half (49.5%) of the total population of the island of Ireland. Table 3 indicates that there is a slight majority of males in the youngest age group, whilst they comprise less than half of the population aged 65 years or over.

Table 3: Proportion of males in the population, by age, RoI and NI, 2019

	RoI			NI			Island of Ireland		
	N of people	N of males	% male	N of people	N of males	% male	N of people	N of males	% male
0-15	1,073,756	549,523	51.2	395,925	203,081	51.3	1,469,681	752,604	51.2
16-39	1,570,175	777,871	49.5	578,542	291,075	50.3	2,148,717	1,068,946	49.7
40-64	1,581,200	783,700	49.6	604,476	295,444	48.9	2,185,676	1,079,144	49.4
65+	696,300	326,800	46.9	314,724	143,117	45.5	1,011,024	469,917	46.5
Total	4,921,431	2,437,894	49.5	1,893,667	932,717	49.3	6,815,098	3,370,611	49.5

Source: CSO Statbank Table PEA01, NISRA (2020a)

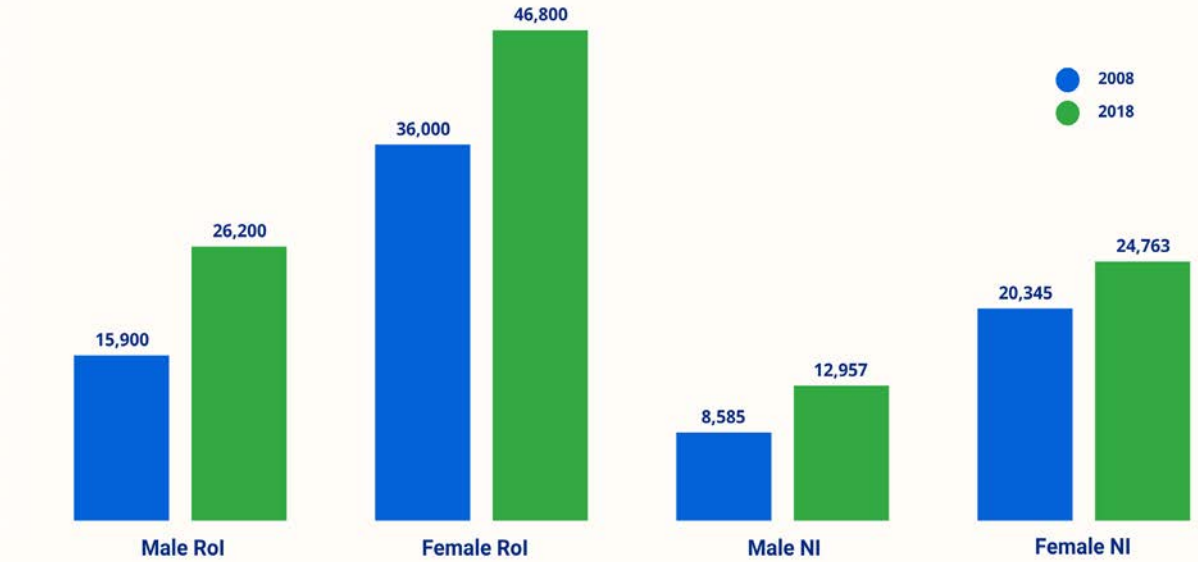
2.1.4 Men and ageing

The broad age groups shown in Table 3 hides variation within them, especially in relation to ageing. It is important to take the age profile of local areas into account for health and care planning. For example, in 2018, 15.87% of the population in Regional Health Area F in the Republic of Ireland was aged 65 years or over, compared with less than 12.22% in Areas A and B (Department of Health [Ireland], 2019a). In Northern Ireland, 21.4% of the population in Ards and North Down were aged 65 years or over, compared with 14.5% in Mid Ulster (NISRA, 2020a). This rise in the numbers of older men across Ireland has resulted in the need to develop gender-appropriate services among the statutory and voluntary sectors.

Figure 2 shows the increase in the number of people aged 85 years or over across the island of Ireland. In the Republic of Ireland, the number of males aged 85+ has grown by 64.8% between 2008 and 2018. This is more than twice the rate for females. As a result, men comprise 35.9% of all people living in the Republic of Ireland aged 85 years or over, compared with 30.6% in 2008.

A similar pattern is evident in Northern Ireland, where the number of males aged 85 years or older has grown by 50.9% since mid-2008, whilst the number of females has grown by 21.7% over the same decade. As a result, males now account for 34.4% of all people living in Northern Ireland aged 85 years or over, compared with 29.7% in 2008 (NISRA, 2019a).

Figure 2: Number of people aged 85 years or over, RoI and NI, 2008 to 2018



Source: CSO (2020a), NISRA (2020a)

2.1.5 Travellers

As shown in 2.1.4, the population across the island of Ireland is ageing. In contrast, Travellers have a young population, which reflects a high birth rate, high mortality rates and low life expectancy. Data from the Census in the Republic of Ireland indicates that in 2016, 41% of male travellers were aged under 15, which is nearly twice the figure for all males in the population (22%). However, only 3% of Traveller males were aged 65 years or over, compared with 13% for all males – see Table 4.

A similar pattern was found by the All Ireland Traveller Health Study Team (2010), based on their Census of Travellers in 2008.

Table 4: Age profile of Traveller males and all males, RoI, 2016

	%	
Age group	Male Travellers 2016	Male population 2016
0-14	41	22
15-24	19	12
25-39	25	29
40-64	12	24
65+	3	13
Total number	15,377	2,320,460

Source: CSO Statbank Table E8006

2.1.6 Immigration

Since the publication of the Men's Health in Ireland report in 2004, the population across the island of Ireland has become more diverse due to immigration, especially after the expansion of the European Union (EU). Ten countries joined the EU in 2004 (Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia). In addition, Bulgaria and Romania joined the EU in 2007. The economic boom during the 'Celtic Tiger' years meant that the Republic of Ireland also attracted workers from non-EU countries.

In the Republic of Ireland in 2006, 89% of males were Irish and 3% were from the UK. By 2019, estimated figures suggest that this had fallen slightly to 87% and 2% respectively (see Table 5). The 2016 Census showed that the largest groups of non-national males were from Poland (61,860), United Kingdom (52,724), Lithuania (16,919) and Romania (15,090) (CSO, 2017a).

Table 5: Estimated number of males, by nationality, RoI, 2006 to 2019

	2006		2019	
	Number of males (000's)	%	Number of males (000's)	%
Irish	1,887.4	89	2,126.2	87
UK	57.8	3	59.7	2
EU14 excluding Ireland and UK	21.3	1	39.3	2
EU15 to EU27 (accession countries post 2004)	79.9	4	126.8	5
Other nationalities	70.9	3	86	4

Source: CSO Statbank Table PEA21

Data from the 2011 Census in Northern Ireland show that 89% of males were born in Northern Ireland, 5% were born in England, Scotland or Wales, and 2% were born in the Republic of Ireland (see Table 6). The next largest groups of males not born in Northern Ireland were Polish (10,278) and Lithuanian (3,469). It is important to note that these figures are now nine years old and will have changed since then - due to different social and economic contexts, and BREXIT.

Table 6: Population by country of birth, males, NI, 2011

	Number of males	%
Born in Northern Ireland	789,193	89
England / Scotland / Wales	42,510	5
Republic of Ireland	15,053	2
EU14 excluding Ireland and UK	4,735	1
EU15 to EU27 (accession countries post 2004)	18,192	2
Other nationalities	17,640	2

Source: Northern Ireland Census Table DC2107NI

Table T1: Trend Table: Population, RoI

	2009	2019	Outcome
Male population	2,257,300	2,437,894	INCREASE
	2008	2018	
Males aged 85 years or over	15,900	26,200	INCREASE

Table T2: Trend Table: Population, NI

	2008	2018	Outcome
Male population	878,562	932,717	INCREASE
	2008	2018	
Males aged 85 years or over	8,585	12,957	INCREASE

USEFUL SOURCES OF INFORMATION

Central Statistics Office [CSO] (2017),
Census of Population 2016 – Profile 7 Migration and Diversity
Available at: https://www.cso.ie/en/releasesandpublications/ep/p-cp7md/p7md

Central Statistics Office [CSO]: https://www.cso.ie

Eurostat (European statistics): https://ec.europa.eu/eurostat/home

Northern Ireland Statistics and Research Agency [NISRA]: https://www.nisra.gov.uk

CASE STUDY

ENGAGE

The Engage National Men's Health Training Programme was developed to assist practitioners to build effective relationships with males of all ages in order to address their health and wellbeing needs. Engage offers service providers a range of focused one day experiential and interactive workshops, that increase their understanding of the world of men, and help them to develop strategies for making realistic connections.

https://engagetraining.ie

2.2 Life expectancy

Life expectancy is the product of many factors, including the development of treatments for specific diseases, as well as healthier lifestyles. The *Men's Health in Ireland* report (2004) highlighted that life expectancy at birth provides one of the broadest indicators of the overall health of the population. In addition, life expectancy at age 65 years provides an important measure of an ageing population. Whilst there have been overall increases, life expectancy figures for males continue to be lower than for females.

2.2.1 Life expectancy on the island of Ireland

Table 7 shows life expectancy across the island of Ireland for three years (1997, 2007 and 2018). The key points evident are:

- Life expectancy figures at birth and at age 65 years are higher for females than for males.
- The gender gap (the difference between the relevant figures for males and females) has fallen across all life expectancy measures between 1997 and 2018.
- The gender gaps in life expectancy are similar across the Republic of Ireland and Northern Ireland.
- Life expectancy at birth, and at age 65 years, has increased for males and females in both jurisdictions.
- Life expectancy at age 65 has increased more than life expectancy at birth.
- Life expectancy at birth, and at age 65 years, has increased more for males than for females.
- Life expectancy was slightly higher in the Republic of Ireland than in Northern Ireland in 2018, which is the reverse of the pattern in 1997.

Table 7: Life expectancy (years), males and females, RoI and NI, 1997 to 2018

	RoI				NI			
	At birth		At age 65		At birth		At age 65	
	Male	Female	Male	Female	Male	Female	Male	Female
1997	73.4	78.7	14.0	17.6	73.8	79.2	14.6	18.1
2007	77.3	82.1	17.0	20.1	76.1	81.2	16.8	19.7
2018	80.5	84.1	19.1	21.6	78.7	82.4	18.3	20.6
% change 1997-2018	9.7	6.9	36.4	22.7	6.6	4.0	25.3	13.8
Gender gap 1997 (years)	5.3		3.6		5.4		3.5	
Gender gap 2018 (years)	3.6		2.5		3.7		2.3	

Source: Eurostat Tables TPS00208 and TEPSR_SP330, Office for National Statistics (2019)
Note: Time frame for RoI: 1997, 2007, 2018
Time frame for NI: 1995-1997, 2005-2007, 2016-2018

There are several explanations for these patterns. The *Life Expectancy in Northern Ireland 2016-18* report (Carson, Blakley and Laverty, 2019) highlights that decreased mortality rates among 60-89 year olds contributed to the majority of the increase in male life expectancy over the last 5 years, as did reduced mortality among young people aged 0-19 years. The report also highlighted the contribution of specific diseases to life expectancy. For example, reduced mortality from circulatory disease and cancer led to increased male life expectancy, whilst increased mortality from digestive diseases and nervous system disorders resulted in a decrease in life expectancy.

The *Ireland Country Health Profile 2019* (OECD, 2019) highlighted that the increase in life expectancy in Ireland since 2000 has mainly been driven by reductions in mortality rates from circulatory diseases, notably ischaemic heart disease. In addition, the smaller increase in life expectancy among females may be due to high influenza mortality, a slowdown in cardiovascular health improvements and austerity (Sheehan and O'Sullivan, 2020).

2.2.2 Comparison with EU

Table 8 shows life expectancy in the Republic of Ireland in 2007 and 2018 was higher than the average figure for the EU28 countries. Northern Ireland figures were very similar to the average.

Table 8: Life expectancy (years), males, NI, RoI and EU, 2007 and 2018

	2007		2018	
	At birth	At age 65	At birth	At age 65
EU 28	76	16.9	78.3	18.2
Highest	79.0 (Sweden)	18.4 (France)	81.2 (Italy)	19.7 (France)
RoI	77.3	17.0	80.5	19.1
NI	76.1	16.8	78.7	18.3
Lowest	64.5 (Lithuania)	12.6 (Latvia)	70.1 (Latvia)	14.1 (Latvia)

Source: Eurostat Tables TPS00208 and TEPSR_SP330

2.2.3 Other life expectancy measures

As well as overall life expectancy, two additional estimates are useful when considering quality of life, as well as planning for the provision of health and other services. Firstly, Healthy Life Expectancy (HLE) is the average number of years a person can expect to live in good health.

Table 9 shows the variation in HLE at birth across the EU28 in 2018, ranging from 51.0 to 73.7 for males (a difference of 22.7 years) and from 53.7 to 73.4 for females (a difference of 19.7). The gender gap for HLE is considerably smaller than for overall life expectancy. Therefore, men may spend a greater proportion of their shorter lives free from limitations on their activity and function.

Healthy Life Expectancy for Northern Ireland is lower than for the Republic of Ireland, and for the EU28 average. For both males and females, the Healthy Life Expectancy in the Republic of Ireland is the third highest among the EU28 countries.

Between 2009 and 2018, HLE for males in the Republic of Ireland increased from 64.0 to 68.4, a rise of 4.4 years. The average across the EU28 rose from 61.2 to 63.4, which is 2.2 years.

Table 9: Healthy Life Expectancy at birth (years), males and females, EU28, NI and RoI, 2018

	Male	Female
EU28	63.4	63.8
Highest EU28	73.7 (Sweden)	73.4 (Malta)
RoI	68.4 (3rd highest in EU28)	70.4 (3rd highest in EU28)
NI (2016-18)	59.7	60.8
Lowest EU28	51.0 (Latvia)	53.7 (Latvia)

Source: Eurostat Table hlth_hlye, NISRA (2018a)

A second useful measure is Disability-Free Life Expectancy (DFLE), although it can be calculated in different ways. Carson, Blakley and Laverty (2019) define DFLE as the average number of years a person can expect to live disability free. Therefore, DFLE provides an estimate of a lifetime spent free from a limiting persistent illness or disability. Table 10 shows that in Northern Ireland:

- DFLE in 2016-18 was similar for males and females (57.3 and 57.2 years respectively).
- Between 2012-14 and 2016-18, DFLE fell by 3 years for males and 4.6 years for females.
- HLE for males increased by 1 year between 2012-14 and 2016-18, whilst it decreased by 0.9 years for females.
- In 2012-14, HLE was lower than DFLE, whilst the reverse is true from 2013-15 onwards.

Table 10: Life expectancy, HLE and DFLE (years), males and females, NI, 2012-14 to 2016-18

Male	2012-14	2013-15	2014-16	2015-17	2016-18
Life Expectancy at Birth	78.3	78.3	78.5	78.5	78.7
Life Expectancy at 65	18.1	18.2	18.3	18.2	18.4
Healthy Life Expectancy	58.7	58.4	59.1	59.1	59.7
Disability-Free Life Expectancy	60.3	57.2	55.3	55	57.3
Female					
Life Expectancy at Birth	82.3	82.3	82.3	82.3	82.4
Life Expectancy at 65	20.5	20.6	20.7	20.6	20.7
Healthy Life Expectancy	61.7	61	60.9	60.3	60.8
Disability-Free Life Expectancy	61.9	58.9	56.4	55.4	57.2

Source: Carson, Blakley and Laverty (2019)

Sheehan and O'Sullivan (2020) cite DFLE figures for the Republic of Ireland using the Eurostat definition of healthy life expectancy at age 65 years. Table 11 shows that this figure increased from 9.6 years in 2007 to 12.0 years in 2018, both of which are higher than the EU28 average. This suggests that males in the Republic of Ireland can spend 66% of their remaining years free from disability, compared with 63% of females. These are higher than the figures for Northern Ireland: 49.3% for males and 43.8% for females.

Table 11: Disability Free Life Expectancy at 65 (years), males, EU and RoI, 2007 to 2018

	2007	2018
EU28	8.7	9.8
Highest EU28	13.1 (Denmark)	15.6 (Sweden)
RoI	9.6	12.0
Lowest EU28	3.6 (Estonia)	4.0 (Slovakia)

Source: Eurostat Table TEPSR_SP320

2.2.4 Socio-economic inequalities

The overall figures on life expectancy mask disparities according to socio-economic circumstances. As Table 12 shows, in the Republic of Ireland in 2016-17, the life expectancy at birth of males living in the most deprived areas was 79.4 years, compared with 84.4 years for those living in the most affluent areas (CSO, 2019a).

Table 12: Life expectancy (years), by deprivation, males, RoI, 2016

	Republic of Ireland	Most deprived	Least deprived	Deprivation gap
Life expectancy at birth	82.0	79.4	84.4	5.0
Life expectancy at age 65	19.9	18.5	21.5	3.0

Source: CSO (2019a)

A similar pattern is found in Northern Ireland. The *Health Inequalities Annual Report 2020* (Carson et al., 2020) highlights variation in life expectancy (LE) statistics between the 20% most deprived and 20% least deprived areas of Northern Ireland (based on the NI Multiple Deprivation Measure). Table 13 shows sizable disparities between the least and most deprived areas (deprivation gap), ranging from 3.2 years for life expectancy at age 65, to 14.5 years for Disability Free Life Expectancy. The report shows that the deprivation gap for DFLE has increased from 11.3 years in 2012-14 to 14.5 years in 2016-18, although there was no change in relation to the other three indicators.

Table 13: Life expectancy (years), by deprivation, males, NI, 2016 to 2018

	Northern Ireland	Most deprived	Least deprived	Deprivation gap
Life expectancy at birth	78.7	74.6	81.7	7.1
Life expectancy at age 65	18.4	16.5	19.7	3.2
HLE	59.7	51.4	65.4	14.0
DFLE	57.3	48.3	62.8	14.5

Source: Carson, P. et al. (2020)

Life expectancy for Travellers is lower than in the general population, which was highlighted within the *All Ireland Traveller Health Study* (2010). Table 14 indicates that:

- In 2008, the life expectancy at birth for Traveller men was 61.7 years, which is similar to the life expectancy of the general population in 1945-47.
- Between 1987 and 2008, the life expectancy at birth for Traveller men had not changed.
- In 2008, the gap between life expectancy at birth for Traveller males and those in the general population was 15.1 years. In 1987, the gap was 9.9 years.

Table 14: Life expectancy (years), males, Travellers and general population, RoI, 1987 to 2008

		Travellers	General population	Traveller deficit
1987	Life expectancy at birth	61.7	71.6	9.9
	Life expectancy at 65	10.1	13.1	3.0
2008	Life expectancy at birth	61.7	76.8	15.1
	Life expectancy at 65	10.6	16.6	6.0

Source: All Ireland Traveller Health Study Team (2010)

Table T3: Trend Table: Life expectancy, RoI

	2007	2018	Outcome
Male Life Expectancy at Birth (years)	77.3	80.5	BETTER
Male Life Expectancy at age 65 (years)	17.0	19.1	BETTER
Male Healthy Life Expectancy (years)	64.0	68.4	BETTER

Table T4: Trend Table: Life expectancy, NI

	2005-2007	2016-2018	Outcome
Male Life Expectancy at Birth (years)	76.1	78.7	BETTER
Male Life Expectancy at age 65 (years)	16.8	18.3	BETTER
	2012-2014	2016-2018	
Male Healthy Life Expectancy (years)	58.7	59.7	BETTER

USEFUL SOURCES OF INFORMATION

Carson, P., Blakley, H. and Laverty, C. (2019), *NI Health and Social Care Inequalities Monitoring System: Life Expectancy in Northern Ireland 2016-18*, Belfast: Department of Health Available at: https://www.health-ni.gov.uk/sites/default/files/publications/health/hscims-life-expectancy-ni-2016-18.pdf

Sheehan, A. and O'Sullivan, R. (2020), *Ageing and Public Health – an overview of key statistics in Ireland and Northern Ireland,* Dublin: Institute of Public Health Available at: https://publichealth.ie/wp-content/uploads/2020/04/20200416-AGEING-PUBLIC-HEALTH-MAIN.pdf

Central Statistics Office [CSO]: https://www.cso.ie

Eurostat (European statistics): https://ec.europa.eu/eurostat/home

Northern Ireland Statistics and Research Agency [NISRA]: https://www.nisra.gov.uk

2.3 Social and economic circumstances

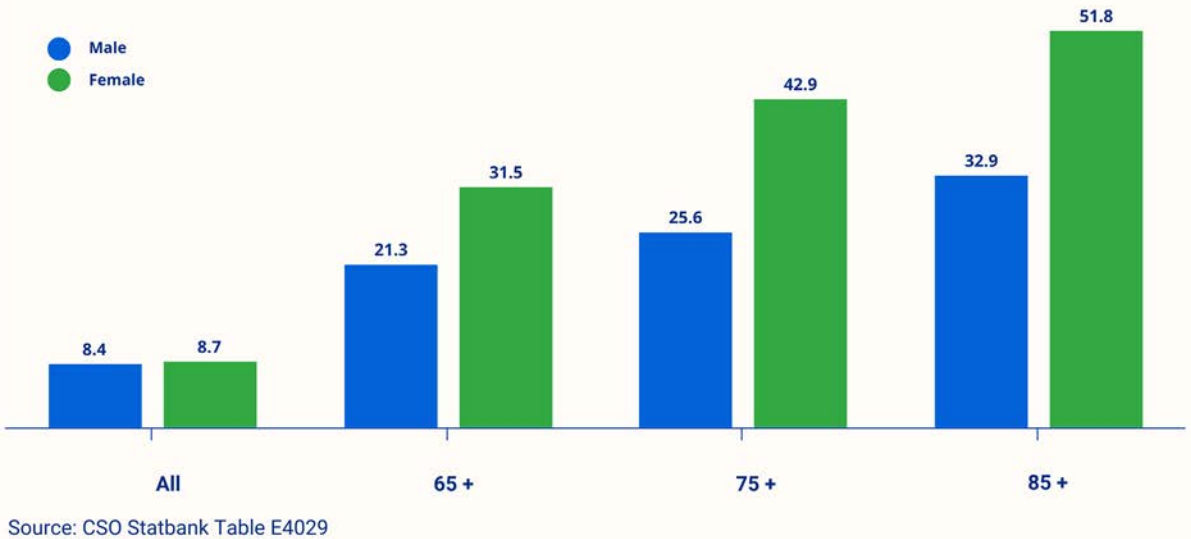
A social determinants model of health recognises that there is a relationship between social and economic circumstances and health outcomes. This chapter highlights a range of relevant topics, using government and survey data. However, we acknowledge that these statistics will not reflect an accurate picture for some of these issues (such as homelessness).

2.3.1 Living alone

The 2016 Census in the Republic of Ireland showed that:

- 195,519 males and 204,296 females who lived in private households lived alone. This represents 8.4% of males and 8.7% of females (see Figure 3).
- 65% of males who lived alone were single, compared with 43.6% of females.
- 12.5% of males living alone were widowed, compared with 36.6% of females.
- 61% of males living alone owned their own home, compared with 74.5% of females.
- A higher proportion of females, compared with males in older age groups, were living alone. For example, 51.8% of females aged 85 years or over were living alone, compared with 32.9% of males.
- The number of males aged 65 years or over living alone had increased from 36,058 in 1996 to 59,163 in 2016.
- However, the proportion of males aged 65 years or over living alone was similar - 1996 (21.9%), 2006 (21.9%) and 2016 (21.3%).

Figure 3: Living alone, RoI, 2016



Source: CSO Statbank Table E4029

In Northern Ireland, the proportion of males aged 16 years or over living alone is 13%, which is similar to the proportion for females (14%). These figures are higher than in the Republic of Ireland. However, the proportion of people aged 65 years or over living alone in Northern Ireland is 20.6% for males and 33.4% for females, which is similar to the Republic of Ireland (see Table 15).

The number of people living alone is rising. In Northern Ireland, the number of males living alone is expected to rise by 23.1% between 2016 and 2041, and 14.7% for females (NISRA, 2018a). In particular, the number of males aged 65 years and over living alone is expected to increase by 59.8% during that time, compared with an increase of 28.5% for females in that age group (see Table 16). This is due to the projected increase in life expectancy, which affects males relatively more than females.

Table 15: Population living alone, males and females aged 16+, NI, 2016

	Male	Female
Number living alone	94,882	106,842
% living alone	13	14.1
% 65+ living alone	20.6	33.4

Source: NISRA (2018b)

Table 16: Population living alone, males and females, NI, 2016 to 2041

	← MALE →		← FEMALE →	
Age	2016	2041	2016	2041
16-39	21,086	14,665	14,457	10,579
40-64	46,274	58,130	37,514	41,453
65+	27,522	43,972	54,871	70,482
Total 16+	94,882	116,767	106,842	122,514
% change 16+		23.1		14.7
% change 65+		59.8		28.5

Source: NISRA (2018b)

2.3.2 Lone parents

In 2011, there were 5,639 households in Northern Ireland headed by a male aged 16-74 with dependent children (8.8% of all lone parent households) (NISRA Census Table KS107NI).

In 2011, there were 24,497 households in the Republic of Ireland headed by a one parent father with children (13.6% of lone parent households). In 2016, the figure was 24,731 (13.9% of lone parent households) (CSO Statbank Table E4005).

2.3.3 Homelessness

The 2016 Census in the Republic of Ireland measured homelessness using data from a number of agencies (such as Department of Housing, Planning, Community and Local Government; CSO and other agencies) as well as the number of rough sleepers.

Table 17 shows that:

- 4,018 males and 2,888 females were homeless.
- Two thirds of the homeless males were in Dublin (2,802).
- The average age for males who were homeless was 33.2 (CSO, 2017b).
- Tusla (Child and Family Agency) identified 92 males and 214 females in domestic violence refuges. 104 males and 19 females were rough sleepers.

Table 17: Number of males and females in homeless accommodation, RoI, 2016

	Number of males	Number of females
Private emergency accommodation	1,343	1,548
Supported temporary accommodation	1,817	920
Temporary emergency accommodation	602	176
Mixed	48	7
Rough sleeper	104	19
Tusla	92	214
Unknown	12	4
Total	4,018	2,888

Source: CSO Statbank Table E5001

In 2018-19, 5,848 single males presented as homeless to the Housing Executive in Northern Ireland (see Table 18). This represents 32% of households presenting as homeless. There has been a fall in the number of people presenting as homeless since 2010-11, especially in the number of 16-17 year olds.

However, these statistics do not fully reflect the housing situation. For example, many people may be part of a hidden homeless population or at risk of homelessness, but do not formally apply to the Housing Executive (Fitzpatrick et al., 2020).

Table 18: Number of single males presenting as homeless, by age group, NI, 2004 to 2019

Age Group	2004-5	2010-11	2014-15	2018-19
16-17	194	201	185	66
18-25	1,772	2,295	2,013	1,429
26-59	3,962	4,690	4,663	4,353
Total	5,928	7,186	6,861	5,848

Source: Department for Communities (2019)

2.3.4 Relationship status

Table 19 shows that a majority of males aged 15 years or over in the Republic of Ireland were single (56.6%) in 2011, compared with 39.4% of males aged 16 years or over in Northern Ireland. However, a higher proportion of males in Northern Ireland were married (49.3%), compared with the Republic of Ireland (37.6%).

In both jurisdictions, females were more likely than males to be widowed, which reflects the higher life expectancy of females.

Towns had a higher rate of younger people, and of single people. In all large towns, males were more likely to be single than females (CSO, 2020b). For example, in Portlaoise, 46% of males aged 15 or over were single, compared with 39.8% of females.

Table 19: Marital status, males, NI and RoI, 2011 and 2016

	%		
	NI (16+) 2011	RoI (15+) 2011	RoI (15+) 2016
Single	39.4	56.6	55.8
Married	49.3	37.6	38.0
Civil partnership	0.1	-	0.1
Separated	3.3	2.2	2.2
Divorced	4.7	1.7	1.8
Widowed	3.2	1.9	2.0

Source: Savage and Russell (2014), CSO Statbank Table E4001

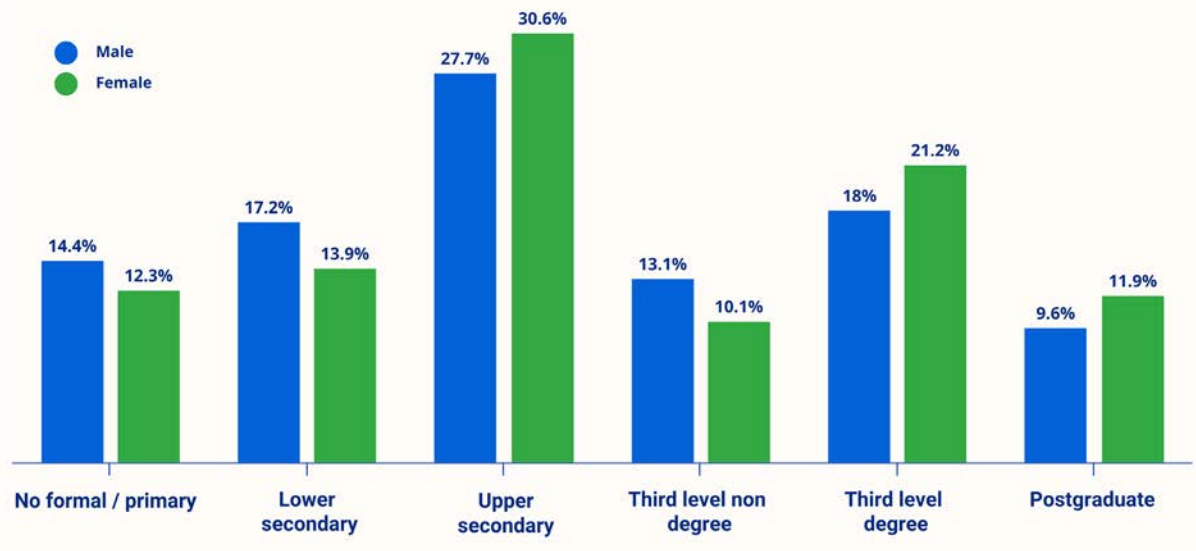
2.3.5 Education

Using data from the 2016 Census in the Republic of Ireland, Figure 4 shows that:

- Females were better educated than men: 43.2% of females aged 15 years or over had a third level qualification, compared with 40.7% of males.
- 31.6% of males were not educated beyond lower secondary, compared with 26.2% of females.
- Females aged 25 to 59 had tended to stay in education longer than males.

Watson, Kenny and McGinnity (2017) outlined that 95% of Traveller males and 92% of Traveller females leave school without completing secondary level.

Figure 4: Education qualifications, males and females aged 15+, RoI, 2016



Source: CSO (2020c)

Research in Northern Ireland has persistently shown that males have lower educational achievement than females. Table 20 shows that 33.5% of males leaving school in Northern Ireland in 2018/19 attained at least 3 A levels, which is higher than the figure in 2013/14. The proportion of females leaving with at least 3 A levels has also increased, and remains higher than for males (48.6%).

Burns, Leith and Hughes (2015) noted that the gap in attainment increased after leaving primary school. Many of the barriers for males included the formal nature of the classroom, some teachers having lower expectations of males, and a lack of connection between curriculum content and the lives of many males.

This lower educational attainment means that females are more likely to go into higher education than males, which will impact on the future graduate workforce. In 2018/19, 35% of male school leavers went to higher education, compared with 49.2% of females (Campbell, Lennon and McCallion, 2020).

Table 20: Qualifications of school leavers, males and females, NI, 2013/2014 to 2018/2019

	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
MALE						
3+ A-levels A*-C	30.2	31.1	31.2	33.0	33.3	33.5
5 GCSEs A*-C	74.1	76.9	77.5	79.7	81.5	83.1
At least 5 GCSEs A*-C including English and maths	58.6	61.6	63.3	64.7	66.0	65.9
No GCSEs / No formal qualifications	2.1	1.0	0.8	1.0	1.6	1.6
FEMALE						
3+ A-levels A*-C	44.2	45.7	45.9	48.8	48.6	48.6
5 GCSEs A*-C	83.4	85.4	86.1	88.1	89.2	89.8
At least 5 GCSEs A*-C including English and maths	68.6	70.5	72.2	74.6	75.6	75.7
No GCSEs / No formal qualifications	1.5	0.9	0.5	0.7	1.1	1.1

Source: Campbell, Lennon and McCallion (2020)

Entitlement to Free School Meals (FSM) is often used to indicate lower income or socio-economic group. Data from 2018/2019 shows that:

- 43.3% of boys entitled to FSM achieved at least 5 GCSEs A*-C including English and Maths, compared with 74.0% of those not entitled to FSM.
- 15.7% of boys entitled to FSM achieved at least 3 A-levels A*-C, compared with 39.8% of those not entitled to FSM.

(Campbell, Lennon and McCallion, 2020)

Harland and McCready (2012) highlighted the underachievement of working class Protestant boys in Northern Ireland. Burns, Leitch and Hughes (2015) noted that Protestant males who were entitled to free school meals had the lowest GCSE and A level attainment rates, the highest proportion of non attainment, and the lowest proportion of schools leavers moving on to higher education of all gender/religion/FSM categories. Explanations for this include: intergenerational mistrust and negativity towards the benefits of education; the divided nature of the school system in Northern Ireland; lower post-16 provision in controlled schools; a lack of male working-class role models in schools; and weakened community infrastructure in urban Protestant areas in particular.

2.3.6 Employment and unemployment

Data from the *Labour Force Survey* in the Republic of Ireland (see Table 21) show that:

- The male unemployment rate has fallen from 17.1% in 2010 to 5.6% in 2019.
- The male employment rate has increased from 65.3% in 2010 to 74.6% in 2019.
- The economic inactivity rate has remained fairly constant.
- In 2010 and 2015, the unemployment rate in the Republic of Ireland was higher than the EU28 average. However, the reverse is true in 2019.

Table 21: Unemployment, employment and economic inactivity rates, males, RoI and EU28, 2010 to 2019

	%		
Republic of Ireland	**2010**	**2015**	**2019**
Unemployment, male (15-74)	**17.1**	**11.0**	**5.6**
Employment, male (15-64)	**65.3**	**70.2**	**74.6**
Economic inactivity, male (15-64)	**21.3**	**21.0**	**20.8**
EU28			
Unemployment, male (15-74)	**9.6**	**9.3**	**6.6**
Employment, male (15-64)	**70.1**	**70.8**	**74.4**
Economic inactivity, male (15-64)	**22.4**	**21.7**	**20.6**

Source: CSO (2020d), Eurostat Table lfsa_ipga

Data from the *Northern Ireland Labour Force Survey* (see Table 22) show that:

- The unemployment rate for males has fallen from 9.2% in 2010 to 2.7% in 2019.
- The employment rate for males has increased from 70.8% in 2010 to 75.8% in 2019.
- The inactivity rate has remained fairly constant.

The age bands used to calculate these figures are different in RoI and NI. However, both surveys show the same trends. It is anticipated that the impact of COVID-19 on economic activity will greatly affect these figures during 2020 as well as in the near future.

Table 22: Unemployment, employment and economic inactivity rates, males, NI, 2010 to 2019

	%		
	2010	2015	2019
Unemployment, male (16+)	9.2	7.2	2.7
Employment, male (16-64)	70.8	73.3	75.8
Economic inactivity, male (16-64)	21.8	20.8	22.0

Source: NISRA (2020b)

2.3.7 Income

Table 23 shows that in 2018, the median gross annual earning for males in the Republic of Ireland was €39,658. In 2011, this figure was €37,656. In both years, the median earnings were higher for males than for females.

In 2019, the *Northern Ireland Annual Survey of Hours and Earnings* (ASHE) indicated that females working full-time earned more per hour than males working full-time, and this was the case since 2010 (NISRA, 2019b). However, the reverse is true in relation to median gross annual earning for males working full-time as employees. This is due to males working longer hours and receiving higher bonuses. For example, in 2018, 52.8% of males in the Republic of Ireland worked for 40 hours or more each week compared with 24.7% of females (CSO, 2020d). There is a similar pattern in Northern Ireland. In 2019, males worked 6.4 hours more than females (38.8 and 32.4 hours respectively), and a greater proportion of males (85%) worked full-time compared with females (56%) (NISRA, 2019b).

Table 23: Median annual income, males, RoI (2018) and NI (2019)

	Republic of Ireland (2018)	Northern Ireland (2019)
	Median gross annual earnings (€)	Median gross annual earnings (£) – full time employees
Male	€39,658	£28,843
Female	€32,264	£25,606
Overall	€36,095	£27,434

Source: CSO Statbank Table NSA81, NISRA (2019b)

2.3.8 Caring responsibilities

The 2016 Census in the Republic of Ireland indicated that:

- 77,112 males were carers (approximately 39% of males).
- 1,875 boys under 15 years old were carers.
- Approximately one quarter of male carers (26%) provided 29 hours or more of unpaid help each week in 2016 (CSO, 2020d).

The 2018/19 Health Survey in Northern Ireland indicates that 10% of males and 17% of females have caring responsibilities.

Table T5: Trend Table: Social and economic circumstances of males, RoI

	2011	2016	Outcome
Marital status: single	56.6%	55.8%	SIMILAR
Marital status: married	37.6%	38.0%	SIMILAR
	2010	2019	
Employment (15-64 years)	65.3%	74.6%	BETTER
Unemployment (15-74 years)	17.1%	5.6%	BETTER
Economic Inactivity (15-64 years)	21.3%	20.8%	SIMILAR

Table T6: Trend Table: Social and economic circumstances of males, NI

	2013/2014	2018/2019	Outcome
Education qualifications: none	2.1%	1.6%	SIMILAR
Education qualifications: 3+ A-levels A*-C	30.2%	33.5%	BETTER
Education qualifications: at least 5 GCSEs A*-C including English and Maths	58.6%	65.9%	BETTER
	2004-2005	2018-2019	
Homelessness (single males)	5,928	5,848	SIMILAR
	2010	2019	
Employment (16-64 years)	70.8%	75.8%	BETTER
Unemployment (16+ years)	9.2%	2.7%	BETTER
Economic Inactivity (16-64 years)	21.8%	22.0%	SIMILAR

USEFUL SOURCES OF INFORMATION

Central Statistics Office [CSO] (2020), *Women and Men in Ireland 2019* Available at: https://www.cso.ie/en/releasesandpublications/ep/p-wamii/womenandmeninireland2019

Savage, R. and Russell, R. (2014), *Census 2011 – Key Statistics for Gender, Northern Ireland Assembly Research and Information Service Research Paper NIAR 491-14* Available at: http://www.niassembly.gov.uk/globalassets/documents/raise/publications/2015/general/3415.pdf

Central Statistics Office [CSO]: https://www.cso.ie

Eurostat (European statistics): https://ec.europa.eu/eurostat/home

Northern Ireland Statistics and Research Agency [NISRA]: https://www.nisra.gov.uk

2.4 Self-reported health

Within health research and administrative statistics there tends to be a focus on mortality and morbidity, which reflects a deficit model of health. In addition, these statistics are often based on people who have been in contact with health services. However, it is also useful to explore health from an individual perspective.

2.4.1 Self-rated health

The majority of men across the island of Ireland in 2018-19 rated their health as good or very good (see Table 24). In the Republic of Ireland, 82.9% of men aged 16 years or over rated their health as good or very good. This is the highest figure among EU28 countries (where the average figure was 72.6%). There is variation by age, with 96% of 16-24 year olds rating their health as good or very good, compared with 64.5% of those aged 65 years or over.

Data from the 2018/19 Northern Ireland Health Survey show that 73% of males said that their health was very good or good, 17% said fair, and 10% said that it was bad or very bad. These figures have been stable since 2010/11 and are similar to the EU28 average.

Table 24: Self-perceived health status, males, RoI, NI and EU28, 2018-19

	%		
	RoI	NI	EU28
Very good	44.5	37	24.8
Good	38.4	36	47.8
Fair, bad, very bad	17.1	27	27.7

Source: Department of Health [Ireland] (2019a), Department of Health [Northern Ireland] (2020a)

2.4.2 Long-standing illness or health problem

Table 25 shows that in Northern Ireland, 38% of males said that they have a long-term illness or health condition. This figure is made up of 27% who said this condition reduces their ability to carry out day-to-day activities, and 11% who said that their condition does not limit their life. The figures for Northern Ireland are similar to the EU28 average, whilst the figures for the Republic of Ireland are lower. This may be due to the differing age distribution among the two jurisdictions (see Table 3). The data for the Republic of Ireland indicate a gradation according to age, with 8.5% of those aged 16-44 having a limiting long-term condition, compared with 40.7% of those aged 75 years or older.

The data also reflect income inequality, with fewer low income earners reporting good health both in the Republic of Ireland and across the EU *(Health in Ireland - Key Trends, 2019)*.

Table 25: Self-reported illnesses and conditions, males, RoI, NI and EU28, 2018-19

	%	
	Long-standing condition	Limiting long-standing condition
RoI	28.1	16.4
NI	38	11
EU28	35.0	22.2

Source: Department of Health [Ireland] (2019a), Department of Health [Northern Ireland] (2020a)

USEFUL SOURCES OF INFORMATION

Central Statistics Office [CSO]: https://www.cso.ie

Eurostat (European statistics): https://ec.europa.eu/eurostat/home

Northern Ireland Statistics and Research Agency [NISRA]: https://www.nisra.gov.uk

CASE STUDY

MEN'S HEALTH WEEK

International Men's Health Week - held in June each year - offers an annual opportunity to: heighten awareness of preventable health problems for males of all ages; support men and boys to engage in healthier lifestyle choices / activities; and encourage the early detection and treatment of health difficulties in males. In 2020, 90+ organisations across the island of Ireland contributed to the Planning Group for the week.

https://www.mhfi.org/mhw/about-mhw.html

2.5 Cause of death

In 2018, the four main causes of death among males in the Republic of Ireland were:

- Neoplasms (invasive cancers) - 31.5%
- Circulatory system diseases - 29.6%
- Respiratory system diseases - 12.5%
- External causes of injury and poisoning - 5.7%

(CSO *Vital Statistics* series)

In 2008, diseases of the circulatory system was the top cause of death (34.4%), although this has now been overtaken by neoplasms (see Table 26).

Table 26: Leading causes of death, males, RoI, 2008 to 2018

	% of deaths					
Cause of death (ICD-10)	2008	2010	2012	2014	2016	2018
Neoplasms (C00-D48)	30.4	30.5	31.3	32.5	31.6	31.5
Diseases of the circulatory system (I00-I99)	34.4	34.0	32.0	29.9	30.5	29.6
Diseases of the respiratory system (J00-J99)	11.4	10.7	11.3	11.5	12.3	12.5
External causes of injury and poisoning (V01-Y89)	8.4	8.4	7.6	7.4	6.0	5.7

Source: CSO *Vital Statistics* series

There are differences according to age:

- Neoplasms account for 42.8% of deaths in people aged 55-64 and 43.5% in those aged 65-74.
- Circulatory system diseases account for 33.8% of deaths in men aged 85+.
- External causes of injury and poisoning is the main cause of death for younger males: 62% of deaths among males aged 15-24; 65.4% among those aged 25-34; and 39.4% for those aged 35-44 years.

The pattern is similar in Northern Ireland (see Table 27). There has been a fall in the proportion of deaths from diseases of the circulatory system (and especially ischaemic heart disease), and this is larger in Northern Ireland than in the Republic of Ireland.

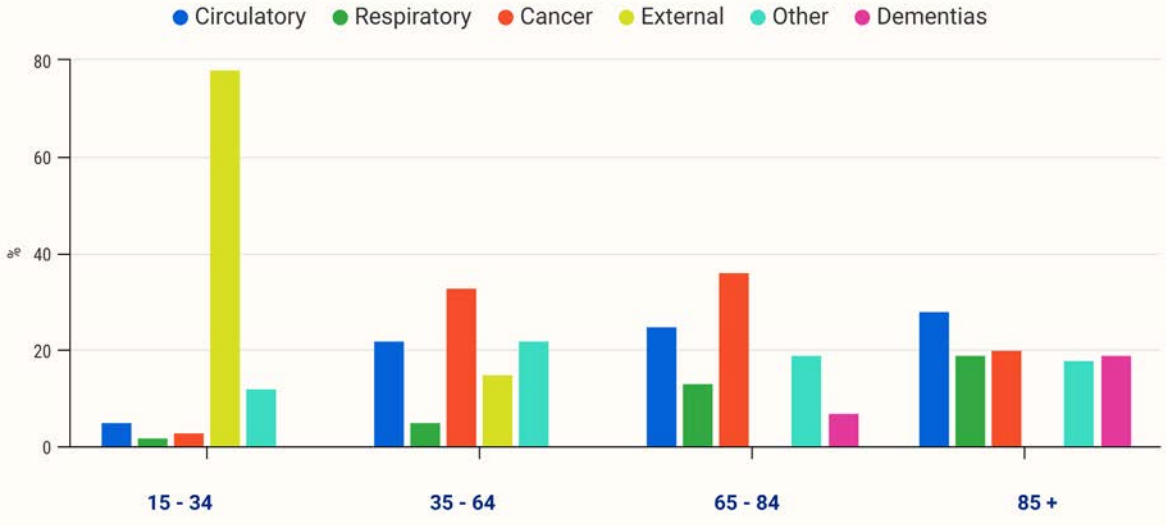
Table 27: Leading causes of death, males, NI, 2008 to 2018

	% of deaths					
Cause of death (ICD-10)	2008	2010	2012	2014	2016	2018
Neoplasms (C00-D48)	29.7	30.6	31.5	32.0	32.8	30.6
Diseases of the circulatory system (I00-I99)	31.7	31.1	27.1	26.5	24.4	24.1
Diseases of the respiratory system (J00-J99)	13.1	12.1	13.8	13.3	12.6	13.2
External causes of injury and poisoning (V01-Y89)	8.0	8.0	6.9	6.5	6.7	7.6

Source: NISRA *Registrar General Annual Report* series

The cause of death for males varies by age, as shown in Figure 5. In 2018 in Northern Ireland, the main cause of death for 15-34 year old males was external causes (78%), the majority of which was due to intentional self-harm and accidental poisoning. Cancer was the main cause of death for 35-64 year olds (33.6%) and 65-84 year olds (36%), whilst circulatory diseases were the main cause of death for men aged 85 years or over (27%).

Figure 5: Cause of death, by age group, males, NI, 2018 (% of all deaths within age group)

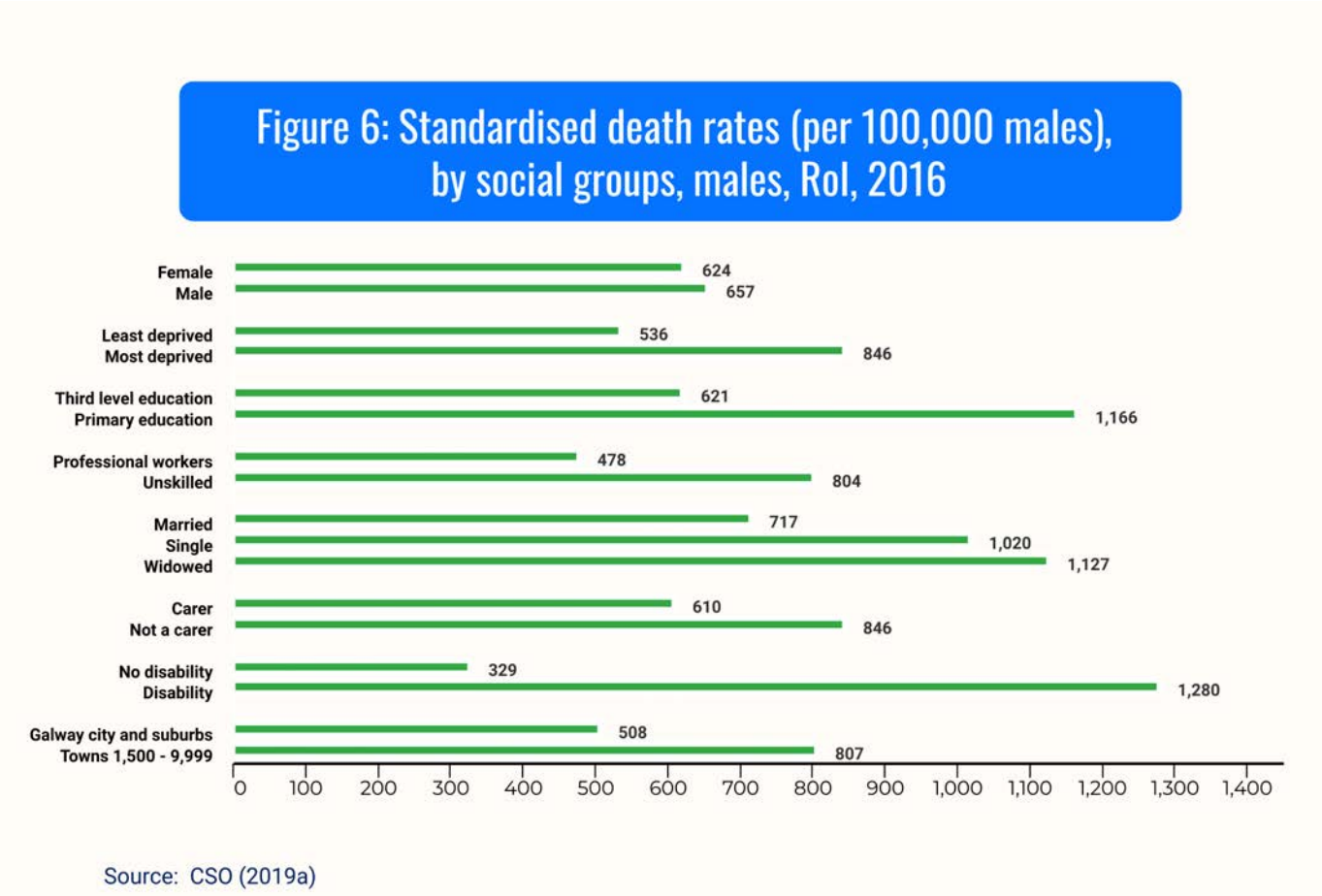


Source: NISRA *Registrar General Annual Report* series

2.5.1 Standardised Death Rates

The Standardised Mortality Rate (SMR) (also called the Standardised Death Rate) takes the age distribution of the population into account. In 2016, the SMR for males in the Republic of Ireland was 657 per 100,000 males, which is higher than for females (624).

Figure 6 shows that SMR varies among different groups of men, and was higher for males living in the most deprived areas, males with only primary education, unskilled workers, widowers, non-carers, and those with a disability. The death rate was lowest among males living in Galway city and suburbs (508), and highest (807) among those living in towns with a population between 1,500 and 9,999 people.



Research has also highlighted higher mortality rates among specific groups:

- The mortality rate for homeless men was between 3 and almost 10 times higher compared with Dublin males in the general population (Ivers and Barry, 2019).
- Smyth et al. (2012) reported on the increase in mortality rates for farmers and agricultural workers during 2000-2006. This overlaps with the economic growth of the 'Celtic Tiger' years, during which mortality rates decreased in the general population.
- The All Ireland Traveller Health Study Team (2010) noted that for all ages, and for all causes of death, the overall mortality rate for Traveller males is 3.7 times higher than for the general population. For respiratory diseases, the Traveller male mortality rate is 7.5 times higher than the general population.

2.5.2 Road traffic accident fatalities

Road traffic accidents remain a key issue across the island of Ireland and in EU28 countries, as they are a significant cause of male fatalities each year. However, limited trend data are available on the gender of those committing driving offences.

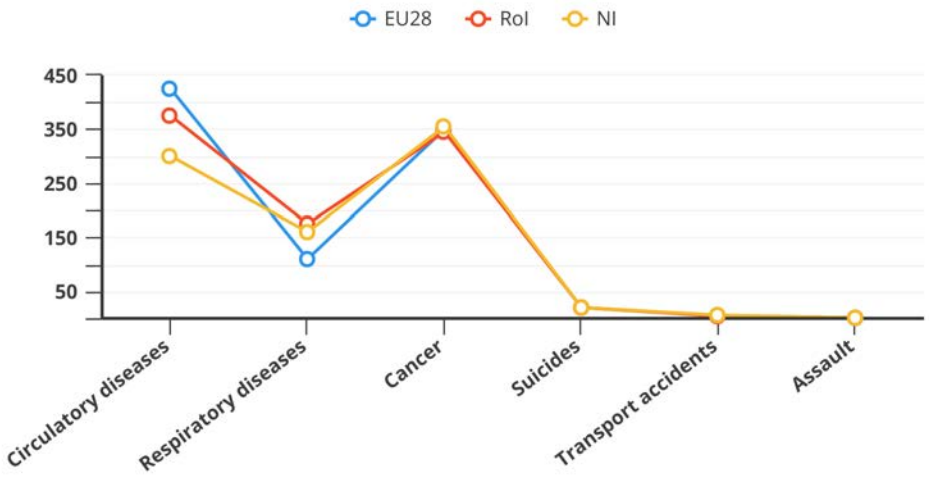
- In the Republic of Ireland, the number of males killed in road traffic accidents fell from 182 in 2009 to 116 in 2017 (CSO Statbank Table ROA16).
- In Northern Ireland, the number of males killed in road traffic accidents fell from 87 in 2009 to 37 in 2019 (PSNI, 2019a, 2020a).
- There was a fall in the number of males killed in road traffic accidents across the EU28 countries, from 26,004 in 2009 to 18,952 in 2016 (European Commission, 2018).

2.5.3 Cause of death: NI, RoI and EU

Figure 7 focuses on six main causes of death for males across EU28, the Republic of Ireland and Northern Ireland in 2016 (the most recent year for which data are available):

- Northern Ireland had a lower rate for circulatory disease than the Republic of Ireland and EU28 (296.53, 376.16 and 426.29 respectively).
- EU28 had a lower rate for respiratory disease than Northern Ireland and the Republic of Ireland (115.54, 163.08, and 164.66 respectively).
- The Republic of Ireland had a lower rate for cancer (neoplasms) than EU28 and Northern Ireland (340.01, 355.17 and 366.47 respectively).
- The rates for suicide were similar across EU28 (16.96), the Republic of Ireland (15.23) and Northern Ireland (14.61).
- The rate for transport accidents was low in Northern Ireland (3.85), the Republic of Ireland (5.27) and EU28 (8.97).
- The rate for assault was low in Northern Ireland, EU28 and the Republic of Ireland (0.47, 0.83 and 0.99).

Figure 7: Standardised death rates (per 100,000 males), males, RoI, NI and EU28, 2016



Source: Eurostat Table hlth_cd_asdr2

Table T7: Trend Table: Cause of death (ICD-10), RoI

	2008	2018	Outcome
Diseases of the circulatory system (I00-I99)	34.4%	29.6%	BETTER
Neoplasms (C00-D48)	30.4%	31.5%	SIMILAR
Diseases of the respiratory system (J00-J99)	11.4%	12.5%	SIMILAR
External causes of injury and poisoning (V01-Y89)	8.4%	5.7%	BETTER
	2009	2017	
Number of males killed in traffic accidents	182	116	BETTER

Table T8: Trend Table: Cause of death (ICD-10), NI

	2008	2018	
Diseases of the circulatory system (I00-I99)	31.7%	24.1%	BETTER
Neoplasms (C00-D48)	29.7%	30.6%	SIMILAR
Diseases of the respiratory system (J00-J99)	13.1%	13.2%	SIMILAR
External causes of injury and poisoning (V01-Y89)	8.0%	7.6%	SIMILAR
	2009	2019	
Number of males killed in traffic accidents	87	37	BETTER

USEFUL SOURCES OF INFORMATION

CSO *Vital Statistics* series:
Available at: https://www.cso.ie/en/statistics/birthsdeathsandmarriages/vitalstatistics

Central Statistics Office [CSO] (2020) *Women and Men in Ireland 2019*
Available at: https://www.cso.ie/en/releasesandpublications/ep/p-wamii/womenandmeninireland2019

Department of Health [Ireland] (2019), *Health in Ireland - Key Trends 2019*
Available at: https://www.gov.ie/en/publication/f1bb64-health-in-ireland-key-trends-2019

Northern Ireland Statistics and Research Agency [NISRA] *Registrar General Annual Report* series:
Available at: https://www.nisra.gov.uk/statistics/births-deaths-and-marriages/registrar-general-annual-report

Eurostat (European statistics): https://ec.europa.eu/eurostat/home

CASE STUDY

MEN ON THE MOVE

Men on the Move is a free, twelve week, community-based beginners' physical activity programme for inactive adult men. It is delivered by Local Sports Partnerships in conjunction with the HSE and Sport Ireland, and creates an environment within which participants can connect with their surroundings and other men. It consists of structured group exercise, experiential workshops, resources and a final celebration event.

https://www.sportireland.ie/YPB/MOM

2.6 All cancers

Having highlighted the main causes of death of males across the island of Ireland, this chapter focuses on specific illnesses and health conditions. In general, it is much easier to obtain data on the number of people dying from a particular condition than it is to find out the number of people diagnosed and living with it. The main exception is cancer, where comprehensive data are available from the National Cancer Registry Ireland (NCRI) and the Northern Ireland Cancer Registry (NICR). In addition, the European Cancer Information System provides data from members of the European Union.

Cancer statistics can be produced for different groups of cancers, usually based on groups of ICD-10 codes, including:

- All registered tumours (ICD-10 C00-D48).
- All invasive cancers (ICD-10 C00-C96).
- All invasive cancers, excluding non-melanoma skin cancer (ICD-10 C00-C43, C45-C96).
- Non-melanoma skin cancer (ICD-10 C44).
- All non-invasive cancers (non-malignant neoplasms) (ICD-10 D00-D48).

For example, in the Republic of Ireland, on average during 2017-2019, there were 21,641 cancers or tumours diagnosed among males each year, and 21,720 among females (see Table 28).

- For males, 90% of these tumours were invasive, compared with 74% among females.
- Non-melanoma skin cancer (NMSC) accounted for 31% of tumours in males, compared with 23% among females.
- Non-invasive cancers accounted for 10% of tumours among males, compared with 26% among females.

Table 28: Incidence of cancer cases, RoI, males and females, annual average 2017-2019

	Male	Female
All registered tumours	21,641	21,720
All invasive cancers	19,389 (90%)	16,052 (74%)
All invasive cancers, excluding NMSC	12,769 (59%)	11,118 (51%)
NMSC	6,621 (31%)	4,934 (23%)
All non-invasive cancers	2,251 (10%)	5,669 (26%)

Source: National Cancer Registry Ireland (2019a)
Note: Percentage figure relates to percent of all registered tumours.

2.6.1 Males and cancer

The range of risk factors for cancer is complex, and includes genetics and lifestyle, as well as socio-economic deprivation and age. In general, the risk of cancer increases with age. Rates of incidence, survival and mortality can be affected by access to, and uptake of screening programmes, awareness of symptoms, and accessing appropriate and timely services. Clarke et al. (2013) highlight the higher rates of mortality and lower survival related to some cancers (for example, lung and colorectal) among males compared with females. In order to address the disproportionate impact of cancer on males, initiatives need to be more gender specific and effective. These include programmes to promote healthy lifestyle options (such as diet and exercise), as well as access and uptake of screening programmes. In particular, there is a need to understand patterns of help-seeking behaviour among men.

This chapter and subsequent chapters, highlight data relating to all invasive cancers excluding NMSC, with a focus on four specific cancers:

- Prostate cancer, which is the most commonly-diagnosed cancer among males.
- Testicular cancer, which particularly affects younger males.
- Breast cancer, which is rare among males.
- NMSC, which is most common among older people and has low mortality.

2.6.2 All invasive cancers excluding NMSC

The figure most used for international comparisons relates to all invasive cancers excluding non-melanoma skin cancer (ICD-10 C00-C43, C45-C96). The National Cancer Registry Ireland website (https://www.ncri.ie/faqs/interpret-use-our-data/why-are-data-non-melanoma-skin-cancer-sometimes-excluded) gives several reasons for this including less complete and accurate data available for non-melanoma skin cancer (NMSC). For example, many cases of NMSC are treated within GP surgeries, and so the cancer registry may not be notified. National Cancer Registry Ireland also note that NMSC is most common in the older population, and that the registration for the group may be less complete than for younger age groups.

The age range used to calculate statistics can vary. For example, age standardised rates are calculated across all ages. However, 0-74 years is often used as an estimate of the lifetime risk of developing a cancer, as this timeframe is similar to the average male life expectancy.

In the Republic of Ireland (see Table 29):

- The European Age Standardised Rate (new) for invasive cancers (excluding NMSC) for males is higher than for females.
- Between 1995 and 2020, there has been a 27% increase in the European Age Standardised Rate (new) among males, and a 23% increase among females.

Table 29: Incidence of invasive cancer cases (excluding NMSC), males and females, RoI, 1995 to 2020

	1995		2005		Annual Average 2017 - 2019		2020	
	Male	Female	Male	Female	Male	Female	Male	Female
Number	6,270	5,814	8,613	7,623	12,769	11,118	14,378	12,689
European Age Standardised Rate (new)	645.0	514.6	728.3	545.7	726.8	549.9	821.7	631.2

Source: European Cancer Information System, National Cancer Registry Ireland (2019a)

Donnelly, Anderson and Gavin (2020) noted that in Northern Ireland, between 1993-1997 and 2013-2017, the average number of cases of invasive cancer (excluding NMSC) among men increased by 52.5%. Most of this increase is a result of ageing of the population. During that time, the age standardised incidence rates had increased for melanoma and head and neck, oesophageal, pancreatic, and kidney cancers among men. At the same time, there were significant decreases in this rate for colon, stomach, and bladder cancers.

Table 30 shows that between 1995 and 2018 in Northern Ireland:

- The European Age Standardised Rate (new) for invasive cancers (excluding NMSC) for males is higher than for females.
- There has been a slight increase in European Age Standardised Rate (new) among males (1%), and a larger increase among females (17%).

Table 30: Incidence of invasive cancer cases (excluding NMSC), males and females, NI, 1995 to 2018

	1995		2005		2015		2018	
	Male	Female	Male	Female	Male	Female	Male	Female
Number	3,035	3,151	3,617	3,635	4,770	4,729	4,934	4,963
European Age Standardised Rate (new)	651.7	472.8	645.1	489.3	679.8	551.5	657.7	554.7

Source: Northern Ireland Cancer Registry

Tables 29 and 30 indicate a higher incidence rate for invasive cancer cases (excluding NMSC) for males in the Republic of Ireland. The European Age Standardised Rate (new) is 726.8 in the Republic of Ireland, compared with 657.7 in Northern Ireland (annual average 2017-2019). The incidence rate for females is similar for females in both jurisdictions.

Incidence rates can vary according to level of deprivation. In Northern Ireland during 2014-2018, the highest rate of invasive cancer (excluding NMSC) was among males living in the most deprived areas. In the most socio-economically deprived areas, incidence rates were 15.2% higher than the NI average, and 5.2% lower than the NI average in the least socio-economically deprived areas.

However, the relationship between cancer and deprivation varies by type of cancer. For example, the incidence rates for stomach cancer and bowel cancer are higher for males living in the most deprived areas compared with the Northern Ireland average. In the least deprived areas, the incidence of prostate cancer and brain cancer were higher than the Northern Ireland average (Northern Ireland Cancer Registry, 2018).

2.6.3 Most commonly diagnosed invasive cancers (excluding NMSC)

- In both the Republic of Ireland and Northern Ireland, prostate cancer is the most commonly diagnosed invasive cancer (excluding NMSC) among males (see Table 31).
- The two next most commonly diagnosed cancers are colorectal (bowel) and lung cancer. There are differences in the ICD-10 codes used to categorise bowel/colorectal cancer. Northern Ireland uses C18-C20, whilst the Republic of Ireland uses C18-C21.
- The fourth most commonly diagnosed cancer in the Republic of Ireland is melanoma (5%).
- In both jurisdictions, the most commonly diagnosed cancers for females were breast, colorectal and lung.

Table 31: Most commonly diagnosed invasive cancers (excluding NMSC), males, RoI (2017-19) and NI (2018)

	Republic of Ireland 2017 - 2019	Northern Ireland 2018
1st	Prostate (29%)	Prostate (25%)
2nd	Colorectal (13%)	Lung (14%)
3rd	Lung (12%)	Colorectal (13%)
4th	Melanoma (5%)	Lymphoma (5%)

Source: National Cancer Registry Ireland (2019a), Northern Ireland Cancer Registry (2018)

The incidence of specific cancers varies according to age (see Table 32). For example, in the Republic of Ireland, testicular cancer is the most common among males aged 0-44 years, accounting for one quarter of diagnoses (23.7%). However, prostate cancer accounts for 37% of diagnoses among men aged 45-64 years, and 31% of those aged 65 years and over.

Between 1993 and 2017 in Northern Ireland, the average age at diagnosis for all cancers (excluding NMSC) was 68 years for males, but 37 years for testicular cancer (Donnelly, Anderson and Gavin, 2020).

Table 32: Most commonly diagnosed invasive cancers (excluding NMSC), males, by age, RoI, 2020

	Age Band		
	0-44	45-64	65+
1st	Testicular 24%	Prostate 37%	Prostate 30%
2nd	Melanoma of skin 10%	Colorectal 11%	Colorectal 14%
3rd	Brain and central nervous system 7%	Lung 9%	Lung 13%
4th	Leukaemia 7%	Kidney 6%	Bladder 6%

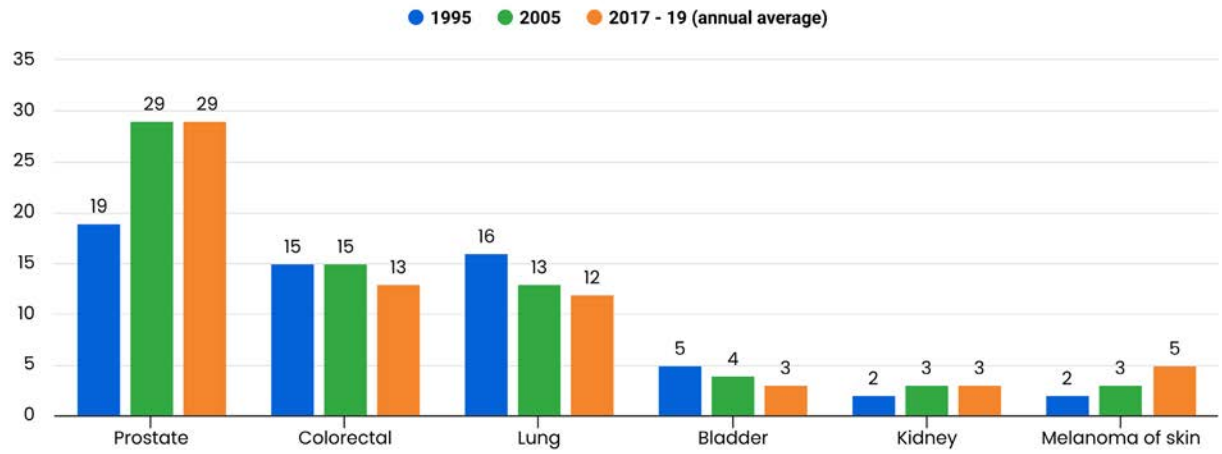
Source: European Cancer Information System

2.6.4 Incidence rates over time

Figure 8 shows trends in the diagnosis of invasive cancers (excluding NMSC) among males in the Republic of Ireland:

- In 1995 and 2005, the most diagnosed of these cancers were prostate, colorectal (bowel), lung and bladder.
- By 2017-19, melanoma of skin had replaced bladder cancer as the fourth most commonly diagnosed invasive cancer (excluding NMSC) among males.
- Prostate cancer accounted for 19% of diagnoses in 1995, and this increased to 29% in 2017-19.

Figure 8: Most commonly diagnosed invasive cancers (excluding NMSC), males, RoI, 1995 to 2017-19



Source: National Cancer Registry Ireland
Note: % are as a proportion of invasive cancers (excluding NMSC)

2.6.5 Mortality

Based on the European Age Standardised mortality rate (new):

- In the Republic of Ireland, the mortality rate for all invasive cancers (excluding NMSC) fell from 438.8 in 1995 to 343.2 in 2020.
- In Northern Ireland, this rate fell from 426.0 in 1995 to 330.6 in 2018.
- In 2020, the rate across the EU27 was 345.0, and 343.2 for the Republic of Ireland.

2.6.6 Survival

Age standardised net survival is the theoretical proportion of patients who would survive if the only possible cause of death was their cancer (Northern Ireland Cancer Registry, 2018).

In the Republic of Ireland (see Table 33):

- For invasive cancers (excluding NMSC) diagnosed between 1994 and 1999, the 5-year net survival rate for males was lower than for females (39% and 46% respectively).
- Since then, this rate has increased for both males and females.
- The age standardised 5-year net survival rate for invasive cancers (excluding NMSC) diagnosed between 2011 and 2015 is higher for males than for females (63% and 60% respectively).
- This represents an increase of 62% (24 percentage points) for males and 30% (14 percentage points) for females.

The increase in survival rates reflects improvements in survival for specific cancers, as well as an increased predominance of cancers with more favourable prognoses (National Cancer Registry Ireland, 2019). For example, there has been an increase in the incidence of prostate cancer, which has a high 5-year survival rate.

Table 33: Age standardised 5-year net survival rates, all invasive cancers (excluding NMSC), males, RoI, 1994-1999 to 2011-2015

	Diagnosis Period			
	1994-1999	2000-2005	2006-2010	2011-2015
Male	39%	50%	58%	63%
Female	46%	51%	57%	60%

Source: National Cancer Registry Ireland (2019a)

In Northern Ireland (see Table 34):

- For cancers diagnosed between 1994 and 1998, the 5-year net survival rate for males was lower than for females (37% and 48% respectively).
- Since then until 2012-2016 (estimates), this rate has increased for both males and females to 56% and 59% respectively.
- This represents an increase of 51% (19 percentage points) for males and 23% (11 percentage points) for females.

Table 34: Age standardised 5-year net survival rates, all invasive cancers (excluding NMSC), males, Northern Ireland, 1994-1998 to 2012-2016

	Diagnosis Period				
	1994-1998	1999-2003	2006-2008	2009-2013	2012-2016 estimates
Male	37%	44%	51%	54%	56%
Female	48%	51%	55%	59%	59%

Source: Northern Ireland Cancer Registry

2.6.7 Incidence projections

The National Cancer Registry Ireland estimated the change in cancer cases, between 2015 and 2045, using several methods (NCRI, 2019b). Based on the median of these models:

- The number of cancer cases among males will increase for all invasive cancers (excluding NMSC) by 111%, and for nearly all types of cancers. The increase ranges from 0% for prostate cancer to 274% for liver, gallbladder and biliary tract (ICD-10 C22-24).
- The age standardised incidence rates among men for invasive cancer (excluding NMSC) will decline by 41% (using the median model).
- The rates for bladder cancer will decrease by 54%, lung by 16%, and prostate by 18%.
- The rates for liver, gallbladder and biliary tract will increase by 73%, melanoma of skin by 50%, and Hodgkin Lymphoma by 33%.

Donnelly, Anderson and Gavin (2020) estimate that by 2040 in Northern Ireland, compared with 2013-17:

- The age standardised incidence rates among men for invasive cancer (excluding NMSC) will decline by 9%.
- The rates for stomach cancer will decrease by 55%, and for bladder cancer by 30%.
- The rates for liver cancer will increase by 72%, for melanoma by 65%, for kidney cancer by 44%, and for oesophageal cancer by 34%.
- The number of diagnoses among men for every type of cancer will increase, except for stomach cancer.
- The number of cases is expected to double among males for melanoma, liver and kidney cancer.

They highlight that 38% of cancers (excluding NMSC) are attributable to 14 specific risk factors associated with patient lifestyle. Thus, changes in these risk factors (for example, tobacco and alcohol use, exercise, diet, exposure to UV, or infection by Human Papillomavirus [HPV]) have the potential to impact on cancer incidence rates. In addition, screening and vaccination programmes are likely to affect future cancer incidence rates, such as PSA screening (see Chapter 2.7), bowel screening (see Chapter 3.3) and HPV vaccination (see Chapter 3.3).

Table T9: Trend Table: All invasive cancers (excluding NMSC), male, RoI

	1995	2020	Outcome
Number of cases	6,270	14,378	INCREASE
Incidence: European Age Standardised Rate (new)	645.0	821.7	INCREASE
Mortality: European Age Standardised Rate (new)	438.8	343.2	BETTER
	1994-1999	2011-2015	
5-year survival rate	39%	63%	BETTER

Table T10: Trend Table: All invasive cancers (excluding NMSC), male, NI

	1995	2018	Outcome
Number of cases	3,035	4,934	INCREASE
Incidence: European Age Standardised Rate (new)	651.7	657.7	SIMILAR
Mortality: European Age Standardised Rate (new)	426.0	330.6	BETTER
	1994-1998	2012-2016 estimates	
5-year survival rate	36.7%	56.0%	BETTER

USEFUL SOURCES OF INFORMATION

Clarke, N. et al. (2013), *A report on the excess burden of cancer among men in the Republic of Ireland,* Cork: National Cancer Registry Ireland Available at: https://www.ncri.ie/sites/ncri/files/pubs/ReportOnTheExcessBurdenofCancerAmongMeninthe RepublicofIreland%28FullReport%29.pdf

Donnelly, D.W., Anderson, L.A. and Gavin, A. (2020), 'Cancer incidence projections in Northern Ireland to 2040', *Cancer Epidemiology, Biomarkers and Prevention*, 29(7)

National Cancer Registry Ireland [NCRI] (2019), *Cancer in Ireland 1994-2017 with estimates for 2017-2019: Annual report of the National Cancer Registry*, Cork: NCRI Available at: https://www.ncri.ie/publications/statistical-reports/cancer-ireland-1994-2017-estimates-2017-2019-annual-report-national

National Cancer Registry Ireland [NCRI] (2019), *Cancer Incidence Projections for Ireland 2020-2045*, Cork: NCRI Available at: https://www.ncri.ie/sites/ncri/files/pubs/CancerIncidenceProjections_NCRI_fullreport_09042019_final.pdf

European Cancer Information System [ECIS]: https://ecis.jrc.ec.europa.eu

National Cancer Registry Ireland [NCRI]: https://www.ncri.ie

Northern Ireland Cancer Registry [NICR]: https://www.qub.ac.uk/research-centres/nicr

2.7 Prostate cancer (ICD-10 C61)

Prostate cancer is the most commonly diagnosed invasive cancer (excluding NMSC) across the island of Ireland, and accounts for at least one quarter of diagnoses (see Table 31). The top risk factors for prostate cancer are:

- Family history of prostate cancer.
- Height/tallness.
- Arsenic and arsenic compounds.
- Cadmium and cadmium compounds

(National Cancer Registry Ireland, 2018a)

2.7.1 PSA testing

The use of Prostate Specific Antigen (PSA) testing for prostate cancer detection is controversial, due to a risk of misdiagnosis (over and under diagnosis), psychological concern for men and their families, and cost to the health service (RQIA, 2018). Across the island of Ireland, the use of PSA tests has been reflected in statistics relating to prostate cancer. For example 1,391,509 PSA tests were carried out in Northern Ireland between 1993 and 2016 (RQIA, 2018). Despite the increase in PSA test usage between these years, many did not meet the relevant guidelines. The number of prostate cancer diagnoses in Northern Ireland doubled between 1993 and 2016, although mortality rates have been relatively constant. These reflect the increased use of PSA testing (RQIA, 2018).

2.7.2 Incidence of prostate cancer

The number of cases and the age standardised incidence rates of prostate cancer are increasing across the island of Ireland.

In the Republic of Ireland (see Table 35):

- The number of cases quadrupled between 1994 and 2020: from 1,097 to 4,503.
- The European Age Standardised Rate (new) doubled between 1994 and 2020: from 120.0 to 250.9.
- The risk has increased from 1 in 21 in 1994, to 1 in 8 in 2017-19.
- The average age at diagnosis has declined from 74 years in 1994-1996 to 67 years in 2012-2014.
- The proportion of men aged under 55 years at time of diagnosis has quadrupled.
- The increased incidence rates and changing age profile are likely to reflect increases in PSA testing of younger and middle-aged men since the mid-1990s (National Cancer Registry Ireland, 2019b).

Table 35: Incidence of prostate cancer, males, RoI, 1994 to 2020

Year of diagnosis	Number of cases	% Invasive ex. NMSC	European Age Standardised Rate (new)	Risk (1 in X)
1994	1,097	17.23	129.0	1 in 21
2004	2,678	30.74	236.1	1 in 8
2011	3,601	32.30	246.6	1 in 7
2017-2019 (annual average)	3,665	29.0	202.0	1 in 8
2020	4,503	31.3	250.9	-

National Cancer Registry Ireland, European Cancer Information System
Note: Age standardised rate is based on age 0-85+. Risk is based on age 0-74.

In Northern Ireland (see Table 36):

- The number of cases of prostate cancer nearly trebled between 1994 and 2018: from 485 to 1,265.
- The European Age Standardised Rate (new) for incidence of prostate cancer increased from 117.5 in 1994 to 170.4 in 2018.
- The incidence rate in Northern Ireland in 2018 is lower than the rate in the Republic of Ireland during that time (170.4 and 250.9 respectively)

Table 36: Incidence of prostate cancer, males, NI, 1994 to 2018

Year of diagnosis	Number of cases	European Age Standardised Rate (new)
1994	485	117.5
2004	842	162.3
2014	1,157	170.4
2018	1,265	170.4

Source: Northern Ireland Cancer Registry

Based on the European Age Standardised Rate (new), the Republic of Ireland had the highest incidence rate (250.9) across the EU-27 countries in 2020. The lowest was Romania (101.9), while the EU27 average was 158.8. The figure for Northern Ireland in 2018 was 170.4.

Table 37: Incidence of prostate cancer, males, RoI, NI and EU27, 2020

	European Age Standardised Rate (new)
Romania	101.9 (lowest)
EU27	158.8
Northern Ireland	170.4 (2018 figure)
Republic of Ireland	250.9 (highest)

Source: European Cancer Information System Data Explorer, Northern Ireland Cancer Registry

2.7.3 Deprivation and prostate cancer

In the Republic of Ireland during 2008-2011:

- Based on the European Age Standardised Rate (old), the incidence rate for prostate cancer ranged from 128 per 100,000 in the two least deprived groups compared with approximately 153 per 100,000 in the three most deprived groups.
- The distribution of incidence rates across the five deprivation groups remained fairly constant across 2004-2007 and 2008-2011. In both periods, urban areas had higher incidence rates, though this difference decreased from 11% in 2004-2007 to 8% in 2008-2011 (National Cancer Registry Ireland, 2016).

In Northern Ireland, for cases diagnosed between 2014 and 2018, the highest European Age Standardised Rate (new) was among those living in the least deprived areas (177.4), and the lowest level was among those living in the most deprived area (148.9). However, there is no clear-cut pattern among the other deprivation quintiles.

2.7.4 Mortality

While the incidence of prostate cancer is increasing, the mortality rate is decreasing across the island of Ireland. This is most likely due to improvements in treatment (National Cancer Registry Ireland, 2016). In the Republic of Ireland, the European Age Standardised Rate (new) fell from 64.5 in 1994 to 40.5 in 2020. In Northern Ireland the rate fell from 55.3 in 1994 to 44.5 in 2018.

Table 38 shows that the mortality rate in the Republic of Ireland is midway among the EU27 countries, although it has the highest incidence rate (see Table 37).

Table 38: Mortality rate, prostate cancer, males, selected European countries, 2020

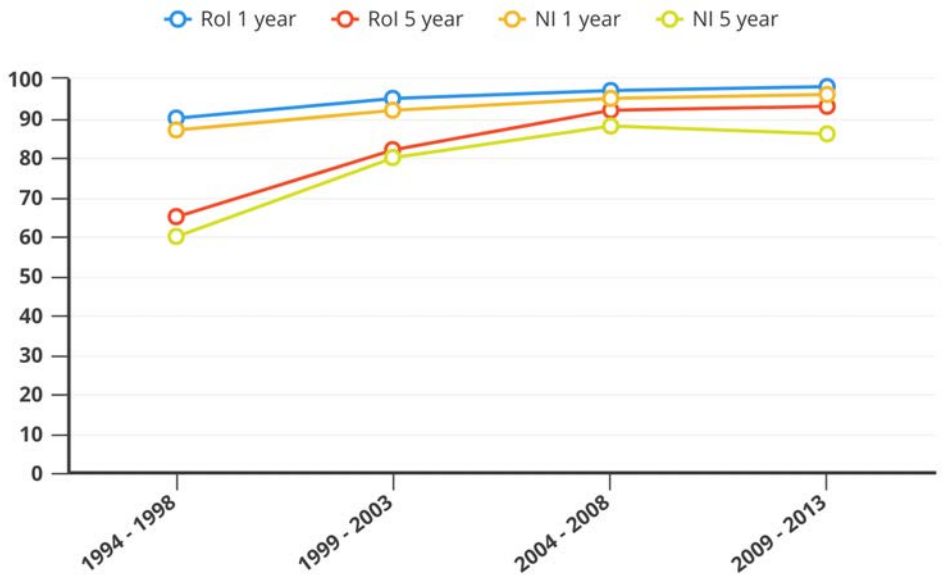
	European Age Standardised Rate (new)
Italy	22.6 (lowest)
EU27	36.3
Republic of Ireland	40.5
Northern Ireland	44.5 (2018 data)
Estonia	78.5 (highest)

Source: European Cancer Information System Data Explorer, Northern Ireland Cancer Registry

2.7.5 Survival

As shown in Figure 9, the survival rates for prostate cancer have increased. In the Republic of Ireland, prostate cancer has the second highest 5-year survival rate among major cancers (National Cancer Registry Ireland, 2019a). The increase in survival rates are likely to reflect a combination of improved treatment and earlier detection (National Cancer Registry Ireland, 2016).

Figure 9: Age standardised survival rates, prostate cancer, males 15-99 years, RoI and NI, 1994-1998 to 2009-2013



Source: National Cancer Registry Ireland, Northern Ireland Cancer Registry

2.7.6 Incidence projections

There are several methods for estimating the number of cases of prostate cancer in the future, each of which makes different assumptions about population change and incidence rates over time. The median method suggests there will be almost no change in the number of cases of prostate cancer in the Republic of Ireland, with a projection of 3,203 cases by 2045 (National Cancer Registry Ireland, 2019b). However, assuming that the average age standardised rates during 2011-2015 continue to apply, the annual numbers of cases of prostate cancer in the Republic of Ireland are projected to increase by 114% between 2015 and 2045, to 6,869 cases. The age standardised incidence rate is projected to fall by 18% between 2015 and 2045.

In Northern Ireland, the number of cases is expected to increase by 36% in 2040, to 1,537 cases. However, the age standardised incidence rates of prostate cancer are expected to decline by 17% by 2040 (Donnelly, Anderson and Gavin, 2020). Any future change in PSA or other testing levels may result in levels of prostate cancer that vary considerably from presented future estimates.

Table T11: Trend Table: Prostate cancer, RoI

	1994	2020	Outcome
Incidence (number of cases)	1,097	4,503	INCREASE
Incidence: European Age Standardised Rate (new)	129.0	250.9	INCREASE
Mortality: European Age Standardised Rate (new)	64.5	40.5	BETTER
	1994-1998	2009-13	
Survival 1 year	89.9	97.6	BETTER
Survival 5 year	65.8	91.5	BETTER

Table T12: Trend Table: Prostate cancer, NI

	2008	2018	Outcome
Incidence (number of cases)	485	1,265	INCREASE
Incidence: European Age Standardised Rate (new)	117.5	170.4	INCREASE
Mortality: European Age Standardised Rate (new)	55.3	44.5	BETTER
	1994-1998	2009-13	
Survival 1 year	86.8	96.4	BETTER
Survival 5 year	60	87	BETTER

USEFUL SOURCES OF INFORMATION

Clarke, N. et al. (2013), *A report on the excess burden of cancer among men in the Republic of Ireland, Cork*: National Cancer Registry Ireland
Available at:
https://www.ncri.ie/ncri/files/pubs/ReportOnTheExcessBurdenOfCancerAmongMenintheRepublicofIreland%28FullReport%29.pdf

Life after Prostate Cancer Diagnosis Project:
https://www.lifeafterprostatecancerdiagnosis.com/publications-and-study-outputs

National Cancer Registry Ireland [NCRI] (2018),
Cancer factsheet: Prostate, Cork: NCRI
Available at: https://www.ncri.ie/sites/ncri/files/factsheets/Factsheet%20prostate.pdf

European Cancer Information System [ECIS]: https://ecis.jrc.ec.europa.eu

National Cancer Registry Ireland [NCRI]: https://www.ncri.ie

Northern Ireland Cancer Registry [NICR]: https://www.qub.ac.uk/research-centres/nicr

CASE STUDY

MALE MENTAL HEALTH RESEARCH

The Men's Health Forum in Ireland (MHFI) coordinated two major pieces of action research into male mental health and suicide. The first of these targeted young adult men, and the second middle-aged men. Both sought to: establish the evidence base; explore key risk factors; identify models of effective practice; and implement strategies to improve the mental health and wellbeing of at risk and vulnerable groups within these age bands.

https://www.mhfi.org/ymspfullreport.pdf
https://www.mhfi.org/MAMRMreport.pdf

2.8 Testicular cancer (ICD-10 C62)

The main risk factors for testicular cancer are:

- Having had an undescended testicle.
- Abnormal development of the testicles.
- Personal history of testicular cancer.
- Family history of testicular cancer (especially in a father or brother).
- Being white.

(National Cancer Registry Ireland, 2018b)

2.8.1 Incidence of testicular cancer

In the Republic of Ireland (see Table 39):

- The number of cases of testicular cancer increased from 69 in 1994 to 204 in 2020.
- Reflecting this, the European Age Standardised Rate (new) increased from 3.9 in 1994 to 9.1 in 2020.
- The risk rose from 1:370 in 1994 to 1:183 in 2017-19.

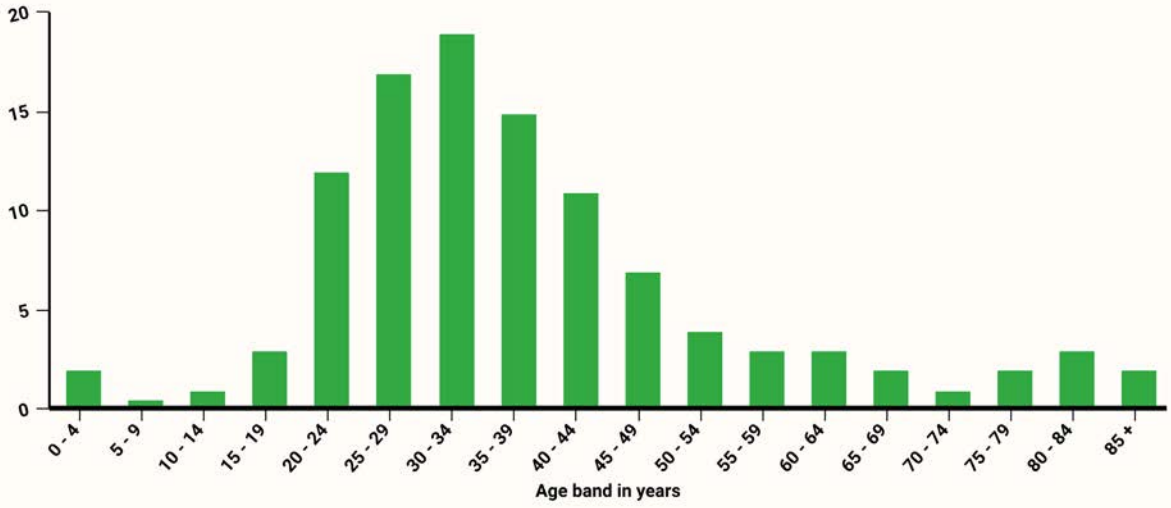
Table 39: Incidence of testicular cancer, RoI, 1994 to 2020

Year of diagnosis	Number of cases	% Invasive ex. NMSC	European Age Standardised Rate (new)	Risk (1 in X)
1994	69	1.08	3.9	1 in 370
2004	122	1.40	5.3	1 in 250
2017-19 (annual average)	180	1.4	7.3	1 in 183
2020	204	1.4	9.1	-

Source: National Cancer Registry Ireland, European Cancer Information System
Note: Age standardised rate is based on age 0-85+. Risk is based on age 0-74.

The highest crude rates of incidence of testicular cancer are among younger males aged between 15 and 39 years (see Figure 10). For example, it accounts for 38.84% of all invasive cancers (excluding NMSC) of men aged 24-29 years, which is a crude rate of 16.81 out of 100,000 males.

Figure 10: Crude incidence rate (per 100,000 males) of testicular cancer, by age group, males, RoI, 1994-2015



Source: National Cancer Registry Ireland

In Northern Ireland (see Table 40):

- The number males diagnosed with testicular cancer has grown from 46 in 1994 to 70 in 2018.
- The European Age Standardised Rate (new) has increased from 5.4 to 7.6 over the same time.
- Testicular cancer was the 16th most common male cancer diagnosed between 2009 and 2013, representing 1.5% of all male cancers (excluding NMSC).

Table 40: Incidence of testicular cancer, males, NI, 1994 to 2018

Year of diagnosis	Number of cases	Crude incidence rate per 100,000 person years	European Age Standardised Rate (new)
1994	46	5.7	5.4
2004	70	8.4	7.7
2014	68	7.5	7.4
2018	70	7.6	7.6

Source: Northern Ireland Cancer Registry

The age distribution of diagnoses of testicular cancer in Northern Ireland shows higher rates among 15-44 year olds, similar to that seen in the Republic of Ireland. The average age at diagnosis is 37 years, compared with the average of 68 years for men for all cancers (excluding NMSC) (Donnelly, Anderson and Gavin, 2020).

Table 41 shows that the incidence rates in the Republic of Ireland are higher than the average across the EU27 (8.4). The rate for Northern Ireland was slightly lower than the EU27 average, although the Northern Ireland figure is for 2018.

Table 41: Incidence rates of testicular cancer, males, selected EU countries, 2020

	European Age Standardised Rate (new)
Lithuania	3.2 (lowest)
Northern Ireland	7.6 (2018)
EU27	8.4
Republic of Ireland	9.1 (9th highest)
Germany	11.4 (highest)

Source: European Cancer Information System Data Explorer, Northern Ireland Cancer Registry

2.8.2 Deprivation and testicular cancer

Table 42 shows a clear gradient in incidence rates according to deprivation quintile in Northern Ireland. Within the least deprived quintile, the incidence rate was 13% higher than the Northern Ireland average, whilst it was 20% lower in the most deprived quintile.

Table 42: Incidence rates of testicular cancer, males, by deprivation quintile of residence, NI, 2014-18

Deprivation quintile of residence	European Age Standardised Rate (new)	Standardised incidence ratio compared with NI
Least deprived (quintile 1)	7.9	113.3
Quintile 2	7.8	112.1
Quintile 3	6.6	94.7
Quintile 4	6.9	99.2
Most deprived (quintile 5)	5.7	80.8
Northern Ireland	7.0	

Source: Northern Ireland Cancer Registry
Note: A value above 100 means that incidence rates are greater than NI average

2.8.3 Mortality

- The mortality rate for testicular cancer is low, and the average across the EU27 countries is 0.4 (see Table 43).
- The rate for the Republic of Ireland is slightly lower than this, as is the rate for Northern Ireland (although it is for a different time frame).
- The mortality rate for testicular cancer in the Republic of Ireland has decreased by 3.7% between 1994 and 2015.

(National Cancer Registry Ireland, 2018b)

Table 43: Mortality rates for testicular cancer, selected European countries, 2020

	European Age Standardised Rate (new)
Luxembourg	0.0 (lowest)
Malta	0.0 (lowest)
Republic of Ireland	0.2 (6th lowest)
Northern Ireland	0.3 (2014-2018 annual average)
EU27	0.4
Bulgaria	1.1 (highest)

Source: European Cancer Information System Data Explorer, Northern Ireland Cancer Registry

2.8.4 Survival

Survival rates for testicular cancer are high and have risen since 1994 (see Table 44):

- In the Republic of Ireland, the 5-year survival rate for testicular cancer has risen from 90.5 in 1994-1998 to 97.7 in 2010-2014. This is now the highest 5-year survival rate among major cancers (National Cancer Registry Ireland, 2019a).
- Despite the overall upward trend in Northern Ireland since 1994 - 1998, the 1-year and 5-year survival rates have decreased since 2004-2008.

Table 44: Survival rates of testicular cancer, males 15-99 years, RoI and NI

	%			
	1994-1998	1999-2003	2004-2008	2009-2013
Republic of Ireland				
1 year	95.4	97.6	98.6	98.8
5 year	90.5	95.3	98.0	97.5
Northern Ireland				
1 year	96.7	97.6	99.4	98.3
5 year	93.2	96.7	98.7	95.7

Source: National Cancer Registry Ireland, Northern Ireland Cancer Registry

2.8.5 Incidence projections

The number of cases of testicular cancer in Northern Ireland is predicted to increase, from 65 per year in 2009-2013 to 73 cases per year by 2035. Testicular cancer is more common among younger men, and the proportion of younger men in the population is not expected to change significantly over time. Therefore, this 12% increase reflects an increase in incidence of testicular cancer, rather than reflecting changing age distribution (Donnelly and Gavin, 2020, p. 176).

Table T13: Trend Table: Testicular cancer, RoI

	1994	2020	Outcome
Incidence (number of cases)	69	180	INCREASE
Incidence: European age standardised incidence rate (new)	3.9	9.1	INCREASE
	1994-1998	2009-2013	
Survival 1 year	95.4	98.8	BETTER
Survival 5 year	90.5	97.5	BETTER

Table T14: Trend Table: Testicular cancer, NI

	2008	2018	Outcome
Incidence (number of cases)	46	70	INCREASE
Incidence: European age standardised incidence rate (new)	5.4	7.6	INCREASE
	1994-1998	2009-2013	
Survival 1 year	96.7	98.3	SIMILAR
Survival 5 year	93.2	95.7	BETTER

USEFUL SOURCES OF INFORMATION

Clarke, N. et al. (2013), *A report on the excess burden of cancer among men in the Republic of Ireland, Cork*: National Cancer Registry Ireland
Available at:
https://www.ncri.ie/ncri/files/pubs/ReportOnTheExcessBurdenOfCancerAmongMenintheRepublicofIreland%28FullReport%29.pdf

National Cancer Registry Ireland [NCRI] (2018), *Cancer factsheet: Testis*, Cork: NCRI
Available at: https://www.ncri.ie/sites/ncri/files/factsheets/Factsheet%20testis.pdf

European Cancer Information System [ECIS]: https://ecis.jrc.ec.europa.eu

National Cancer Registry Ireland [NCRI]: https://www.ncri.ie

Northern Ireland Cancer Registry [NICR]:
https://www.qub.ac.uk/research-centres/nicr

CASE STUDY

FARMERS HAVE HEARTS CARDIOVASCULAR HEALTH PROGRAMME

The Farmers Have Hearts Cardiovascular Health Programme is a health intervention which targets male Irish farmers. The programme consists of a baseline health check, a health behaviour change intervention, and a repeat health check at 52 weeks. The overall goal of this on-going programme is to assess its effectiveness in terms of farmers' follow-up use of health services, sustainable health behaviour change, and reduced CVD risk.

https://www.teagasc.ie/publications/2020/farmers-have-hearts-cardiovascular-health-programme.php

2.9 Breast cancer (ICD-10 C50)

Breast cancer (ICD-10 C50) in males is rare, and there is a general perception that breast cancer solely affects females. This can result in men and medical professionals ignoring or misdiagnosing symptoms of breast cancer. The range of statistics on male breast cancer that can be produced is limited due to the small number of cases. In addition, statistics on the incidence of breast cancer among men are not available from the European Cancer Information System (ECIS) or GLOBOCAN.

Little research has been undertaken on male breast cancer. However, a recent project (Maguire et al., 2020) explored the genetic basis of male breast cancer, and found that the underlying biological processes which affect breast cancer initiation and progression are probably similar in males and females. This means that developments in the prevention and treatment of breast cancer may benefit both males and females. Importantly, the research may also help to identify the biological mechanisms that cause the disease to develop in men.

2.9.1 Incidence of breast cancer

Figures from the National Cancer Registry in the Republic of Ireland show that, on average, between 2017 and 2019, males accounted for 28 out of the 3,351 cases of breast cancer. This is a risk of 1:1,196 for males compared with 1:10 for females. Table 45 shows that the number of breast cancer diagnoses among men has increased since 1995.

Data from the Northern Ireland Cancer Registry show that in 2018 in Northern Ireland, males accounted for 10 out of 1,532 cases of breast cancer. The median age of diagnosis for males was 76, compared with 61 for females. Data before 2018 are not available for Northern Ireland. The incidence rate – based on the European Age Standardised Rate (new) – is 1.6.

Table 45: Incidence of breast cancer, males, RoI, 1994 to 2015

Year of diagnosis	Number of cases	% Invasive ex. NMSC	European Age Standardised Rate (old)	Risk (1 in X)
1994	14	0.22%	0.89	1 in 1,250
2004	15	0.17%	0.81	1 in 1,429
2015	24	0.21%	1.01	1 in 1,111
2017-19 (annual average)	28	-	1.0	1 in 1,196

Source: National Cancer Registry Ireland
Note: Age standardised rate is based on age 0-85+. Risk is based on age 0-74.

2.9.2 Mortality

In the Republic of Ireland, the death rate from breast cancer for males was much lower than for females. The annual European Age Standardised Rate (new) was 0.4 for males compared with 39.9 for females. This means that the cumulative risk of death was 1:6,735 for males compared with 1:54 for females. In Northern Ireland, the European Age Standardised Rate (new) in 2014-2018 was 0.3 for males and 35.9 for females.

2.9.3 Survival

Table 46 shows that the unstandardised survival rates for males in the Republic of Ireland have increased. However, due to the small number of cases, age standardised statistics for both jurisdictions are not available.

Table 46: Survival rates (unstandardised) of breast cancer, males 15-99 years, RoI

	%			
	1994-1998	1999-2003	2004-2008	2009-2013
1 year	82.1	90.4	93.9	93.4
5 year	53.1	81.4	79.5	76.2

Source: National Cancer Registry Ireland

Table T15: Trend Table: Breast cancer, RoI

	1994	2017-2019	Outcome
Incidence (number of cases)	14	28	INCREASE
European age standardised incidence rate (old)	0.89	1.0	SIMILAR
	1994-1998	2009-2013	
Survival 1 year	82.1	93.4	BETTER
Survival 5 year	53.1	76.2	BETTER

Table T16: Trend Table: Breast cancer, NI

	2018
Incidence (number of cases)	10
European age standardised incidence rate (new)	1.6

USEFUL SOURCES OF INFORMATION

European Cancer Information System [ECIS]: https://ecis.jrc.ec.europa.eu

National Cancer Registry Ireland [NCRI]: https://www.ncri.ie

Northern Ireland Cancer Registry [NICR]: https://www.qub.ac.uk/research-centres/nicr

2.10 Non-melanoma skin cancer (ICD-10 C44)

Non-melanoma skin cancer (NMSC) accounted for 31% of all registered tumours in the Republic of Ireland in 2017-2019.

2.10.1 Incidence

In the Republic of Ireland (see Table 47):

- The number of males diagnosed with NMSC has more than doubled, from 2,826 in 1994 to 6,621 in 2017-19.
- The European Age Standardised Rate (old) has increased from 188.3 in 1994 to 241.2 in 2017-19 (annual average).
- The risk for males is 1 in 6, whilst the risk for females is 1 in 9.

Table 47: Incidence of non-melanoma skin cancer, males, RoI, 1994 to 2017-19

Year of diagnosis	Number of cases	European Age Standardised Rate (old)	Risk (1 in X)
1994	2,826	188.3	1 in 8
2004	3,346	185.65	1 in 8
2015	5,995	242.55	1 in 6
2017-19 (annual average)	6,621	241.2	1 in 6

Source: 1994-2015: National Cancer Registry Ireland, 2017-2019: National Cancer Registry Ireland (2019a)
Note: Age standardised rate is based on age 0-85+. Risk is based on age 0-74.

In Northern Ireland (see Table 48):

- The number of cases of NMSC among males has more than doubled from 1,005 in 1994 to 2,417 in 2018.
- The European Age Standardised Rate for NMSC has risen between 1994 and 2018.
- In 2018, the European Age Standardised Rate (new) for Northern Ireland (336.0) was lower than in the Republic of Ireland (396.8).
- The European Age Standardised Rate for NMSC in males has consistently been higher for males than for females: 336.0 and 192.5 respectively in 2018.

Table 48: Incidence of non-melanoma skin cancer, males, NI, 1994 to 2018

Year of diagnosis	Number of cases	European Age Standardised Rate (new)
1994	1,005	220.5
2004	1,170	225.6
2014	2,036	306.7
2018	2,417	336.0

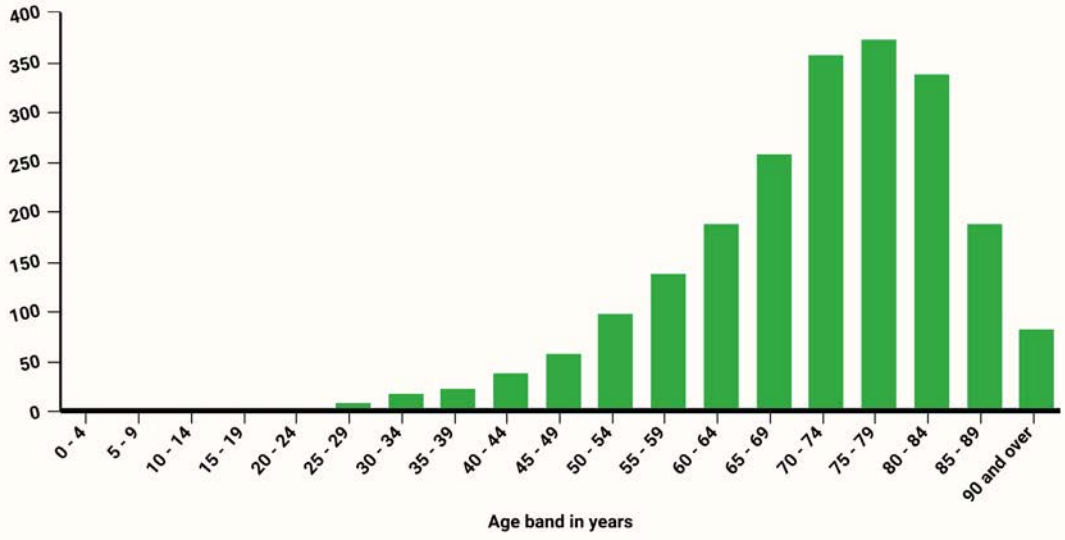
Source: Northern Ireland Cancer Registry

2.10.2 NMSC and age

The incidence of NMSC increases with age:

- In the Republic of Ireland, the overall crude rate for NMSC among males between 1994 and 2015 was 22.15 for 0-49 year olds, and 1,683.33 for males aged 75 years or over.
- In Northern Ireland in 2018, the median age of diagnoses for males and females was 73 years. Figure 11 shows that the number of cases rises according to age, with only 8% of cases diagnosed among those aged under 50. The age specific incidence rate ranges from 2 at age 20-24, to 2,463.3 at age 90 or over.

Figure 11: Average number of cases of NMSC diagnosed per year by age group, males, NI, 2014-2018



Source: National Cancer Registry Ireland

2.10.3 Deprivation and NMSC

Table 49 shows that the incidence of NMSC varies according to deprivation. The European Age Standardised Rate (new) for males living in the most deprived areas was 11% lower than the Northern Ireland average, whilst the rate among those living in the least deprived areas was 13% higher than the Northern Ireland average.

Table 49: Incidence of NMSC, by deprivation quintile of residence, males, NI, 2014-18

Deprivation quintile of residence	European Age Standardised Rate (new)	Standardised incidence ratio compared with NI
Quintile 1 - least deprived	364.6	113.2
Quintile 2	321.8	99.4
Quintile 3	318.8	99.3
Quintile 4	307.6	96.2
Quintile 5 - most deprived	288.1	89.0
Northern Ireland	322.2	100.0

Source: Northern Ireland Cancer Registry
Note: A value above 100 means that incidence rates are greater than NI average

2.10.4 Mortality

Mortality for NMSC is low. There were 22 male and 10 female deaths from non-melanoma skin cancer each year in Northern Ireland between 2014 and 2018.

Table T17: Trend Table: Non-melanoma skin cancer, RoI

	1994	2017-2019	Outcome
Incidence (number of cases)	2,826	6,621	INCREASE
European age standardised incidence rate (old)	188.3	241.2	INCREASE

Table T18: Trend Table: Non-melanoma skin cancer, NI

	1994	2018	Outcome
Incidence (number of cases)	1,005	2,417	INCREASE
European age standardised incidence rate (new)	220.5	336.0	INCREASE

USEFUL SOURCES OF INFORMATION

National Cancer Registry Ireland [NCRI]: https://www.ncri.ie

Northern Ireland Cancer Registry [NICR]: https://www.qub.ac.uk/research-centres/nicr

2.11 Circulatory diseases (ICD-10 I00-I99)

As highlighted in Chapter 2.5, circulatory diseases are amongst the leading causes of male deaths in the Republic of Ireland and Northern Ireland. These include hypertension, pulmonary heart disease and ischaemic heart disease. Obtaining information on the number of people diagnosed and living with a disease or condition is often very difficult. In addition, many of the available statistics are not provided for males and females separately. Therefore, this section will outline the key mortality rates for the Republic of Ireland, Northern Ireland, and the average across the EU28 countries. Chapter 3.2 provides a discussion of ischaemic heart disease.

2.11.1 Proportion of deaths due to circulatory diseases

The proportion of deaths due to circulatory diseases has been falling (see Table 50).

In the Republic of Ireland:

- The proportion of male deaths due to diseases of the circulatory system has decreased, from 34.4% in 2008 to 29.6% in 2018.
- In 2018, deaths from diseases of the circulatory system accounted for 29.6% of deaths among males, and 27.8% among females.
- The proportion of deaths due to ischaemic heart disease is higher for males than for females. In 2018, the figures were 15.9% and 10.5% respectively.

In Northern Ireland:

- The proportion of male deaths due to diseases of the circulatory system has decreased from 31.7% in 2008 to 24.1% in 2018.
- The proportion of male deaths due to ischaemic heart disease has fallen from 18.7% to 12.3% between 2008 and 2018.
- In 2018, deaths from diseases of the circulatory system accounted for 24.1% of deaths among males, and 21.5% among females.
- The proportion of deaths due to ischaemic heart disease is higher for males than for females. In 2018, the figures were 12.3% and 6.9% respectively.

Table 50: Proportion of deaths due to circulatory diseases, males, RoI and NI, 2008 to 2018

	% of deaths					
	2008	2010	2012	2014	2016	2018
Republic of Ireland	34.4	34.0	32.0	29.9	30.5	29.6
Northern Ireland	31.7	31.1	27.1	26.5	24.4	24.1

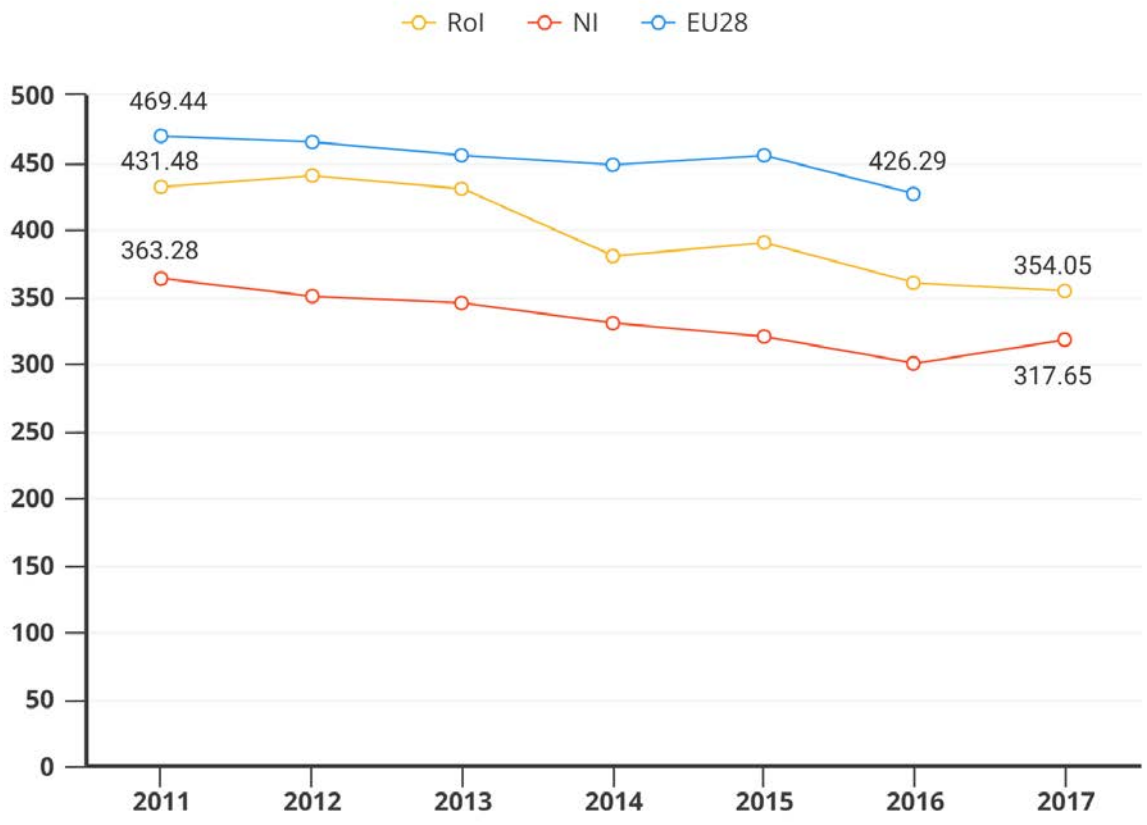
Source: CSO *Vital Statistics* series, NISRA *Registrar General Annual Report* series

2.11.2 Death rates

Since 2011, the age standardised death rate from circulatory diseases has fallen in the Republic of Ireland, Northern Ireland and for the EU28 average (see Figure 12):

- Of these three regions, the EU28 average rate was the highest, and the rate in Northern Ireland was the lowest.
- The rate in the Republic of Ireland has decreased from 431.48 in 2011 to 354.05 in 2017.
- The rate in Northern Ireland has decreased from 363.28 in 2011 to 317.65 in 2017.
- The EU28 average has fallen from 469.44 to 426.29.

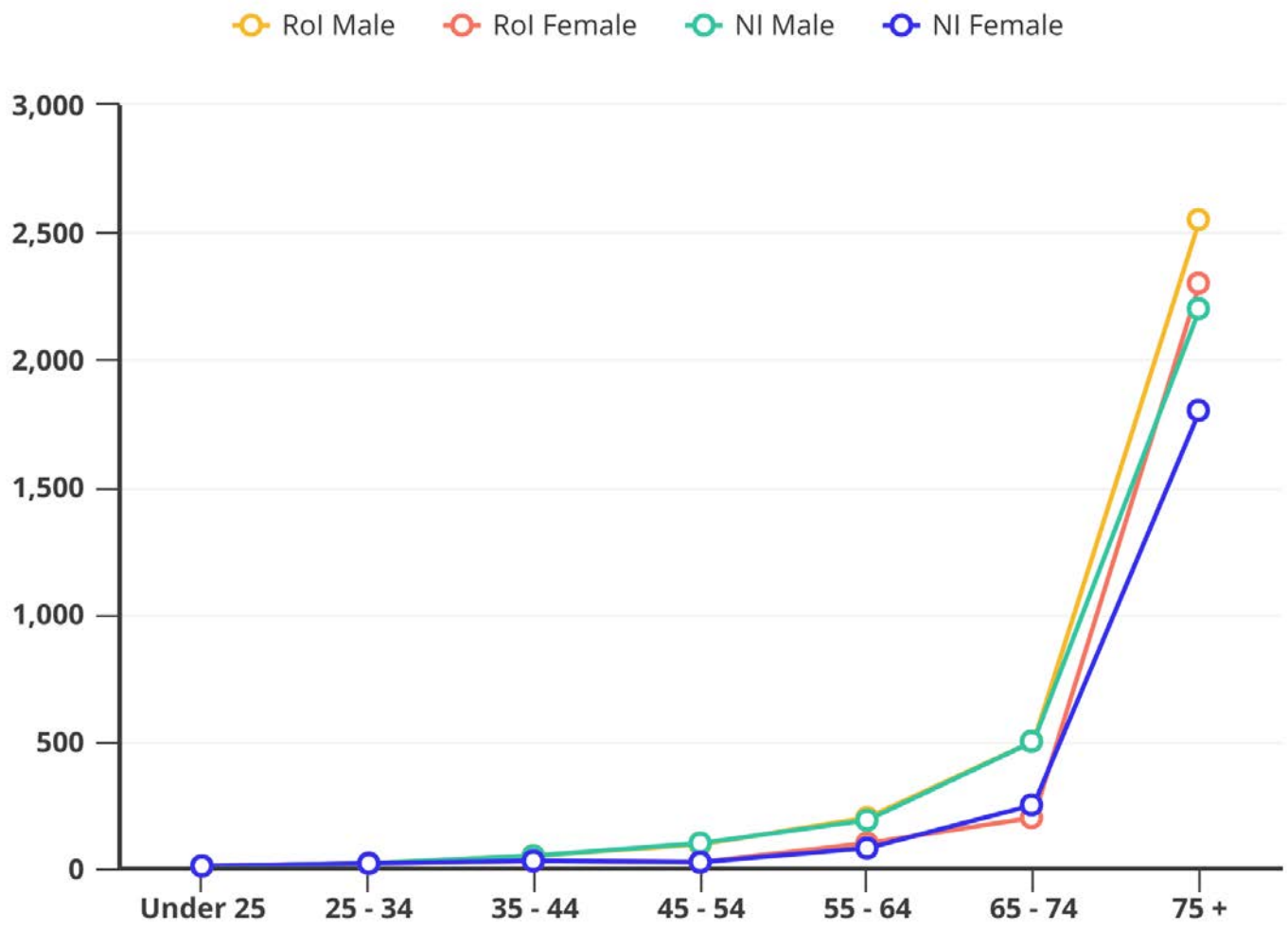
Figure 12: Age standardised death rates per 100,000 males, circulatory diseases, males, RoI, NI and EU28, 2011 to 2017



Source: Eurostat Table hlth_cd_asdr2

Figure 13 compares the crude death rates from circulatory diseases in the Republic of Ireland and Northern Ireland in 2017, and shows that the rate increases with age across both jurisdictions. It illustrates that the crude death rate for males residing in the Republic of Ireland was highest for the age categories of 65-74 years and 75 years or older. Although the death rate for males residing in Northern Ireland was similar to males living in the Republic of Ireland at age 65-74 years, it was lower at age 75 years or older.

Figure 13: Crude death rates (per 100,000 males), circulatory diseases, RoI and NI, 2017



Source: CSO Statbank: *population estimates, causes of death*
NI Registrar *General Cause of Death 2017*; NISRA *Mid Year Population Estimates 2017*

Table T19: Trend Table: Circulatory disease, RoI

	2011	2017	Outcome
Age standardised death rates per 100,000 males	431.48	354.05	BETTER
	2008	2018	
Proportion of deaths due to circulatory diseases (%)	34.4	29.6	BETTER

Table T20: Trend Table: Circulatory disease, NI

	2011	2017	Outcome
Age standardised death rates per 100,000 males	363.28	317.65	BETTER
	2008	2018	
Proportion of deaths due to circulatory diseases (%)	31.7	24.1	BETTER

USEFUL SOURCES OF INFORMATION

British Heart Foundation, *Heart & Circulatory Disease Statistics 2019*
Available at: https://www.bhf.org.uk/what-we-do/our-research/heart-statistics/heart-statistics-publications/cardiovascular-disease-statistics-2019

Department of Health and Children (2010), *Changing Cardiovascular Health: National Cardiovascular Health Policy 2010-2019*, Dublin: Department of Health and Children
Available at: https://assets.gov.ie/14907/9fa9221a41374006a7fc2e1d4c4706fc.pdf

2.12 Respiratory diseases (ICD-10 J00-J99)

Respiratory diseases are one of the top four leading causes of male death in the Republic of Ireland and Northern Ireland. These include influenza, pneumonia, emphysema, asthma and Chronic Obstructive Pulmonary Disease (COPD). Occupational lung disease is a major cause of work-related ill health, some of which develop shortly after exposure (such as work-related asthma), and others which may develop later (for example, pneumoconiosis). The incidence and risk of occupational lung disease is higher among those working in agriculture, bakeries, construction, engineering, quarries, vehicle paint spraying, waste and recycling, and welding (HSENI, not dated). The majority of people working in many of these occupations are male.

Statistics on the number of people diagnosed with respiratory diseases are not readily available and, so, this discussion will focus upon mortality rates. However, O'Connor et al. (2018) highlight that in the Republic of Ireland:

- 19.3% of males with full General Medical Services (GMS) scheme coverage filled at least one prescription for respiratory medications in 2016.
- 26% of boys on GMS coverage in 2016 received a respiratory medication, as did 12% of males aged 25-45 years, and 28% of males aged over 75 years who had GMS coverage.
- Many respiratory diseases are more common in lower socioeconomic groups. For COPD and lung cancer, this can be partly explained by higher rates of smoking, as well as air pollution and adverse factors in childhood.

2.12.1 Proportion of male deaths due to respiratory diseases

Table 51 shows that:

- The proportion of deaths due to respiratory diseases in the Republic of Ireland is slightly lower than in Northern Ireland.
- The proportion of deaths due to respiratory diseases in the Republic of Ireland has risen from 11.4% in 2008 to 12.5% in 2018.
- The proportion of deaths due to respiratory diseases in Northern Ireland in 2018 is similar to the figure in 2008, although there has been some fluctuation between those years.
- In 2018, the proportion of deaths due to respiratory diseases was lower for males than for females in Northern Ireland - 13.2% and 14.4% respectively.

Table 51: Proportion of deaths due to respiratory diseases, males, RoI and NI, 2008 to 2018

	% of deaths					
	2008	2010	2012	2014	2016	2018
Republic of Ireland	11.4	10.7	11.3	11.5	12.3	12.5
Northern Ireland	13.1	12.1	13.8	13.3	12.6	13.2

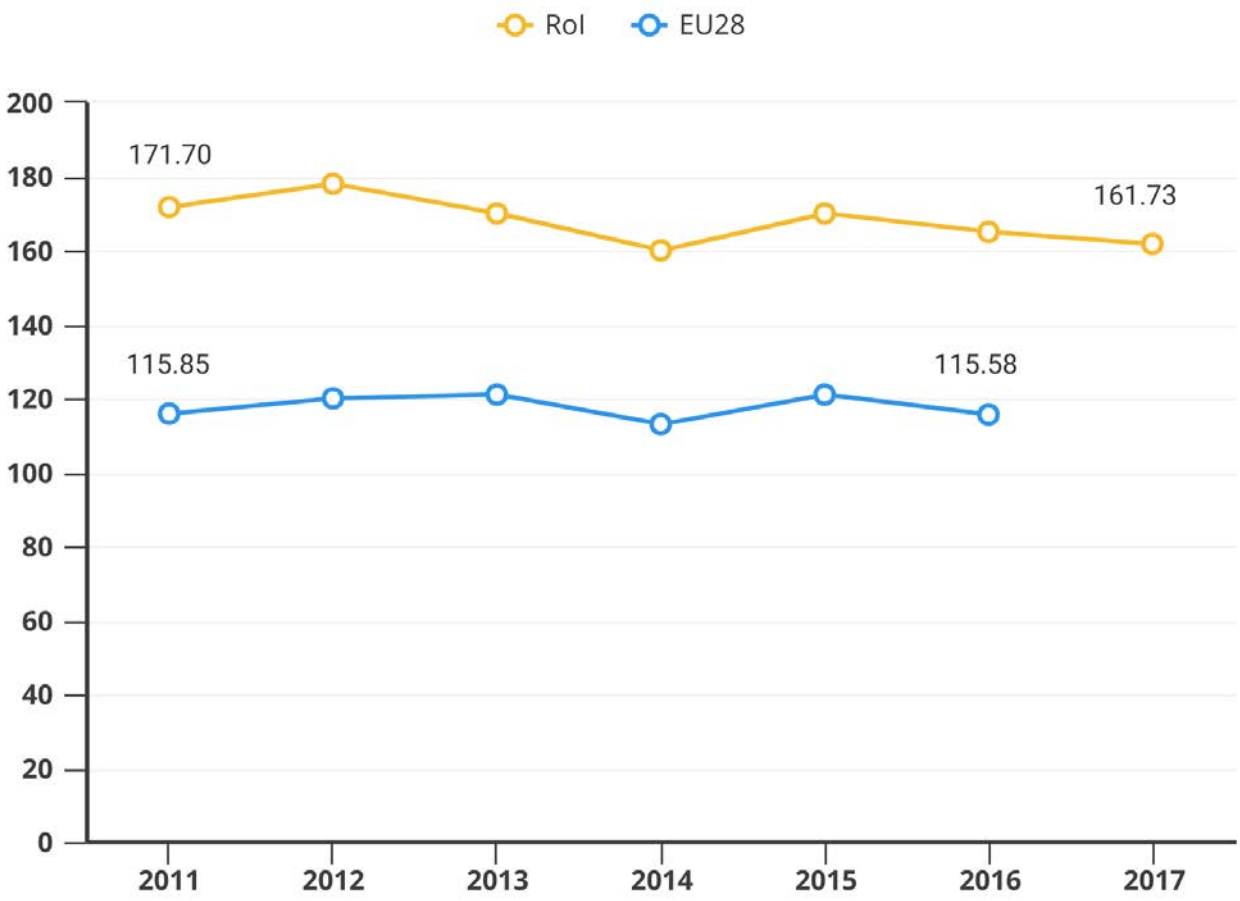
Source: CSO *Vital Statistics* series, NISRA *Registrar General Annual Report* series

2.12.2 Death rates

Figure 14 highlights the standardised death rates per 100,000 males from respiratory diseases in the Republic of Ireland and average across the EU28 countries between 2011 and 2017:

- The rate in the Republic of Ireland has decreased from 171.7 in 2011 to 161.73 in 2017.
- The average rate for the EU28 countries is similar in 2011 to 2016, although it rose to 123.92 in 2015.
- Overall, the rate is higher in the Republic of Ireland than for the average of the EU28 countries.

Figure 14: Age standardised death rates per 100,000 males, respiratory diseases, males, RoI and EU28, 2011 to 2017



Source: Eurostat Table hlth_cd_asdr2

Table T21: Trend Table: Respiratory disease, RoI

	2011	2017	Outcome
Age standardised death rates per 100,000 males	171.7	161.73	BETTER
	2008	2018	
Proportion of deaths due to respiratory diseases (%)	11.4%	12.5%	SIMILAR

Table T22: Trend Table: Respiratory disease, NI

	2008	2018	Outcome
Proportion of deaths due to circulatory diseases (%)	13.1%	13.2%	SIMILAR

USEFUL SOURCES OF INFORMATION

O'Connor, M. et al. (2018), *Respiratory Health of the Nation, 2018*, Dublin: Irish Thoracic Society
Available at: https://irishthoracicsociety.com/wp-content/uploads/2018/12/RESP-Health-LATEST19.12.pdf

Regulation and Quality Improvement Authority (2014), *Independent Review of the Implementation of the Respiratory Service Framework*, Belfast: The Regulation and Quality Improvement Authority
Available at: https://www.rqia.org.uk/RQIA/files/36/36654318-b183-4bce-a34f-131ec780fd6c.pdf

CASE STUDY

SHEDS FOR LIFE

Sheds for Life is a community-based health promotion programme aimed at supporting local members of Irish Men's Sheds. The programme seeks to facilitate open and meaningful health-focused discussions, while encouraging men to adopt and maintain healthier lifestyle choices, and to increase their awareness in areas such as physical activity, healthy eating and mental wellbeing.

https://menssheds.ie/sheds-for-life

2.13 Benign Prostatic Hyperplasia (BPH)

Benign prostatic hyperplasia (BPH) refers to the non-malignant growth of the prostate which is observed very frequently in men from the age of approximately 40 years of age (Roehrborn, 2005). This condition can result in lower urinary tract symptoms, such as problems in urinating, due to the reduced ability of the urethra to expand when passing urine. These symptoms can have a negative impact on daily activities, quality of life and sexual functioning. However, BPH may not, necessarily, result in symptoms severe enough for a man to consult a doctor.

The relevant ICD-10 code is N40.0 and N40.1. There is some disagreement about the specific clinical diagnostic criteria (Trueman et al., 1999). Benign prostatic hyperplasia is not completely understood, and there is little statistical information on the incidence and prevalence of BPH, partly due to the disagreement about criteria. Some research studies have indicated that prevalence and incidence rates are rising, which may be due to an increase in awareness of BPH, increased life expectancy, or a change in help-seeking behaviour among older men in order to increase their quality of life (Egan, 2016).

2.13.1 Number of urologists

Despite the high prevalence of BPH, the number of urologists varies across countries. Palmer and Taylor (2018) provide statistics on the number of consultant urologists in a range of countries, and provide a ratio of urologists to total population (see Table 52). In 2018, there were:

- 24 consultant urologists in Northern Ireland, as well as one locum. This means that there was one consultant urologist per 78,658 people (excluding the locum). This is higher than in 2008, when there was one consultant per 103,000 people.
- 43 consultant urologists in the Republic of Ireland, as well as four locums. This means that there was one consultant urologist per 111,627 people (excluding locums).

Table 52: Number of urologists, England, Scotland, Wales and NI, 2008 and 2018

	England	Scotland	Wales	N Ireland
2008	1:85,000	1:83,000	1:72,000	1:103,000
2018	1:62,946	1:67,834	1:63,372	1:78,658

Source: Palmer and Taylor (2018)

Palmer and Taylor also provided relevant data across a range of countries in 2018 (see Table 53). The ratio of urologists to the population is lowest in Spain (1:19,890) which is around one quarter of the figure for Northern Ireland, and less than one fifth of the ratio in the Republic of Ireland.

Table 53: Number of urologists, selected countries, 2018

Country	Population	Number of Consultant Urologists	Ratio of consultants to population
Spain	47,737,941	2,400	1:19,890
Sweden	9,851,852	480	1:20,524
Denmark	5,690,750	253 (estimated)	1:22,493
New Zealand	4,565,185	120	1:38,043
France	64,811,043	1,350	1:48,008
England	55,330,000	879	1:62,946
Scotland	5,450,000	86	1:63,372
Australia	24,168,303	380	1:63,500
United Kingdom	66,570,000	1,036	1:64,260
Wales	3,190,000	47	1:67,834
Northern Ireland	1,860,000	24	1:78,658
Republic of Ireland	4,800,000	43	1:111,627

Source: Palmer and Taylor (2018)

USEFUL SOURCES OF INFORMATION

Palmer, M. and Taylor, C. (2018), *British Association of Urological Surgeons and The Specialist Advisory Committee in Urology Workforce Report* Available at: https://www.baus.org.uk/_userfiles/pages/files/publications/Workforce_Report_Sep%202018%20ver%201.1.pdf

2.14 Sexually transmitted infections and HIV

In the Republic of Ireland, data on sexually transmitted infections (STIs) are recorded by the Health Protection Surveillance Centre (HPSC). In Northern Ireland, data are based on information provided by the five genito-urinary medicine (GUM) clinics.

2.14.1 Sexually transmitted infections

In the Republic of Ireland: (see Table 54):

- 56% of reported sexually transmitted infections were among males in 2010 and 2018.
- Males accounted for the majority of cases for gonorrhoea and warts in 2010 and 2018.
- By 2018, males also accounted for half the number of cases of chlamydia.
- The number of male diagnoses of STIs has decreased for chlamydia, herpes and warts, and increased for gonorrhoea.

Table 54: Sexually transmitted infections, RoI, 2010 and 2018

	2010		2018	
	N of male diagnoses	% of diagnoses that are male	N of male diagnoses	% of diagnoses that are male
Chlamydia Trachomatis	2,445	45	1,036	50
Gonorrhoea	478	75	709	84
Genital Herpes Simplex	339	38	184	27
Ano-Genital Warts	1,551	58	849	57

Source: HPSC (2012; 2019)

In Northern Ireland in 2018 (see Table 55):

- There were 6,086 new STIs reported in Northern Ireland GUM clinics.
- 65% of new STI diagnoses in 2018 were among males.
- Males accounted for the majority of infections for chlamydia, gonorrhoea, and ano-genital warts.
- The proportion of new herpes diagnoses that were male fell from 37% in 2010 to 27% in 2018.
- The proportion of new warts diagnoses that were male rose from 55% in 2010 to 61% in 2018.
- The highest diagnostic rates of the common STIs were in 20-34 year old males and 16-24 year old females (PHA, 2019a).

Table 55: Sexually transmitted infections (first infections), NI, 2010 and 2018

	2010			2018		
	N of male diagnoses	% of diagnoses that are male	Rate per 100,000 males	N of male diagnoses	% of diagnoses that are male	Rate per 100,000 males
Chlamydia Trachomatis	1,036	57	117.1	1,036	58	111.9
Gonorrhoea	172	84	19.4	709	80	76.5
Genital Herpes Simplex	153	37	17.3	184	27	19.9
Ano-Genital Warts	1,179	55	133.3	849	61	91.7

Source: PHA (2019a)

Men who have sex with men (MSM) have a disproportionate rate of some STIs, and this has increased since 2010. For example, in Northern Ireland, MSM account for:

- 79% of male cases of infectious syphilis (75% in 2010).
- 72% of male cases of gonorrhoea (34% in 2010).
- 29% of male cases of chlamydia infections (14% in 2010).
- 18% of male cases of herpes (12% in 2010).
- 10% of male cases of ano-genital warts (8% in 2010)

(PHA, 2019a)

Men who have sex with men may account for the majority of the rise in diagnoses of syphilis and gonorrhoea during 2018, in part due to increased STI testing levels among men seeking HIV PrEP. However, there are also increasing rates of STIs among heterosexual males, especially for syphilis.

In the Republic of Ireland, MSM accounted for 86% of early infectious syphilis cases, and 65% of gonorrhoea cases.

2.14.2 HIV

In the Republic of Ireland, HIV has been notifiable under the Infectious Disease Regulations since 2011. However, data has been collected since 2003 by the Health Protection Surveillance Centre. For Northern Ireland, statistics for HIV/AIDS infection are based largely on the confidential reporting of HIV infected people to Public Health England's Centre for Infections in London. Table 56 provides statistics for HIV diagnoses in 2009 and 2018.

In the Republic of Ireland:

- There were 524 diagnoses of HIV in 2018, which is high compared with other countries in Western Europe (O'Donnell and Igoe, 2019). However, 42% of people receiving a new HIV diagnosis in Ireland had previously been diagnosed with HIV in another country.

- The number of males diagnosed with HIV has increased from 258 in 2009 to 411 in 2018 - a rise of 59%.
- In 2009, males constituted 65% of new HIV diagnoses, compared with 79% in 2018.
- In 2018, the rates of HIV diagnoses were three times higher among males than females (17.5 per 100,000 and 4.6 per 100,000) respectively.
- The highest proportion of all diagnoses were among men who have sex with men - 42% in 2009 and 56% in 2018.

In Northern Ireland:

- The number of new HIV cases has risen from 61 in 2009 to 82 in 2018.
- The number of males diagnosed with HIV has increased from 49 in 2009 to 61 in 2018 - a rise of 24%.
- In 2009, males constituted 80% of new HIV diagnoses, compared with 74% in 2018.
- The highest proportion of diagnoses in 2009 (55%) was among men who have sex with men (MSM), although this fell to 51% in 2018.

Table 56: HIV diagnoses, RoI and NI, 2009 and 2018

Republic of Ireland	2009	2018
Number of new HIV diagnoses	395	514
Number of new HIV diagnoses among males	258	411
% new HIV diagnoses that are male	65	79
% new diagnoses MSM	42	56
Northern Ireland	**2009**	**2018**
Number of new HIV diagnoses	61	82
Number of new HIV diagnoses among males	49	61
% new HIV diagnoses that are male	80	74
% new diagnoses MSM	55	51

Source: HPSC (2010), O'Donnell and Igoe (2019), Public Health England (2019)

Table 57 shows the rate of new HIV diagnoses in a range of countries across the EU and European Economic Area (EEA). In 2009, the average rate of new HIV diagnoses in the EU/EEA countries was 9.8 per 100,000 males, which was lower than for the Republic of Ireland. While the EU/EEA rate had fallen to 7.9 in 2018, the rate in the Republic of Ireland had risen to 16.7.

Table 57: New HIV diagnoses rate per 100,000 males, EU/EEA, 2009 to 2018

	2009	2014	2018
Lowest	1.8 Slovakia	2.8 Slovakia	0 (Liechtenstein)
EU/EEA	9.8	10.3	7.9
Republic of Ireland	11.5	11.9	16.7
Highest	Estonia 39.1	29.6 Estonia	24.8 (Latvia)

Source: European Centre for Disease Prevention and Control/WHO Regional Office for Europe (2019)

Table T23: Trend Table: Sexually transmitted infections, RoI

	2010	2018	Outcome
Number of males diagnosed with chlamydia	2,445	1,036	BETTER
Number of males diagnosed with gonorrhoea	478	709	WORSE
Number of males diagnosed with herpes	339	184	BETTER
Number of males diagnosed with ano-genital warts	1,551	849	BETTER
	2009	2018	
Number of males newly diagnosed with HIV	258	411	WORSE

Table T24: Trend Table: Sexually transmitted infections, NI

Rates per 100,000 males	2010	2018	Outcome
Rate of males diagnosed with chlamydia	117.1	111.9	BETTER
Rate of males diagnosed with gonorrhoea	19.4	76.5	WORSE
Rate of males diagnosed with herpes	17.3	19.9	WORSE
Rate of males diagnosed with ano-genital warts	133.3	91.7	BETTER
	2009	2018	
Number of males newly diagnosed with HIV	49	61	WORSE

USEFUL SOURCES OF INFORMATION

Health Protection Surveillance Centre: https://www.hpsc.ie

Public Health Agency: https://www.publichealth.hscni.net/directorate-public-health/health-protection/sexually-transmitted-infections

Public Health England HIV surveillance data: https://www.gov.uk/government/statistics/hiv-annual-data-tables

2.15 Mental health

The mental health of males in the Republic of Ireland and Northern Ireland is of increasing concern. The link between mental health and physical health is also becoming recognised, such as the increased risk of developing physical illnesses (such as cardiovascular disease and diabetes) when mental health is poor (Prince et al., 2007). During 2020, there has been concern about the effect of COVID-19 restrictions on mental health, and this is discussed in Section 3.4.

During the last decade, more recognition has been given to the impact of loneliness and social isolation. While these can affect people of all ages, much of the focus has been on older people. The increasing number of older men, as well as the number of people living alone, means that many older men are at risk of social isolation. Thus, there is a need for gender and age appropriate services and interventions (Devine et al., 2014), as evidenced by the growth of the Men's Shed movement.

This chapter outlines trends in relation to two key mental health issues: suicide and self-harm. A fuller discussion on mental health (including suicide and eating disorders) can be found in Chapter 3.1 of this report. As is evident throughout the report, there are complex issues around the classification, reporting and analysis of relevant statistics.

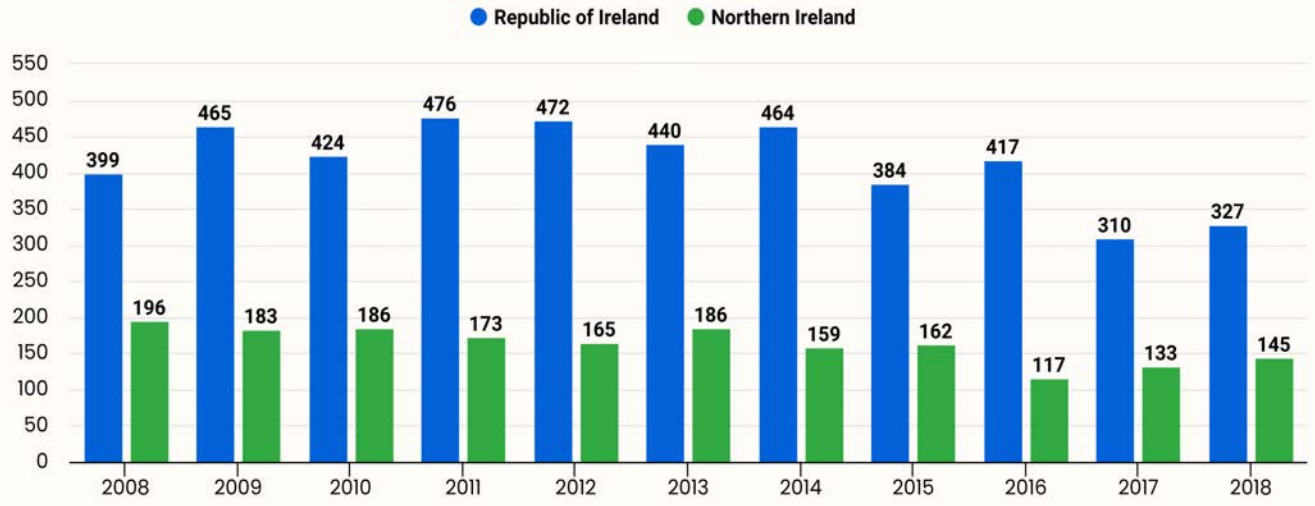
2.15.1 Suicide

Suicide statistics are recorded differently in the Republic of Ireland and Northern Ireland. In the Republic of Ireland, the ICD-10 codes of X60-X84 (suicide/intentional self-harm) are used. In Northern Ireland, the statistics often include deaths due to self-inflicted injury and events of undetermined intent (ICD-10 codes of X60-X84, Y87.0, Y87.2 and Y10-Y34). In July 2020, NISRA (2020c) highlighted a potential change to how deaths are defined as suicide in Northern Ireland. Where possible, the figures below relate to X60-X84 for the Republic of Ireland, and X60-X64 plus Y87.0 for Northern Ireland.

Statistics can be affected by delays in registering a death by suicide, for example, due to the time taken to hold a Coroner's inquest. In the Republic of Ireland, published suicide statistics may be at different 'stages': provisional; official excluding late registrations; and official including late registrations. Thus, it can be difficult to compare data across years (National Office for Suicide Prevention, 2020).

In the Republic of Ireland in 2018, 327 males and 110 females died by suicide (although this figure excludes late registrations). Figure 15 shows that that the number of male suicides was highest between 2009 and 2014, which coincides with the economic recession.

Figure 15: Number of deaths by suicide, males, RoI and NI, 2008 to 2018

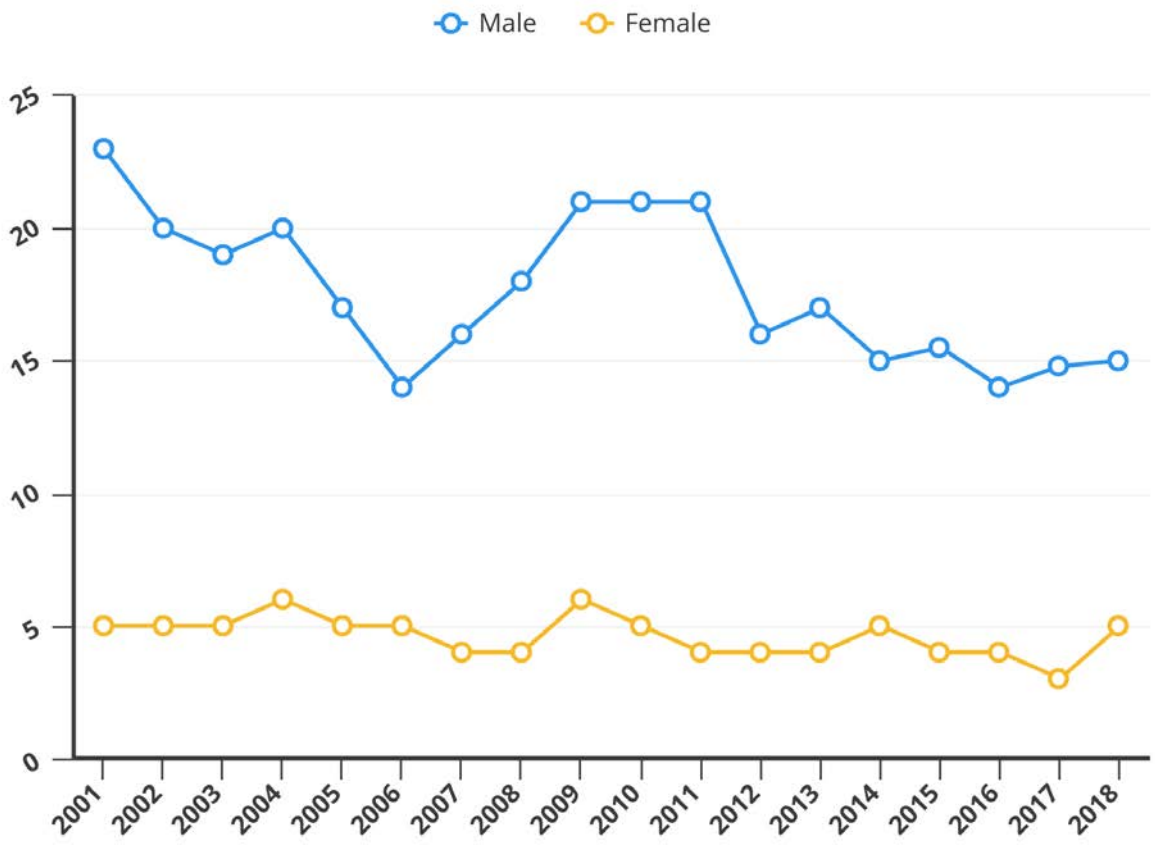


Source: National Office for Suicide Prevention (2020), NISRA Registrar General Annual Reports
Note: Different ICD-10 codes for RoI (X60-X84) and NI (X60-X84, Y87.0); RoI figures for 2017 and 2018 exclude late registrations

Figure 16 shows that the standardised death rate in the Republic of Ireland has decreased between 2001 and 2018 for males (8.2 percentage points). The standardised death rate for females is lower than for males, and has remained fairly constant between 2001 and 2018.

In 2019, the provisional number of deaths by suicide had increased to 317 for males and 104 for females (National Office for Suicide Prevention, 2020).

Figure 16: Standardised death rates for suicide per 100,000, RoI, 2001 to 2018



Source: CSO Statbank Table VSD32
Note: ICD-10 X60-X84; excludes late registered deaths

The crude male death rates by suicide varied by age between 2001 and 2018 (see Table 58), although the overall rate has decreased across all age groups. Since 2010, the highest rates have been among middle-aged men (with the exception of 2017, when the highest rate was among 25-34 year olds). For example, in 2016 and 2018, the highest rate was among those aged 55-64 years, whilst between 2010 and 2015 the highest rates were among 45-54 year olds. The *Middle-aged Men and Suicide in Ireland* report published by the Men's Health Forum in Ireland (MHFI, 2018) highlighted the need for a specific suicide prevention initiative targeting middle-aged men.

As well as age, death rates for suicide vary across social groups. For example, The All Ireland Traveller Health Study Team (2010) highlighted that the suicide rate in male Travellers is 6.6 times higher than in the general population.

Table 58: Crude death rates for suicide per 100,000 males, by age group, RoI, 2001 to 2018

	All males	15-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65 years or above
2001	22.4	27.7	37.2	29.9	28.6	26.5	17.2
2008	17.2	20.5	25.5	22.4	24.5	21.2	12.0
2011	20.2	26.7	27.0	28.2	32.3	25.1	12.8
2018	13.6	11.7	16.0	19.9	19.2	23.8	13.0

Source: National Office for Suicide Prevention (2020)
Note: ICD-10 X60-X84; excludes late registered deaths

In Northern Ireland in 2018, 145 males and 39 females died by suicide, based on a similar classification to the one used in the Republic of Ireland. However, based on the more comprehensive classification (ICD-10 X60-X84, Y87.0, Y10-34, Y87.2), 228 males and 79 females died by suicide in that year. Using this wider classification, the European Age Standardised rate (new) of male suicide was 27.2 in 2011, rose to 30.3 in 2015, but fell to 28.0 in 2018.

Figure 59 is based on the most readily available crude death rates by 10-year age bands, and indicates that between 2010 and 2015:

- The rate for males aged 15-24 and 35-44 years decreased.
- The rate for males aged 25-34, 55-64 and 65+ years increased.
- The rate for 45-54 year olds was similar in 2010 and 2015, although there was fluctuation between these years.
- The highest rate in 2010 was among 15-24 year olds, but among 25-34 year olds in 2015.

Table 59: Crude death rates for suicide per 100,000 males, by age group, males, NI, 2010 to 2015

Registration Year	Under 15 years	15-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65 +
2010	0.0	44.6	35.1	43.4	38.9	15.7	10.6
2011	4.6	34.7	49.5	29.1	23.4	21.1	9.0
2012	4.6	30.5	42.7	35.5	33.7	16.0	8.3
2013	0.5	24.0	36.4	42.9	41.1	32.3	15.5
2014	1.6	26.5	46.0	33.3	32.2	16.8	14.2
2015	0.0	30.7	54.8	36.8	38.3	29.1	13.8

Source: NISRA (2018c)
Note: ICD-10 X60-X84, Y87.0, Y10-34, Y87.2

Eurostat data on cause of death (Table HLTH_CD_ASDR2) shows the European Age Standardised rate (new) for male intentional self-harm (ICD-10 codes X60-X84, Y87.0), and indicates that:

- Between 2011 and 2017, the rate in the Republic of Ireland fell from 20.43 to 13.93.
- The rate in Northern Ireland fell from 15.37 in 2011 to 13.03 in 2017.
- The rate in the Republic of Ireland was consistently higher than in Northern Ireland, although the gap has narrowed.
- Since 2013, the rates in both jurisdictions have been lower than the EU28 average, which fell from 19.5 in 2011 to 16.96 in 2016 (the most recent figure).

However, as highlighted in this chapter, the different definitions of suicide used in the Republic of Ireland and Northern Ireland, as well as the issues of delayed registration and changing classifications, mean that these figures are not directly comparable with other published data.

2.15.2 Self-harm

Self-harm statistics for the Republic of Ireland are available via the National Self-Harm Registry Ireland (NSHRI), which is funded by the Health Service Executive's National Office for Suicide Prevention. It is the world's first national registry of cases of intentional self-harm presenting to hospital emergency departments. The Registry of Self Harm was established in Northern Ireland in 2012.

Griffin et al. (2019) analyse statistics on self-harm in the Republic of Ireland, including the European Age Standardised Rate (old) per 100,000 males. In 2018:

- The most frequent method of self-harm presentations amongst males involved a drug overdose (55.8%), although it was more commonly used among females (66.9%).
- Alcohol (33.9%), cutting (31%), and attempted hanging (12.4%) were more common in males than females. Males who cut themselves more often required intensive treatment.
- There was a 22% increase in the number of presentations involving attempted hanging between 2017 and 2018.
- Self-cutting was most common among boys aged under 15 years (36%).
- The average number of tablets taken in overdose acts was higher among males than females (31 and 28 respectively).
- The peak rate for males was among 20-24 year olds (543 per 100,000), which represents one in every 184 males aged 20-24. The peak rate for females was among 15-19 year olds (766 per 100,000).

Table 60 shows that:

- There was an increase in the rate of males presenting with self-harm between 2007 and 2018, from 162 to 193.
- The rate in 2018 was 19% higher than its pre-recession level in 2007 (7% higher among females).
- In particular, the male rate increased by 11% and 10% in 2008 and 2009 (respectively) during the economic recession.
- In the most recent years, there was an increase of 7% between 2017 and 2018.

Table 60: European Age Standardised Rate (old) of self-harm, males, RoI, 2007 to 2018

Year	European Age Standardised Rate (old)	% change from previous year
2007	162	+2%
2008	180	+11%
2009	197	+10%
2010	211	+7%
2011	205	-3%
2012	195	-5%
2013	182	-7%
2014	185	+2%
2015	186	+1%
2016	184	-1%
2017	181	-2%
2018	193	+7%

Source: Griffin et al. (2019)

Data on self-harm in Northern Ireland (Public Health Agency, 2019b) show that:

- From 2017 to 2018, 47% of self-harm presentations were from males.
- The peak age for males was 20-24 year olds (909 per 100,000), compared with 15-19 for females (1,184 per 100,000).
- The highest rates were in the Belfast Health and Social Care Trust (HSCT) area, and the lowest were in the Southern HSCT area.
- The most commonly used methods among males were drug overdose (61.3%), self-cutting (29.7%) and attempted hanging (6.6%).
- 35% of male drug overdoses involved a minor tranquiliser.
- Of the 6,107 people treated for self-harm episodes in NI in 2017-2018, approximately one fifth made repeat acts (21.9% male, 20.9% female).

Table 61 outlines the European Age Standardised Rate (old) per 100,000 males in NI, in hospital, following an incident of self-harm. The age standardised rate is consistent from 2012/2013 to 2017/2018.

Table 61: European Age Standardised Rate (old) per 100,000 of males presenting to hospital following self-harm, NI, 2012/2013 to 2017/2018

Year	European Age Standardised Rate (old)	Percentage change from previous year
2012/2013	336	-
2013/2014	339	+1%
2014/2015	343	+1%
2015/2016	338	-1%
2016/2017	330	-2%
2017/2018	337	+2%

Source: Public Health Agency (2019b)

Table T25: Trend Table: Mental illness, RoI

	2001	2017	Outcome
Standardised death rate for male suicide per 100,000	22.5	14.3	BETTER
	2007	2018	
European Age Standardised Rate (old) of self-harm	162	193	WORSE

Table T26: Trend Table: Mental illness, NI

	2011	2018	Outcome
European Age Standardised Rate (new) for male suicide	27.2	28.0	SIMILAR
	2012/2013	2017/2018	
European Age Standardised Rate (old) of self-harm	336	337	SIMILAR

USEFUL SOURCES OF INFORMATION

Griffin E. et al. (2019), *National Self-Harm Registry Ireland: Annual Report 2018*, Cork: National Suicide Research Foundation

Institute of Public Health in Ireland, Dillon, B. and Butler, P. (2011), *Facing the Challenge. The Impact of Recession and Unemployment on Men's Health in Ireland*, Dublin: The Institute of Public Health in Ireland
Available at: https://www.mhfi.org/IPHreport2011.pdf

National Office for Suicide Prevention (2020), *Briefing on CSO Suicide Figures, 4 November 2020*
Available at: https://www.hse.ie/eng/services/list/4/mental-health-services/connecting-for-life/publications/nosp-briefing-nov-2020.pdf

Northern Ireland Statistics and Research Agency (NISRA) (2020), *Guidance Note to Users on Suicide Statistics in Northern Ireland*
Available at: https://www.nisra.gov.uk/sites/nisra.gov.uk/files/publications/Guidance%20Note%20to%20Users%20Northern%20Ireland%20Suicide%20Statistics.pdf

Public Health Agency (2019), *Northern Ireland Registry of Self-Harm Annual Report 2017/2018*
Available at: https://www.publichealth.hscni.net/publications/northern-ireland-registry-self-harm-annual-report-2017-2018

Samaritans (2019) *Suicide statistics report. Latest statistics for the UK and Republic of Ireland*
Available at: https://media.samaritans.org/documents/SamaritansSuicideStatsReport_2019_Full_report.pdf

CASE STUDY

GAA HEALTHY CLUB PROJECT

The GAA Healthy Club Project supports local clubs to explore how they can best support the holistic health of their members, and the communities that they serve, by: reflecting upon what they are already doing well; identifying areas where they would like to improve; and empowering them to ensure that everyone who engages with their club - in whatever capacity - benefits from the experience in a health-enhancing way.

https://www.gaa.ie/my-gaa/community-and-health/healthy-club

2.16 Criminal justice system

This section highlights the experiences of males within four areas of the criminal justice system: the prison population, victims of crime, drink driving, and victims of domestic abuse.

2.16.1 Prison population

The prison population often experience poorer health-related outcomes and services than the general population, including higher risk of infectious disease transmission, poorer mental health, higher prevalence of drug use and addiction, and poorer access to health care.

In the Republic of Ireland (see Table 62):

- The majority of prisoners in the Republic of Ireland are male.
- The number of male prisoners was at its peak in 2010 (12,057), but has fallen since then.
- The prison population is ageing, as shown by the increasing proportion of prisoners aged 50 years or over.

Table 62: Prison population, by age, males, RoI, 2007 to 2017

	%			
	2007	2010	2013	2017
15-16 years	1.2	0.6	0.0	0.0
17 years	1.6	1.2	0.8	0.2
18-20 years	13.6	11.9	8.5	7.9
21-24 years	21.4	20.3	18.3	15.9
25-29 years	21.4	21.5	20.6	19.7
30-39 years	25.4	27.3	28.8	32.9
40-49 years	11.1	11.9	14.8	15.4
50 years or above	4.3	5.4	8.2	8.1
Number of male prisoners	8,556	12,057	10,729	6,403
Male prisoners as % of all prisoners	88.1	87.6	82.2	85.6

Source: Irish Prison Service (not dated)

In Northern Ireland (see Table 63):

- The number of male prisoners fell from 1,734 in 2014/15 to 1,442 in 2019/20.
- The majority of the prison population are male.
- The proportion of male prisoners is higher in Northern Ireland than in the Republic of Ireland.

Table 63: Daily average male prison population, NI, 2014/15 to 2019/20

	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020
Number of male prisoners	1,734	1,539	1,418	1,382	1,384	1,442
Male prisoners as % of all prisoners	96.4	96.7	96.3	96.0	95.5	95.1

Source: Redmond and Palmer (2020)

2.16.2 Prisoners' health

The prison population includes a wide range of social groups and, as a result, prisoners have diverse and complex health needs. The prison environment itself can further affect the health and social care needs of those incarcerated. Accessible and comprehensive data on the health needs, health care system and health-related behaviour among prisoners across the island of Ireland is scarce. Thus, much information is gleaned from surveys and research.

MacNamara, Varley and McNamara (2016) noted that although health care in prisons in the Republic of Ireland has improved, some structural deficiencies still exist, including:

- Access to staff and facilities.
- Medical examination on admission and recording of injuries.
- Drug related issues.
- Use of special observational cells.
- Psychiatric care in prison.

Analysis by the *Self-Harm Assessment and Data Analysis Project* showed that 121 male prisoners in the Republic of Ireland engaged in self-harm in 2018, which is a rate of 3.4 per 100. There was a range of contributory factors associated with the episodes of self-harm, including mental health, environment and relationships (Irish Prison Service, 2020).

An unannounced inspection conducted in 2018 of the all-male Maghaberry prison in Northern Ireland (Criminal Justice Inspection Northern Ireland, 2018) noted that:

- The range of primary care services was appropriate, but waiting times for routine GP and dentist appointments required improvement.
- Mental health provision was reasonably good, but there were problems transferring to inpatient mental health facilities.
- The prison had reduced the supply of illegal drugs and prescription medicines, but 30% of prisoners - of 319 prisoners responding to the CJI survey - had developed a problem with illicit drugs.
- The clinical and psychosocial support for prisoners with substance misuse issues remained limited.

- Health promotion initiatives were good. A health development worker was supporting the development of health promotion campaigns.
- Access to community screening programmes, immunisation, sexual health services, and blood-borne virus testing and treatment was appropriate.
- 66% of prisoners said they had a mental health problem, but only 24% said they had been helped.

Conor Murray (2019) undertook a study on the experiences and needs of young men, aged 18-24, imprisoned in Hydebank College in Northern Ireland. While they were growing up, many of these young men had lived through traumatic or violent experiences, as well as having literacy problems. Issues during their time in Hydebank included violence, the need to hide emotions, poor health care, lack of mental health support, self-harm and drug use. Murray made several policy recommendations to address these issues, including the need for a gender-specific strategic approach to provide a safe prison environment.

2.16.3 Male victims of crime

Table 64 highlights the number of males who were victims of five specific crimes in the Republic of Ireland:

- The majority of victims of murder or manslaughter, dangerous driving leading to death, and attempts/threats to murder, assault, harassments and related offences are male.
- Male victims consistently made up less than one fifth of victims of sexual offences in the Republic of Ireland between 2016 and 2019.
- The number of male victims of sexual offences has risen from 439 in 2016 to 528 in 2019, while the number of female victims of sexual offences has risen from 1,787 to 2,260.

Over half of the victims of attempts/threats to murder, assault, harassments and related offences were male between 2016 and 2019. This proportion remained consistent between those years.

Table 64: Recorded crime victims, males, RoI, 2016 to 2019

	Number of victims, and males as % of all victims			
	2016	2017	2018	2019
Homicide offences	62 73.8%	59 64.8%	62 77.5%	40 81.6%
Of which:				
Murder or manslaughter	40 95.2%	32 66.7%	36 76.6%	30 78.9%
Dangerous driving leading to death	22 52.4%	27 62.8%	26 78.8%	10 90.9%
Sexual offences (rape and sexual assault)	439 19.7%	481 19.0%	509 18.4%	528 18.9%
Attempts/threats to murder, assault, harassments and related offences	9,294 59.3%	10,763 59.8%	11,390 59.3%	12,126 59.1%

Source: CSO (2020e) Table 3.1

Table 65 shows the proportion of crimes in Northern Ireland which had a male victim:

- Approximately one half of crimes had a male victim, as did criminal damage.
- Violence with injury, robbery and different forms of theft consistently involved a majority of male victims.
- Sexual offences had a substantially lower proportion of male victims in each respective year.

Table 65: Police recorded crimes, male victims, NI, 2007/8 to 2018/19

	Number of crimes with male victims, and % of victims who are male			
	2007/8	2011/12	2015/16	2018/19
Violence with injury (including homicide and death/serious injury by unlawful driving)	9,730 65.3%	9,396 64.1%	8,808 61.8%	8,004 58.7%
Violence without injury (including harassment)	5,756 49.3%	5,910 48.6%	9,034 49.3%	9,191 46.3%
Sexual offences	244 14.4%	337 18.9%	608 20.3%	769 22.0%
Robbery	511 70.8%	577 72.0%	391 71.1%	355 71.3%
Theft – burglary	4,280 55.8%	4,378 57.5%	3,769 56.4%	2,519 55.3%
Theft – vehicle offences	4,880 64.7%	3,483 63.1%	2,710 58.9%	2,088 62.5%
All other theft offences	4,141 48.2%	5,322 51.9%	5,016 47.7%	4,773 52.7%
Criminal damage	11,577 54.1%	8,901 53.4%	7,697 51.4%	6,424 49.6%
Other crimes against society	139 33.4%	146 33.1%	200 33.7%	184 32.6%
Total police recorded crime	41,258 55.3%	38,450 55.0%	38,233 52.0%	34,297 50.5%

Source: Police Service of Northern Ireland (PSNI) (2019b) Excel spreadsheet

2.16.4 Drink driving

Disaggregated trends data on drink driving offences by the gender of the offender are not readily available in the Republic of Ireland. Such data are often aggregated into dangerous or negligent acts/offences (for example, dangerous driving causing serious bodily harm, or driving/in charge of a vehicle while over the legal alcohol limit or under the influence of drugs).

However, the Road Safety Authority published a report in 2016 which examined road traffic accidents in the Republic of Ireland between 2008 and 2012 in which alcohol was deemed a contributory factor. During this time period, of the 867 fatal alcohol related collisions that took place, 89% of drivers were male. Almost half of the male drivers (43%) that had consumed alcohol were between 16 and 24 years of age.

In Northern Ireland (see Table 66):

- The majority of drink/drug driving offences were committed by males (81.0% in 2019).
- There were 2,371 drink/drug driving offences by males in 2017, and this rose to 2,435 in 2019.
- From 2017 to 2019, the proportion of drink/drug driving offences committed by males remained relatively consistent at around 81.0%.

Table 66: Number of drink/drug driving offences in Northern Ireland, 2017 to 2019

	2017	2018	2019
Male	2,371 82.8%	2,257 81.0%	2,435 81.0%
Female	492 17.2%	527 19.0%	568 18.9%
Unknown	0 0%	1 0%	2 0.1%
Total	2,863 100%	2,785 100%	3,005 100%

Source: PSNI, *Motoring offence statistics*

2.16.5 Domestic abuse

Data on domestic abuse crimes in Northern Ireland from the Police Service of Northern Ireland indicate that:

- The number of male domestic abuse crime victims more than doubled from 2,103 in 2004/5 to 4,779 in 2018/19 (see Table 67).
- In 2004/5, males accounted for 25% of victims of these crimes, and this has risen to 31% in 2018/19.

- In 2004/5 nearly half of domestic abuse crimes experienced by males aged 18 years or over was violence with injury (46%), although this fell to 34% by 2018/19.
- Violence without injury rose from 30% in 2004/5 to 36% in 2018/19.
- The majority of offenders of domestic abuse detected crimes are male (96% in 2018/19).

Table 67: Domestic abuse crime victims, males, NI, 2004/5 to 2018/19

	2004/05	2009/10	2014/15	2018/19
Number of male victims	2,103	2,269	3,736	4,779
% of victims who are male	25	26	30	31
Total (person victims)	8,467	8,779	12,306	15,363

Source: Police Service of Northern Ireland (PSNI) (2019c) Table 3.3

Statistics from the Police Service of Northern Ireland (PSNI) indicate that domestic abuse incidents have increased since the start of the COVID-19 lockdown in March 2020. For example, domestic abuse incidents were higher in April and May 2020 than the same months in 2019 by 292 and 252 incidents respectively (PSNI, 2020b). However, while PSNI statistics are useful, they only provide information on domestic abuse incidents that have been reported to the police, and that also meet the criteria of being considered a crime. Some data are available on incidents, but it is likely that many incidents remain unreported.

Data from the 2015/16 *Northern Ireland Crime Survey* (NICS) suggest that 12.1% of respondents aged 16-64 had experienced at least one form of domestic violence or abuse, by a partner, at some stage in their lives since age 16 (a lifetime prevalence). This means that 15% of females and 8% of males had a lifetime prevalence of partner violence or abuse. However, it does not, necessarily, mean that these respondents are currently experiencing partner violence or abuse (Campbell and Rice, 2017). It is important to note that the NICS domestic violence questions were only asked of respondents aged 15-64 years. Therefore, there is no information relating to people aged 65 years or older, for whom domestic abuse incidents are often categorised as elder abuse.

The NICS data show that the majority of victims have never reported these incidents to the police. Females were more likely than males to report this to the police. Within the 2015/16 survey, 39.4% of females and 19.1% of males said that they had done this.

Research among male victims of domestic abuse in Northern Ireland (Sweet, 2010) showed that there was a lack of male awareness around domestic abuse issues. Many men showed a reluctance to seek help, partly due to a fear of disbelief and the perception that the legal system would favour female partners, resulting in them losing contact with their children. There was also a lack of awareness of support services among men. Research in Northern Ireland by Brogden and Nijhar (not dated) highlighted that traditional images of masculinity were the main reason for men not reporting abuse to friends or agencies. Indeed, there was a perception that such agencies would be much more supportive of female victims compared to male victims.

There are also a number of challenges and gaps in service provision for male victims; particularly for older men, men with disabilities, and gay men (Sweet, 2010). The current National Strategy on Domestic, Sexual and Gender-based Violence (Cosc, 2016) in the Republic of Ireland has highlighted the need to acknowledge intimate partner violence within LGBT communities.

Statistics for domestic violence in the Republic of Ireland were not readily available, although research by Watson and Parsons (2005) found that:

- 15% of females and 6% of males had suffered severe domestic abuse from a partner at some time in their lives.
- 29% of females and 26% of males had suffered domestic abuse when severe abuse and minor incidents are combined.
- 13% of females and 13% of males had suffered physical abuse or minor physical incidents.
- 29% of females (1 in 3) and only 5% of males (1 in 20) reported severe abuse to the Gardaí.

Research by Horgan et al. (2008) showed that 70% of respondents thought that domestic abuse against females is very or fairly common, whilst 42% thought this in relation to domestic abuse against males. In both cases, females were more likely to think this than males. This research showed a general perception (83%) that females suffered more physical harm than males, as well as more emotional abuse (52%), and fear (53%).

Table T27: Trend Table: Criminal justice system, RoI

	2007	2017	Outcome
Male prison population	8,556	6,403	BETTER
	2016	2019	
Male victim – homicide	62	40	BETTER
Male victim – sexual offences	439	528	WORSE
Male victim – attempts/threats to murder, assault, harassments and related offences	9,294	12,126	WORSE

Table T28: Trend Table: Criminal justice system, NI

	2014/2015	2019/2020	Outcome
Male Prison Population	1,734	1,442	BETTER
	2007/2008	2018/2019	
Male victim – violence with injury	9,730	8,004	BETTER
Male victim – sexual offences	244	769	WORSE
Male victim – violence without injury (including harassment)	5,756	9,191	WORSE
	2017	2019	
Drink/drug driving offences by males	2,371	2,435	WORSE
	2004/2005	2018/2019	
Number of male victims of domestic abuse crimes	2,103	4,779	WORSE

USEFUL SOURCES OF INFORMATION

Central Statistics Office [CSO] (2020), *Recorded Crime Victims 2019 and Suspected Offenders 2018*
Available at: https://www.cso.ie/en/releasesandpublications/ep/p-rcvo/recordedcrimevictims2019andsuspectedoffenders2018

Irish Prison Service (not dated), *Persons committed each year by age and gender from years 2007 to 2019*
Available at: https://www.irishprisons.ie/wp-content/uploads/documents_pdf/AGE-AND-GENDER-Year-2007-to-2019.pdf

Police Service of Northern Ireland, *Domestic Abuse Statistics*
Available at: https://www.psni.police.uk/inside-psni/Statistics/domestic-abuse-statistics

Road Safety Authority (2016), *Fatal Collisions 2008-2012: Alcohol as a Factor*
Available at: https://alcoholireland.ie/download/reports/alcohol_driving/Fatal-Collisions-2008-2012_Alcohol-as-a-Factor.pdf

2.17 Lifestyle

This section outlines lifestyle behaviours that influence the health of males residing on the island of Ireland: obesity, smoking, alcohol consumption, drug use and physical activity levels. For example, there is a strong link between smoking and respiratory diseases (O'Connor et al., 2018). Donnelly, Anderson and Gavin (2020) estimated that 38% of cancers (excluding NMSC) are attributable to 14 specific risk factors associated with lifestyle. These include smoking, use of alcohol, obesity and lack of exercise. However, they noted the lack of detailed data on lifestyle behaviours in Northern Ireland, making it difficult to assess the full impact of lifestyle on future cancer incidence.

2.17.1 Obesity

Statistics on obesity are based on survey data, and use the following classification based on the Body Mass Index (BMI):

- Underweight: BMI less than 18.5
- Normal weight: BMI 18.5-24.9
- Overweight or pre-obese: BMI 25-29.9
- Obese: BMI over 30

In 2014:

- Nearly two thirds of males in the Republic of Ireland (63.1%) were overweight or obese, compared with the EU28 average of 59.1%.
- One in five men in the Republic of Ireland was obese (BMI of 30 or more).
- 55.7% of females were overweight or obese, with 18.7% being obese.

(CSO, 2017c)

Data from the *Healthy Ireland* surveys in the Republic of Ireland (Department of Health [Ireland], 2019b) show that:

- In 2015, 68% of men were overweight or obese.
- In 2017, 70% of men were overweight or obese.
- In 2019, 66% of men were overweight or obese.
- In 2019, 65% of males aged 15-24 years were of normal weight, compared with 18% of males aged 55 years or over.
- In 2019, from the age of 25 years upwards, a higher proportion of males compared with females were overweight or obese.

In Northern Ireland (see Table 68):

- 32% of males aged 16 years or over were of normal weight in 2018/19, compared with 44% of females.
- Approximately one third of males aged 16 years or over were of normal weight (based on BMI) in 2010/11 and 2018/19, although there was some fluctuation between these years.
- Around two thirds of males were overweight or obese.
- Approximately one quarter of males were obese.
- In 2018/19, three quarters of boys aged 2-15 years were of normal weight, 17% were overweight, and 10% were obese. This pattern has been fairly consistent since 2010/11.
- Among girls (aged 2-15) in 2018/19, 72% were of normal weight, 21% were overweight, and 7% were obese.

Table 68: Proportion of males obese and overweight, NI, 2010/11 to 2017/18

	%								
Males aged 16+	**2010/11**	**2011/12**	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
Normal weight (including underweight)	33	31	31	32	34	35	33	28	32
Overweight	44	43	43	43	40	37	38	46	42
Obese	23	25	26	24	26	28	29	27	26
Boys aged 2-15	**2010/11**	**2011/12**	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**
Normal weight (including underweight)	75	71	72	77	76	76	75	72	73
Overweight	17	19	20	16	18	16	17	17	17
Obese	8	10	8	7	6	8	8	11	10

Source: Department of Health [Northern Ireland] (2020a)

2.17.2 Smoking

Ward et al. (2009) compared survey data on the proportion of people who smoked across the island of Ireland:

- In 2007, 31% of males in the Republic of Ireland were smokers.
- In 2005, 26% of males in Northern Ireland were smokers.
- In both jurisdictions, the highest rates of smoking were among 18-44 year olds.
- Across all age categories, except 45-64 year olds, males in the Republic of Ireland reflected higher rates of smoking than Northern Ireland.

In the Republic of Ireland:

- In 2014, 23.9% of males and 20.1% of females aged 15 years or over smoked.
- This was below the EU28 average figure (28.7%) and the rate in Bulgaria (43.3%), but higher than Sweden (17.4%).
- Between 2015 and 2019, there was a decline in the proportion of males aged 15 years or over who smoked in the Republic of Ireland, from 24% to 19%.
- Across these years, a higher proportion of males than females smoked: 19% and 16% respectively in 2019.

(Department of Health [Ireland], 2019b)

In Northern Ireland (see Table 69):

- The proportion of males who smoked decreased from 25% in 2010/2011 to 20% in 2018/2019.
- Over the same time, the proportion of females who smoked fell from 23% to 17%.
- The proportion of males who never smoked rose from 39% in 2010/11 to 46% in 2018/19.

Table 69: Smoking status, males aged 16+, NI, 2010/11 to 2018/19

	%								
	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Currently smokes cigarettes	25	27	25	23	23	25	20	20	20
Used to smoke cigarettes regularly	22	24	22	25	25	23	27	27	23
Used to smoke but not regularly	14	11	11	10	12	12	12	12	11
Never smoked	39	39	43	42	40	40	40	41	46

Source: Department of Health [Northern Ireland] (2020a)

In 2000, 12.4% of the 11-16 year olds participating in the *Young Persons' Behaviour and Attitudes Survey* in Northern Ireland said that they were a current smoker, and 10.5% said they were a regular smoker. By 2019, these figures had dropped to 4.6% and 3.2% respectively (Department of Health [Northern Ireland], 2020b).

2.17.3 Alcohol

Binge drinking (heavy episodic drinking) is defined in the Republic of Ireland as drinking more than 60g of pure ethanol on a single occasion (or 6 standard drinks). In Northern Ireland, binge drinking is defined as drinking more than 8 units of alcohol in a single session for men, and 6 units in a single session for women. One unit equals 10ml or 8g of pure alcohol (NHS, 2018).

In the Republic of Ireland during 2014:

- 20.8% of males aged 18 years or over engaged in binge drinking at least once a week. This was the highest rate in the EU28, and the EU average was 9.0%.
- 26.8% of males aged 18-24 years engaged in binge drinking at least once a week. The EU28 average was 11.7% in that age group (see Table 70).
- 16.9% of males never drank alcohol or had not drunk in the last year, compared with the EU28 average of 16.0%.

Table 70: Binge drinking, by age group, selected EU countries, 2014

	Males 18-24 years	Males 25-64 years	Males 18+	Females 18+
Cyprus	0.5%	1.6%	1.4%	0.1%
EU28 average	11.7%	9.3%	9.0%	2.6%
Republic of Ireland	26.8%	21.2%	20.8%	6.8%
Romania	6.6%	23.2%	20.3%	2.4%

Source: Eurostat Table hlth_ehis_al1e

In Northern Ireland during 2017/18 (see Table 71):

- 81% of males drank alcohol, which is similar to 2010/11.
- 75% of females drank alcohol, which is similar to 2010/11.
- 31% of males reported drinking above the recommended weekly limit of 14 units, which is lower than in 2010/11 (37%).
- 9% of females reported drinking more than 14 units per week, which is lower than for males, and lower than in 2010/11 (15%).

Table 71: Alcohol consumption, NI, 2010/11 to 2017/18

	%				
	2010/11	2011/12	2013/14	2015/16	2017/18
Males					
% drinking alcohol	81	81	81	77	81
% drinking > 14 units per week	37	36	32	32	31
Females					
% drinking alcohol	74	72	73	71	75
% drinking > 14 units per week	15	13	12	11	9

Source: Department of Health [Northern Ireland] (2020a)

Among the 11-16 year olds taking part in the *Young Persons Behaviour and Attitudes Survey* in Northern Ireland, there has been a fall in the proportion of young people who report ever taking an alcoholic drink. In 2000, 62.2% of males said this, compared with 31.9% in 2019. In 2000, 61.1% of those who drank alcohol reported being drunk at least once, compared with 43.1% in 2019 (Department of Health [Northern Ireland], 2020b).

2.17.4 Drug use

- The number of males being treated for problem drug use (excluding alcohol) in the Republic of Ireland increased from 5,826 to 7,626 between 2012 and 2018 (Health Research Board, 2018).
- In Northern Ireland, the number of males treated for problem drug use increased from 2,252 in 2012 to 2,946 in 2019 (Foster, Scarlett and Stewart, 2019).
- Across both jurisdictions, males account for at least two thirds of the people receiving treatment for problem drug use.
- In Northern Ireland, patients have to consent for their data to be included in the Drug Misuse Database.

2.17.5 Physical Activity

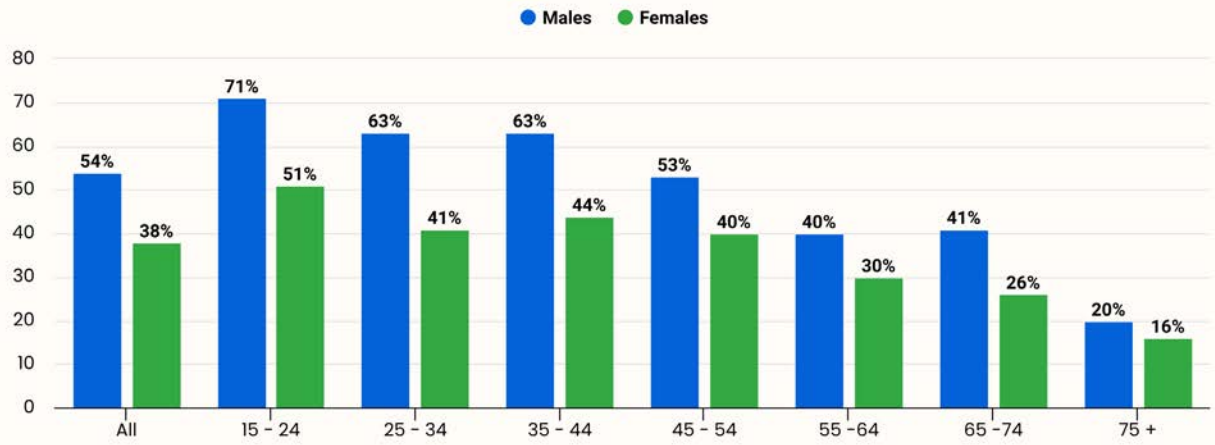
The National Guidelines on Physical Activity in Ireland recommend that adults should have at least 30 minutes a day of moderate activity on 5 days a week (or 150 minutes a week).

In the Republic of Ireland in 2019 (see Figure 17):

- 54% of males aged 15 years or over achieved this level of activity, compared with 38% of females.
- In every age group, a higher proportion of males met the recommended level of activity.
- This gender gap was widest among 15-24 year olds - 71% of males compared with 51% of females achieved this.
- The proportion of people achieving the recommended level of exercise decreased with age.
- 71% of males aged 15-24 years achieved this level of activity, compared with 20% of those aged 75 years or older.

The 2015 *Healthy Ireland* survey used a different method of calculating the level of physical activity. Therefore, comparisons with earlier survey results cannot be made with the data from the 2019 survey.

Figure 17: Achieving National Physical Activity Guidelines, by age, RoI, 2019



Source: Department of Health [Ireland] (2019b)

In Northern Ireland, the proportion of males participating in physical activity at least once a week decreased from 67% in 2014-15 to 57% in 2018-19.

Table T29: Trend Table: Lifestyle, RoI

	2014	2019	Outcome
% males who are overweight	63.1	66	WORSE
	2007	2019	
% males who smoke	31	19	BETTER
	2012	2018	
Number of males treated for problem drug use	5,826	7,626	WORSE

Table T30: Trend Table: Lifestyle, NI

	2010-11	2018-19	Outcome
% males aged 16+ who are overweight or obese	67	64	BETTER
% boys aged 2-15 years who are overweight or obese	25	27	SIMILAR
% males who smoke	25	20	BETTER
	2000	2019	
% 11-16 year olds who smoke	12.4	4.6	BETTER
	2010-11	2017-18	
% males drinking > 14 units per week	37	31	BETTER
% 11-16 year olds drinking alcohol	62.2		
	2012	2019	
Number of males treated for problem drug use	2,252	2,946	WORSE
	2014-15	2018-19	
% males taking physical activity at least once a week	67	57	WORSE

USEFUL SOURCES OF INFORMATION

Department of Health [Ireland] (2019),
***Healthy Ireland Summary Report 2019*, Dublin: Department of Health**
Available at: https://assets.gov.ie/41141/e5d6fea3a59a4720b081893e11fe299e.pdf

Department of Health [Northern Ireland] (2020),
Health Survey NI Trend Tables 2018/19
Available at: https://www.health-ni.gov.uk/sites/default/files/publications/health/hsni-trend-tables-18-19.xlsx

SECTION 3: FOCUS ON

This section focuses on key themes relating to male health on the island of Ireland: mental health, physical conditions, and the use of health care services. Within each theme, we highlight two topics: the first has received attention within research, policy or data collection, while the second has received less attention or is an emerging/changing issue. For each theme, there is a discussion of relevant and intersecting issues, such as socio-economic and cultural factors, groups of vulnerable and 'at risk' men, policy/service developments, and links to other relevant issues.

In addition, this section focuses on COVID-19, and identifies risk factors for men and boys.

3.1 Mental health

The World Health Organization (WHO, not dated, b) defines mental health as 'a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community'.

Mental health can have a strong relationship with physical health, for example, in eating disorders. Prince et al. (2007) argue that 'there can be no health without mental health'. Mental illness can: increase the risk for communicable and non-communicable diseases; reduce the chance of someone seeking help, obtaining diagnoses or treatment; and can influence prognosis. In addition, mental illness can contribute to unintentional and intentional injury. In turn, having a physical illness can result in poor mental health.

However, mental health can also be influenced by social and economic factors such as lifestyle (including diet and exercise), relationship quality (including access to supportive networks), sense of purpose and belonging, career, financial position, housing environment and neighbourhood (Mental Health Ireland, 2020; World Health Organization, 2005). The lockdown and restrictions due to the COVID-19 pandemic has had a significant impact on mental health, especially through the effect of isolation.

Policy

Mental health is increasingly being recognised as a major issue at the individual and the national level, especially within the context of COVID-19. Thus, poor mental health can have financial costs for a country. There is concern about the long-term lack of funding for appropriate mental health services, and the prioritisation of physical health care over mental health care. Despite a higher prevalence of need in Northern Ireland compared to Britain, the Department of Health in Northern Ireland spends a lower proportion of its budget on mental health compared with England, Scotland and Wales (UK Parliament, 2019).

Mental health is now being increasingly prioritised in government agendas. For example, £30 million was allocated to the Northern Ireland Executive in 2018-19 to specifically address issues associated with mental health and severe deprivation (UK Parliament, 2019). In addition, an interim Mental Health Champion for Northern Ireland was appointed in April 2020. In May 2020, a *Mental Health Action Plan* was published in Northern Ireland (Department of Health [Northern Ireland], 2020c), which includes a commitment to produce a mental health strategy and a funding plan for mental health.

There is also a plan focused on dealing with the response to the COVID-19 crisis. *Protect Life 2* is a strategy for preventing suicide and self-harm in Northern Ireland 2019-2024 (Department of Health [Northern Ireland], 2019a), and highlights the higher rates of suicide among males compared with females.

In the Republic of Ireland, the 2019 Budget made an allowance for an additional €55 million for mental health services. This comprised €20 million continuing cost in 2019 of developments initiated in 2018, combined with €35 million for further new developments. Since 2012, the Health Service Executive (HSE) budget for mental health has been increased by almost 40% (Houses of the Oireachtas, 2019). *Connecting for Life* is Ireland's national strategy to reduce suicide 2015-20 (Department of Health [Ireland], 2015), supported by the National Office for Suicide Prevention (NOSP).

Measuring mental health

Measuring mental health across the population is difficult. For example, most health-related information relates to illness and death, rather than good health. In addition, statistics on mental health usually focus on severe mental illness, such as data on hospitalisation or death. In order to obtain a sense of the situation across the general population, survey data must be used. Survey data often indicate higher rates of mental illness (such as depression) among females compared with males. However, males and females may experience different symptoms. It has been argued that many of the scales used to measure mental disorders (such as the General Health Questionnaire [GHQ]) are based on symptoms that are more appropriate for females. Therefore, these measurement scales may not identify mental disorders among males (White, 2006). Surveys may also ask participants to rate their health, which can result in the under-reporting of certain conditions, especially those relating to mental health.

Based on data from the 2017/18 *Health Survey of Northern Ireland*, the groups most likely to be at risk of a possible mental disorder were females aged 45-64 and men aged 16-24 (Department of Health [Northern Ireland], 2020a). Northern Ireland has the highest rate of post-traumatic stress disorder in the world, and also the highest suicide rate in the United Kingdom.

Previous studies in the Republic of Ireland have found that females were more likely to experience mental ill-health than males. Barry et al. (2009) found that men reported higher levels of positive mental health than females. Similarly, Tedstone Doherty, Moran and Kartalova-O'Doherty (2008) found that a greater proportion of females were at risk of experiencing psychological distress. This finding was consistent across most age categories. However, the authors found that for the age category of 50-64 years, psychological distress was more likely in males than females.

3.1.1 Suicide

The number of suicides, especially among males, has been causing increasing concern across the island of Ireland and worldwide.

Chapter 2.15 of this report highlighted the different ways that suicide statistics are recorded across the island of Ireland. Nevertheless, one consistent pattern is the higher rate of suicide among males. In Northern Ireland, the Public Health Agency (2019c) outlined that in 2018 the number of potential years of life lost for males who died from suicide, aged between 1-74 years, was 8,009. Across the island of Ireland, there has been variation in the rate of suicide across age groups, and over years. For example, in the Republic of Ireland, the highest rate of suicide is among middle-aged males, and the number of suicides was highest during the years of the economic recession.

The Connecting for Life policy in the Republic of Ireland (Department of Health [Ireland] (2015) outlined priority groups who are at increased risk of suicidal behaviour:

- People with physical or mental health issues: people with mental health problems, those engaging in repeated acts of self-harm, people with alcohol and drug problems and people with chronic physical health conditions.
- Minority groups: members of the LGBT community, members of the Traveller community, people who are homeless, people in contact with the criminal justice system, people who have experienced domestic, clerical, institutional, sexual or physical abuse, asylum seekers, refugees, migrants and sex workers.
- Demographic cohorts: middle-aged men and women, young people and economically disadvantaged people.
- People bereaved by suicide.
- Occupational groups: health care professionals and professionals working in isolation (such as farmers and vets).

Discussion

Explanations for suicide trends are complex and at times, intertwined. There is a substantial body of literature examining suicide patterns across the island of Ireland, which draw upon a range of themes, including economic factors, loneliness, mental health, trauma, the legacy of the Northern Ireland conflict, and alcohol use. This discussion will outline some explanations - that are embedded within a social determinants approach - that may help our understanding of the statistical trends outlined in Chapter 2.15. These statistics and explanations are also important to take into account when designing suicide prevention policies and interventions that are appropriate to specific at risk groups.

Isolation and lack of social connections

Isolation and lack of social connections has been identified as a major risk factor for suicide. The main thrust of the *Connecting for Life* policy (Department of Health [Ireland] (2015) is connection; given that links with family, friends and community can provide a protection against isolation. In addition, connected services means that people can access appropriate services at the right time. Suicidal behaviour may be a response to psychological stress where there is a lack of support services. Thus, connections at the individual and community level are vital.

Gender and masculinities

Gender plays an important role in relation to suicide. In particular, the gender roles associated with masculinities can result in mental illness and help seeking being seen as weaknesses. Thus, men may be reluctant to seek appropriate help or support, and may use alcohol and other substances as a way to deal with the issues. Studies have indicated that alcohol use is associated with suicide due to its link with impulsive behaviours and dealing with mental ill-health (O'Neill et al., 2015; Richardson, Clarke and Fowler, 2013). In addition, higher rates of male suicide may be due to the use of more lethal methods such as hanging.

Economic explanations

Figure 16 showed that the highest levels of male suicide in the Republic of Ireland coincided with an economic recession, suggesting the importance of economic factors in relation to suicide rates, and mental health in general (Institute of Public Health in Ireland, Dillon and Butler, 2011). Garcia (2013) noted that the recession in the Republic of Ireland led to a change in employment opportunities for young males, particularly those from lower socio-economic backgrounds. Manual jobs, traditionally filled by these young men, became highly competitive, whilst salaries and working hours were greatly reduced due to the recession. At the same time, house prices and rental costs remained high after the boom years of the Celtic Tiger, making it difficult for those from lower socio-economic backgrounds to secure independent living arrangements (Garcia, 2013). As a result, this social and economic context resulted in males from lower socio-economic backgrounds being at greater risk of suicide.

More specifically, Milner et al. (2013) found that the occupations at greatest risk of suicide included labourers, cleaners, machine operators and ship's deck crew. This may reflect the social and economic challenges and insecurities related to these occupations. Other research has highlighted the link between unemployment, job problems, financial problems and suicide, particularly for males (Men's Health Forum in Ireland, 2018; O'Neill et al., 2015; Foster, 2011). For example, whilst unemployment can cause financial stress, it can also lead to social isolation, which may be an additional risk factor for suicide.

Middle-aged men

Table 58 outlined the high rates of suicide among middle-aged men. Although there had previously been a lack of research into middle-aged men and suicide, the Men's Health Forum in Ireland (2018) noted that middle-aged men are increasingly at risk of marginalisation and social isolation, which are risk factors for suicide. Other important factors are based around marginalised masculinities due to mid-life transitions, which include: a decline in health and career opportunities; psychological distress; and increasing pressures in the role of family provider. In addition, the stigma associated with men's mental health and accessing support impacts upon middle-aged men's approach to seeking help.

Marital status also impacts on the experience of marginalisation and social isolation. Richardson, Clarke and Fowler (2013) note that marital status is particularly important for understanding suicides amongst divorced and widowed men. In particular, men who are single, divorced or widowed are more likely to have a lack of social support, which increases their risk of suicide (O'Connor and Sheehy, 1997; Gallagher and Sheehy, 1994).

Moreover, middle-aged males residing in rural locations may also be at greater risk of social isolation. In particular, those in rural areas have the specific risk of suicide by poisoning due to access to pesticides, coupled with greater access to a private setting in which to carry out a suicide.

Legacy of the Northern Ireland conflict

The higher rate of suicide in Northern Ireland, compared with the Republic of Ireland, England, Scotland and Wales, could be linked to the legacy of the Northern Ireland conflict, and the associated issues of trauma and poor mental health that have prevailed. Males are more likely than females to have experienced a traumatic event related to the conflict (Bunting et al., 2013). O'Neill et al. (2014a) highlighted that the experience of trauma was associated with an increased risk in suicidal behaviour, as exposure to conflict-related trauma increases the risk of mental disorders such as Post Traumatic Stress Disorder (PTSD).

Social isolation may be a result of the conflict in Northern Ireland, as it contributed to the isolation of individuals, families and households in terms of imprisonment, migration and violence (Tomlinson, 2012). In the latter stages of the conflict, males of working age were twice as likely to live alone than females in Northern Ireland (Tomlinson, 2012). In post-conflict Northern Ireland, the strength of social networks reduced, resulting in a reduction in the protective factors of social cohesion and connectedness against suicide (O'Neill et al., 2014b; Tomlinson, 2012). At the same time, the experience of conflict-related trauma and instances of related mental disorders such as PTSD have increased. In addition, O'Connor and Sheehy (1997) suggested that the socio-economic impact of the conflict in Northern Ireland indirectly influenced suicide rates, as it affected employment due to reduced economic and social development.

Sexual identity

Sexual identity may be a cause of social isolation and may increase the risk of suicide. Richardson, Clarke and Fowler (2013) note that some males experience stigma and shame due to their sexual identity, resulting in higher rates of suicide amongst gay males. Such stigma may be related to traditional forms of masculinity, and the relatively high presence of religious values on the island of Ireland. The *LGBT Ireland Report* (Higgins et al., 2016) found that 70% of 14-18 year olds identifying as LGBTI had seriously thought of ending their life, with 1 in 3 attempting suicide. In addition, 62% of 19-25 year olds seriously considered ending their life, with 1 in 5 attempting suicide. Moreover, students who experienced anti-LGBTI bullying in school were more likely to seriously consider ending their life and to attempt suicide.

Summary

The social context is central to understanding suicide trends. Within this social context, the economic and historical settings are particularly relevant. The immediate and lasting effects of the economic recession across the island of Ireland, and the impact of the Northern Ireland conflict, has particularly affected males in terms of employment, trauma and mental health issues. Other important factors are age, residential location, marital status, sexual identity and occupation. Moreover, societal expectations and norms of masculinity, and the indirect effects such can have on help seeking behaviours amongst males, must also be acknowledged and considered when exploring suicide rates across the island of Ireland. Overall, the literature identifies a range of risk factors that influence suicide rates. These risk factors affect a range of male social groups, highlighting the need for an inclusive explanatory approach.

KEY READING

Garcia, F. (2013), PhD Thesis: *Coping and suicide amongst 'the lads': expectations of masculinity in post-traditional Ireland,* NUI Maynooth
Available at: https://pdfs.semanticscholar.org/c751/612f9650b7032854b243879e46d197693bb1.pdf

Men's Health Forum in Ireland [MHFI] (Prepared by Shane O'Donnell and Noel Richardson) (2018), *Middle-Aged Men and Suicide in Ireland,* Dublin: Men's Health Forum in Ireland
Available at: https://www.mhfi.org/MAMRMreport.pdf

O'Neill, S. et al. (2014), 'Patterns of suicidal ideation and behaviour in Northern Ireland and associations with conflict related trauma', *PLoS ONE,* 9(3)
Available at: https://journals.plos.org/plosone/article/file?id=10.1371/journal.pone.0091532&type=printable

Richardson, N., Clarke, N. and Fowler, C. (2013), *A Report on the All-Ireland Young Men and Suicide Project,* Dublin: Men's Health Forum in Ireland
Available at: https://www.mhfi.org/ymspfullreport.pdf

3.1.2 Eating disorders

Eating disorders are complex conditions related to disturbances in eating behaviours (Bodywhys, 2020). The main types of eating disorders are anorexia nervosa, bulimia nervosa, and binge eating disorder. While there is concern about the increasing levels of eating disorders, the stereotypical view is that eating disorders mostly affect young women. Such a view may result in men failing to recognise their behaviour as an eating disorder and, therefore, they do not seek appropriate help (Räisänen and Hunt, 2014). It may also mean that professionals do not diagnose eating disorders among men. In addition, information and resources may not be appropriate for males. These are issues that groups such as The Laurence Trust and Bodywhys are trying to address.

In 2018, females made up the majority of people admitted to hospital for eating disorders in both jurisdictions. In Northern Ireland, 53 out of 518 patients that had an eating disorder were male (10%) in 2018/2019 (Belfast Telegraph, 2020). In the Republic of Ireland, males accounted for 3 out of 157 hospital admissions (2%) for eating disorders in 2018 (Health Research Board, 2019a).

Among child and adolescent admissions, 5 out of 33 hospital admissions in the Republic of Ireland were male in 2018 (Health Research Board, 2019a). In 2019, males accounted for 7% of child and adolescent hospital admissions for an eating disorder in the Republic of Ireland, whilst females made up the remaining 93% of cases of those aged under 18 years (Health Research Board, 2019b).

Between 2007 and 2017, there were 5 deaths in Northern Ireland caused by eating disorders, all of which were among females (Department of Finance, 2020). In the Republic of Ireland, there were 20 deaths caused by eating disorders, of which one was male (2014) (CSO, 2019b).

Discussion

There are several issues to acknowledge when examining the prevalence of eating disorders across the island of Ireland amongst males and females. Firstly, the few statistics that are available relate to hospital admissions or death. There are no statistics that show the number of people diagnosed with eating disorders. Secondly, statistics are not provided for specific eating disorders (e.g. anorexia, bulimia or binge eating). Thirdly, research literature continues to focus on females' experience of eating disorders and potential explanations for such. Striegel-Moore and Bulik (2007) argue that the marginalisation of males in the literature cannot be justified, and that it leads to greater stigmatisation of males when they have an eating disorder. Several explanations for eating disorders amongst males have been suggested.

Media pressure and body dissatisfaction

Studies examining males' experience of eating disorders have suggested that those suffering from eating disorders have body dissatisfaction that leads to negative feelings about their self (Wallin et al., 2014; Polivy and Herman, 2002). This can be related to media exposure that presents images of idealised physiques (Stother et al., 2012). More specifically, Wallin et al. (2014) suggest that body dissatisfaction is an element of self-dissatisfaction, along with low self-esteem and an individual's high demands and expectations of themselves.

Social stress

Experience of stress in different spheres of life may also play a role in explaining why males develop eating disorders (Wallin et al., 2014). In particular, bullying, moving to new places/ separation from friends, and societal ideals may be especially important factors.

Family

Having a critical family environment - which includes coercive parental control, or low levels of communication, support and expectations - may be an explanatory factor for eating disorders amongst young people (Polivy and Herman, 2002). Similarly, Wallin et al. (2014) found that difficulty in family interaction and communication, and excessive expectations from family, were contributing factors to males developing an eating disorder. In addition, Wallin et al. (2014) found that feelings of neglect or discrimination by family members may contribute to the development of an eating disorder related to feelings of loneliness.

Trauma

Several researchers have pointed to trauma as an important factor (Wallin et al., 2014; Stother et al., 2012; Polivy and Herman, 2002). This relates to an individual's mental wellbeing, self-esteem and life events (Polivy and Herman, 2002). Stother et al. (2012) outlined that some males may react to their experiences of trauma by conscious or unconscious manipulation of their body shape.

Cultural factors

Wallin et al. (2014) outline that some studies suggest gay males may be at greater risk of developing an eating disorder (Crisp, 2006; Russell and Keel, 2001). Stother et al. (2012) examine this in greater detail, suggesting that concerns about body shape and image are more prevalent amongst gay males. Despite this, the authors highlight that some gay sub-cultures do not emphasise concerns over body image. Moreover, other studies suggest there is little evidence to suggest sexual orientation is a risk factor amongst males for developing an eating order (Striegel-Moore and Bulik, 2007).

Stother et al. (2012) also suggest that gender roles may be an important explanatory factor, as males with feminine gender roles have a higher prevalence of eating disorders than males with masculine roles.

Summary

The available data suggests that the prevalence of eating disorders amongst males is low in Ireland. However, given that these statistics do not reflect the number of people who have not been diagnosed or hospitalised with eating disorders, the actual number of males with eating disorders is unknown.

There has been a lack of research on disordered eating in adolescent boys. The risk factors and experiences related to eating disorders are not, necessarily, the same for boys and girls. This lack of research, and recognition of males' experience of disordered eating, may result in the greater stigmatisation and subsequent marginalisation of males, so reducing the likelihood of affected males seeking appropriate help or receiving appropriate services.

The social context of the Republic of Ireland and Northern Ireland should also be considered, with an exploration into how socio-cultural factors can increase the risk of certain social groups experiencing an eating disorder. A study of 1,190 boys and 1,841 girls in Ireland showed that puberty is a risk factor for disordered eating for girls, but not for boys. However the timing of puberty is also important. In particular, boys undergoing puberty later than their peers had more bulimic symptoms and were more likely to be dissatisfied with their bodies. Educational interventions to address eating disorders are important. However, these should take the differences between girls and boys into account (McNicholas et al., 2012), as should organisations offering specific services and support.

KEY READING

Polivy, J. and Herman, C.P. (2002), 'Causes of Eating Disorders', ***Annual Review of Psychology,*** **53, pp. 187-213**

Stother, E. et al. (2012), 'Eating Disorders in Men: Underdiagnosed, Undertreated, and Misunderstood', ***Eating Disorders*****, 20, pp. 346-355**
Available at: http://dx.doi.org/10.1080/10640266.2012.715512

Striegel-Moore, R.H. and Bulik, C.M. (2007), 'Risk Factors for Eating Disorders', ***American Psychologist*****, 62(3), pp. 181-198**
Available at: http://dx.doi.org/10.1037/0003-066X.62.3.181

Wallin, K. et al. (2014), 'A Qualitative Study of Males' Perceptions about Causes of Eating Disorder', ***Psychology*****, 5, pp. 1813-1820**
Available at: http://dx.doi.org/10.4236/psych.2014.515187

3.2 Physical conditions

Physical health is the most common indicator used to assess our health and wellbeing. It is also important for understanding men's mental health, due to the reported correlation between poor physical health and poor mental health (Kivimäki et al., 2020; Ohrnberger, Fichera and Sutton, 2017; Cho et al., 2011). The strong association between mental and physical health may be due to common factors such as low income, poor housing and poor nutrition, in addition to common risk factors such as smoking, high alcohol consumption and physical inactivity (Department of Health and Children, 2010).

Baker et al. (2014) outline that the health outcomes of males are substantially worse than females, yet the gender health disparity has failed to receive national and international recognition from health providers or policy makers. Males' poorer physical health outcomes may be due to a higher risk of occupational exposure to physical and chemical hazards, male norms of masculinity, and associated health behaviours. For example, men are less likely to seek health advice from a GP when they are unwell, and are less likely to report symptoms of illness when visiting a GP. Power dynamics are also important (Barker et al., 2010), with males from lower socio-economic backgrounds being more vulnerable to physical health conditions due to restricted access to health care. Moreover, social isolation and loneliness are risk factors for poor physical health, particularly amongst an ageing population (Ohrnberger, Fichera and Sutton, 2017; Steptoe et al., 2013). Consequently, older people may be less likely to seek medical attention due to isolation (Steptoe et al., 2013).

In general, it is much easier to obtain data on the number of people dying from a particular condition than it is to obtain data on the number of people diagnosed and living with it. The main exception is cancer, where comprehensive data is available from the Northern Ireland Cancer Registry and the National Cancer Registry Ireland.

As highlighted in Section 2, the main causes of death for males across the island of Ireland are cancer, circulatory diseases and respiratory diseases, although there are differences according to age. There are also differences according to socio-economic background, and over time. For example, 7,351 men were diagnosed with cancer in Northern Ireland in 2018, compared with 4,036 in 1993, and the incidence rate is highest among those in the most deprived areas. At the same time, the mortality rate for some diseases is falling. The male death rate for ischaemic heart disease in Northern Ireland fell from 155 per 100,000 in 2008 to 104 in 2018. Whilst this is good news, it is also important to consider the problems associated with living with chronic conditions.

This chapter focuses on two physical health conditions amongst males in Northern Ireland and the Republic of Ireland: cardiovascular disease and arthritis. Cardiovascular disease has received much attention in research and policy, and has a higher prevalence amongst males. On the other hand, the prevalence of arthritis amongst males has received less attention.

3.2.1 Cardiovascular Disease (CVD)

Cardiovascular disease (CVD) is an umbrella name for conditions that affect the heart and circulation. These include ischaemic heart disease, high blood pressure, stroke and vascular dementia.

Table 72 focuses on a specific CVD condition – ischaemic heart disease (sometimes called coronary heart disease). This is caused by coronary arteries becoming narrow due to a build-up of fatty material in their walls. Table 72 shows that across both jurisdictions, approximately seven out ten people with ischaemic heart disease are male. In Northern Ireland, the Public Health Agency (2019c) outlined that, in 2018, the number of potential years of life lost for males who died from ischaemic heart disease, aged between 1-74 years, was 5,413. The corresponding figure for females was 1,646.

Table 72: Ischaemic heart disease prevalence, 2018

	Republic of Ireland	Northern Ireland
Male	16,062	10,669
Female	6,527	4,593
Total	22,589	15,262
% male	71%	70%

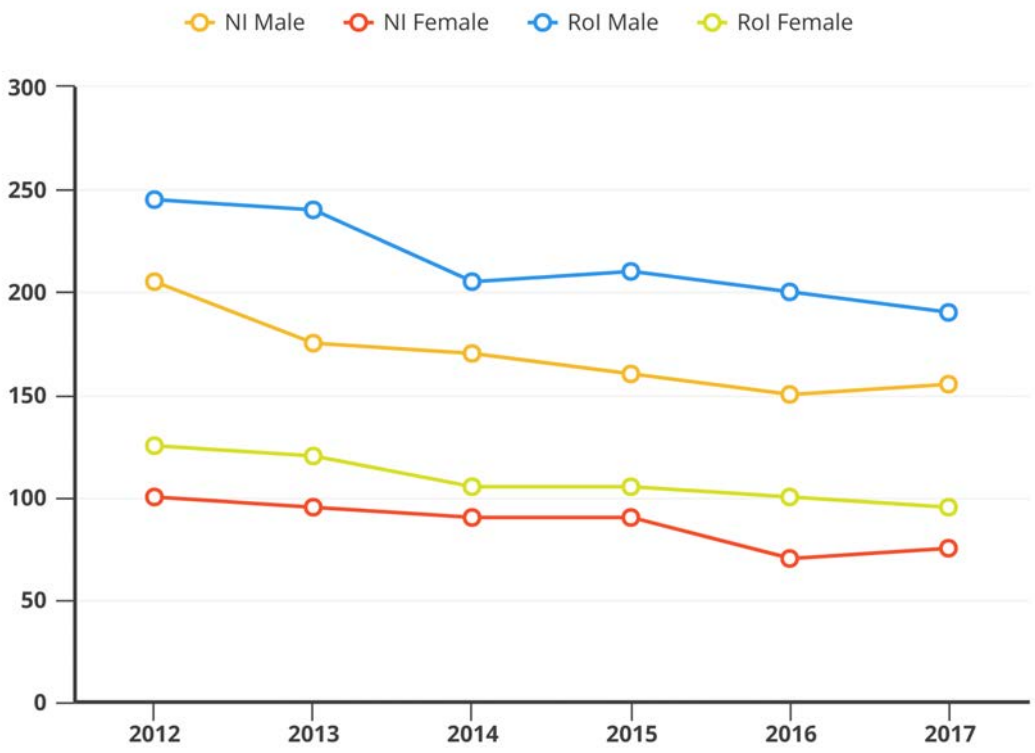
Source: Healthcare Pricing Office (2019), British Heart Foundation (2020)
Note: Northern Ireland figures refer to NHS hospitals and the principal diagnosis. Republic of Ireland figures refer to hospital discharges and the principal diagnosis.

Figure 18 shows that the standardised death rate for ischaemic heart disease was higher amongst males than females in both Northern Ireland and the Republic of Ireland. While there was an overall downward trend, the rate for males in Northern Ireland increased in 2017.

Discussion

The Department of Health and Children (2010) highlighted that the rate of CVD in the Republic of Ireland is a substantial burden to the Irish economy as costs include health care, informal care and loss in productivity. It recommended that preventative measures should be adapted to reduce the impact of cardiovascular disease on wider Irish society, whilst also working to protect the health of at risk individuals. However, Cruise et al. (2017) highlight that access differences to free health care in Northern Ireland and the Republic of Ireland may be a key determinant in understanding coronary heart disease prevalence.

Figure 18: Standardised Death Rate (per 100,000) for Ischaemic Heart Disease, 2012 to 2017



Source: Eurostat Table hlth_cd_asdr2

There are a range of factors that can help to explain the higher prevalence and mortality rates among males for CVD. These include lifestyle and environmental risk factors, gendered behaviours, varying rates of exposure to specific environments, variation in diet, lifestyle and stress, and differences in gender attitudes towards health treatments and prevention (The EUGenMed Cardiovascular Clinical Study Group et al., 2015).

Lifestyle factors

Studies have found lifestyle habits, such as smoking, alcohol consumption, physical inactivity, obesity and poor diet, to be risk factors for coronary heart disease (Cruise et al., 2017; Hughes et al., 2017; Brown and Jennings, 2014; Mosca, Barrett-Connor and Wenger, 2011; Department of Health and Children, 2010). Thus, given the higher rates of smoking and of alcohol use among men, they are at risk of coronary heart disease.

Moreover, social isolation and loneliness are associated with higher risks of cardiovascular disease and mortality (Barth Schneider and von Känel, 2010; Patterson and Veenstra, 2010; Perissinitto, Stijacic Cenzer and Covinsky, 2012; Shiovitz-Ezra and Ayalon, 2010). Social interactions, connections and relationships are, therefore, deemed a central component of physical and mental wellbeing.

These lifestyle and environmental risk factors are more prevalent amongst those from lower socio-economic backgrounds (Brown and Jennings, 2014; Department of Health and Children, 2010). For example, the diets of people from lower socio-economic backgrounds were found to have higher levels of fats, sugar and carbohydrates than less deprived individuals (Drewnowski, 2007). Although Northern Ireland and the Republic of Ireland reflect similarities in lifestyle and demography, some studies have found differences in the prevalence of risk factors for CVD. For example, Ward et al. (2009) found higher rates of obesity and smoking among people aged 65 years or older living in the Republic of Ireland than in Northern Ireland.

Physical conditions and biological factors

Other physical health conditions such as raised blood pressure, raised cholesterol and diabetes are risk factors for coronary heart disease (Hughes et al., 2017; Brown and Jennings, 2014; Department of Health and Children, 2010).

The biological differences between males and females can also help to explain their different rates of CVD. In particular, gene expression and hormones from the sex chromosomes can lead to differences in the functionality of the cardiovascular system (The EuGenMed Cardiovascular Clinical Study Group et al., 2015). High oestrogen levels in females are viewed as a protective factor against CVD, as it increases HDL cholesterol and reduces LDL cholesterol. However, this protective factor reduces in ageing females due to the menopause (Harvard Medical School, 2017). For example, ischaemic heart disease developed 7-10 years later in females compared with males in most western societies. In addition, myocardial infarction occurred 3-4 times more often in males than in females aged under 60 years (The EuGenMed Cardiovascular Clinical Study Group et al., 2015).

Summary

A range of risk factors for cardiovascular disease that affect various social groups of males have been identified in existing research. Individual lifestyle is important: males who have a poor diet, are physically inactive, obese, smoke and consume high levels of alcohol increase their risk of developing cardiovascular disease. Research suggests that such risk factors may be more prevalent amongst those experiencing social isolation and those from lower socio-economic backgrounds, thus highlighting the interconnectedness of risk factors according to socio-demographic factors. It is, therefore, important not to view explanatory factors in isolation from one another but, instead, to simultaneously understand the multidimensional nature of risk factors. Physical and biological factors (such as pre-existing immune weaknesses and health conditions) can add to someone's risk of developing cardiovascular disease. The correlation between developing cardiovascular disease and older age must also be considered within a multidimensional approach to understanding risk factors of cardiovascular disease amongst males on the island of Ireland.

KEY READING

Cruise, S.M. et al. (2017), 'The impact of risk factors for coronary heart disease on related disability in older Irish adults', *Journal of Aging and Health* Available at: https://doi.org/10.1177/0898264317726242

Department of Health and Children (2010), *Changing Cardiovascular Health: National Cardiovascular Health Policy 2010-2019,* Dublin: Department of Health and Children. Available at: https://assets.gov.ie/14907/9fa9221a41374006a7fc2e1d4c4706fc.pdf

Hughes, J. et al. (2017), 'Cardiovascular risk factors – using repeated cross-sectional surveys to assess time trends in socio-economic inequalities in neighbouring countries', *BMJ Open* 2017, 7 Available at: http://dx.doi.org/10.1136/bmjopen-2016-013442

Mosca, L., Barrett-Connor, E. and Wenger, N.K. (2011), 'Sex/gender differences in cardiovascular disease prevention. What a difference a decade makes', *Circulation,* 124(19), pp. 2145-2154 Available at: http://dx.doi.org/10.1161/CIRCULATIONAHA.110.968792

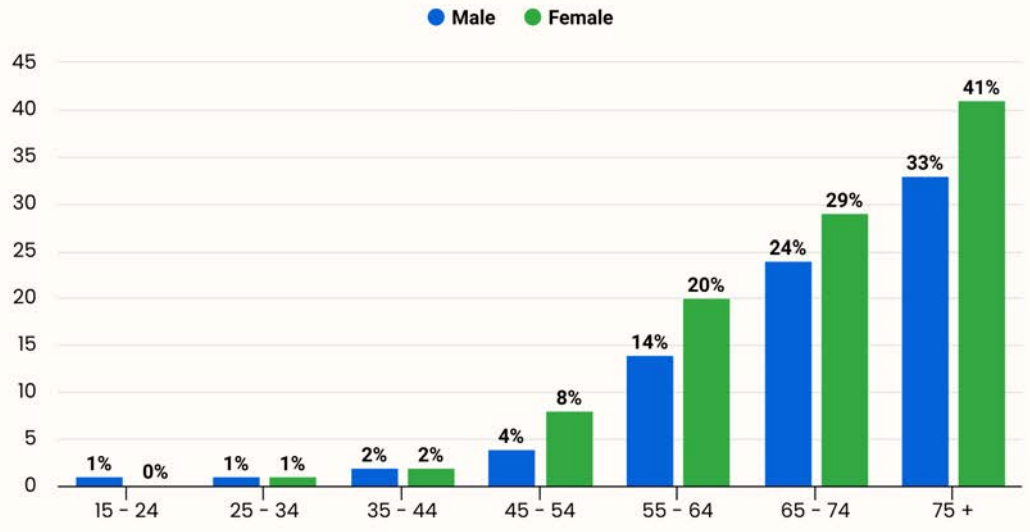
3.2.2 Arthritis

Arthritis has many different forms, including osteoarthritis, rheumatoid arthritis and psoriatic arthritis. All of these cause inflammation of the joints, and can cause pain, immobility and disability. These can lead to increased social isolation, loneliness, and mental health issues.

In 2019, the Healthy Ireland survey found that around 10% of the population in the Republic of Ireland aged 15 years or older had arthritis in the past year (Department of Health [Ireland], 2019b), and the most common form of arthritis in this jurisdiction was osteoarthritis (Sheehan and O'Sullivan, 2020). Arthritis is the most prevalent chronic condition amongst older adults in the Republic of Ireland (McNicholas and Laid, 2018). Females are more likely to be affected by arthritis than males.

Based on the Healthy Ireland survey, Figure 19 shows that the prevalence of arthritis in the Republic of Ireland among males and females aged 15 to 44 years of age is low. Nevertheless, it is important to highlight that people in younger age groups do suffer from arthritis. Among people aged 45 years or more, the prevalence of arthritis is higher for females than for males. Nevertheless, living with arthritis is an issue for a noteworthy proportion of males, especially among the older age groups.

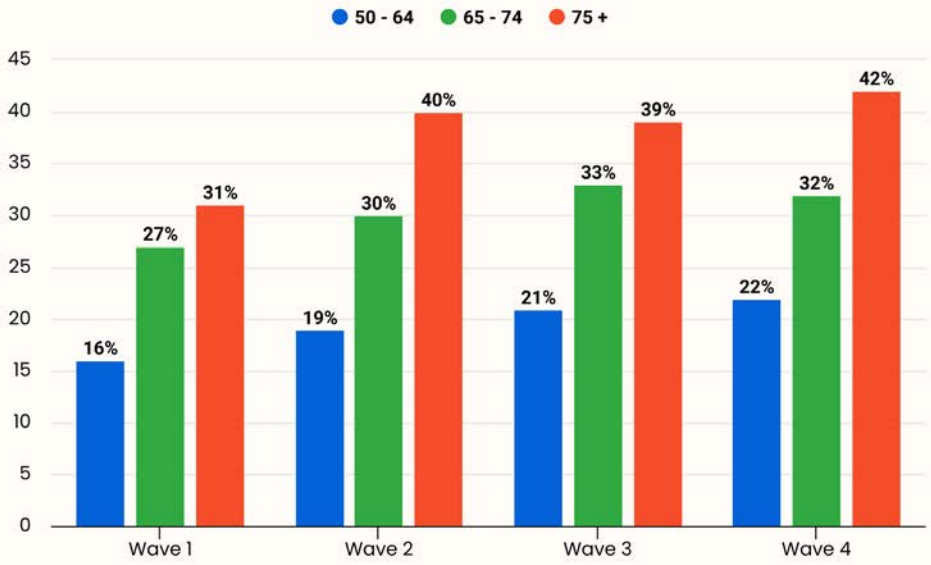
Figure 19: Prevalence of arthritis in the Republic of Ireland, by age group 2019



Source: Department of Health [Ireland], 2019b

Figure 20 focuses on adults aged 50 years or over who took part in *The Irish Longitudinal Study of Ageing* (TILDA), which follows the same group of people over time. Wave 1 of the TILDA study took place in 2009-2010, Wave 2 took place in 2012, Wave 3 in 2014-2015 and Wave 4 in 2016 (TILDA, 2020). As with the data from the *Healthy Ireland* survey (Figure 19), the prevalence of arthritis in all waves of TILDA increased with age. The data in Figure 20 also show that the prevalence of arthritis amongst males in Ireland has increased over the course of the four waves of TILDA. These results from TILDA suggest that the overall prevalence of arthritis is likely to rise, given that the population is ageing.

Figure 20: Prevalence of arthritis, males aged 50+, RoI, (TILDA study)



Source: McNicholas and Laird (2018)

Versus Arthritis (2018) highlights that an estimated 27% of the population in Northern Ireland (466,000 people) have a musculoskeletal condition (arthritis, back pain or osteoporosis). However, these statistics were not disaggregated according to socio-demographics such as gender. In Northern Ireland, as part of the Quality and Outcomes Framework for GP practices, registers were established to monitor the prevalence of 15 health conditions amongst the population, including rheumatoid arthritis. However, despite the existence of the register, disaggregated gender prevalence data are not available for rheumatoid arthritis (Department of Health [Northern Ireland], 2019b).

Discussion

Overall, there is a lack of studies, particularly focusing on the island of Ireland, that provide an in-depth exploration of the risk factors associated with arthritis. Deane et al. (2017) highlight that in order to improve our understanding of the pathways of which factors influence the development of arthritis, longitudinal studies of at risk individuals are needed. Data from TILDA (McNicholas and Laird, 2018) indicate that arthritis affects a sizeable number of men, especially in the older age groups. Understanding the risk factors for and impact of arthritis are important for planning future policy and services.

Lifestyle factors

Lifestyle factors such as smoking, poor diet and obesity have been reported as risk factors for arthritis (van Boheeman and van Schaardenburg, 2019; Deane et al., 2017; Xu and Lin, 2017). Smoking has been associated with increased disease activity which contributes to the onset of arthritis (Deane et al., 2017). Xu and Lin (2017) add that smoking is associated with developing a systemic pro-inflammatory state that can increase the risk of arthritis.

Diet has an important role to play, as diets with high levels of sodium and sugar are risk factors (Deane et al., 2017). Excessive body weight puts pressure on joints, whilst excessive fat affects the disease process and leads to a greater production of inflammatory proteins that increase joint inflammation (Versini et al., 2014). Other physical conditions such as diabetes and osteoporosis have been identified as risk factors for arthritis (Xu and Lin, 2017). Type 2 diabetes can be related to the lifestyle risk factors of a poor diet and obesity.

Economic factors

Osteoarthritis, especially in knee joints, has strong occupational risk factors, which include heavy physical work, kneeling, whole body vibration and repetitive movements (Yucesoy et al., 2015). Thus, workers in construction, firefighting, agriculture, fishing, forestry and mining are of increased risk – occupations which have a majority of male workers. Whilst farm work did not have an increased risk of knee osteoarthritis, there was an increased risk when combined with obesity. Lower socio-economic backgrounds have also been highlighted as a risk factor for arthritis (van Boheeman and van Schaardenburg, 2019; Deane et al., 2017; Xu and Lin, 2017).

Impact of arthritis

As well as consequences for the person living with arthritis, the disease has impacts on wider society. For example, those suffering from arthritis are likely to be restricted in the type or level of employment that they can partake in, and are more likely to be unemployed due to the pain, immobility and disabilities caused by arthritis. This can lead to those with arthritis being financially vulnerable. In addition, arthritis can lead to social isolation and loneliness, which are risk factors for other physical illnesses and poor mental wellbeing (Courtin and Knapp, 2017; Smith, 2017). The presence of social isolation and loneliness can have a negative impact on the use of available health and social care services amongst those suffering with arthritis (Steptoe et al., 2013).

Summary
Arthritis is a physical health condition that is evident amongst all ages, especially those of an older age. Lifestyle and occupation are important risk factors, and the impact of living with arthritis can be wide-ranging and long lasting. The development of educational resources and interventions may be an appropriate response in the future, with the aim of increasing knowledge of the risk factors associated with arthritis and attempting to reduce their prevalence amongst those males most at risk.

KEY READING

Courtin, E. and Knapp, M. (2017) 'Social isolation, loneliness and health in old age: a scoping review', *Health and Social Care in the Community,* 25(3), pp. 799-812 Available at: https://onlinelibrary.wiley.com/doi/full/10.1111/hsc.12311

Deane, K.D. et al. (2017) 'Genetic and environmental risk factors for rheumatoid arthritis', *Best Practice Research in Clinical Rheumatology,* 31(1), pp. 3-18 Available at: http://dx.doi.org/10.1016/j.berh.2017.08.003

Smith, T. (2017) "'On their own': social isolation, loneliness and chronic musculoskeletal pain in older adults", *Quality in ageing: policy, practice and research,* 18(2) Available at: http://dx.doi.org/10.1108/QAOA-03-2017-0010

Van Boheeman, L. and van Schaardenburg, D. (2019) 'Predicting rheumatoid arthritis in at-risk individuals', *Clinical Therapeutics,* 41, pp. 1286-1298 Available at: https://doi.org/10.1016/j.clinthera.2019.04.017

3.3 Use of health care services

Compared with females, males have lower rates of help-seeking behaviours and lower usage of health care services. Explanations for this include masculine norms, attitudes and behaviour, which expect men to be strong, independent and unconcerned by pain or minor health problems (Bradley et al., 2015; Farrimond, 2011; Smith et al., 2008; O'Brien et al., 2005). Other factors that can impact on men seeking help in relation to their health include: time available to monitor their health; their capacity to continue with regular activities; perception of the severity of the health problem; engagement in risky behaviours; how they feel they will be perceived by others (including health care professionals); fear; past experiences; and lack of health-related knowledge (Bradley et al., 2015; Farrimond, 2011; Smith et al., 2008; O'Brien et al., 2005). With these factors in mind, the lower usage of health care services and screening programmes amongst males leads to concerns that they delay in receiving timely advice for health problems, meaning the opportunities for early illness detection, treatment and prevention is reduced (Farrimond, 2011; O'Brien et al., 2005).

Despite such arguments, there have been studies suggesting that men self-monitor their health before considering whether attendance at a health service is necessary (Smith et al., 2008). O'Brien et al. (2005) found that males (particularly younger males) were more likely to avoid attending GP services for minor health problems, but were more willing to attend if there was a serious health problem. This self-monitoring process therefore determines a male's decision on whether to visit a GP (Smith et al., 2008).

Of key importance is the observation that men's health practices will differ according to socio-demographics and social, cultural and environmental contexts (Tyler and Williams, 2014; Farrimond, 2011; Smith et al., 2008). It is, therefore, important to consider different social groups of males who may be at risk of poor health behaviours. These may include: males from lower socio-economic backgrounds; single men; socially isolated males; younger aged males; ethnic minority males; and males for whom English is a second language. As Farrimond (2011) outlines, masculine identities, and subsequent health practices, will differ according to the context. Those from higher socio-economic backgrounds may have the resources such as time, money and status to take control of their health, whilst maintaining their masculine identity. In contrast, males from lower socio-economic backgrounds may find it difficult to navigate and alter various masculine identities across contexts due to their limited possession of monetary capital, self-efficacy and health literacy (Farrimond, 2011).

3.3.1 Visits to health professionals

The *Irish Health Survey* in 2015 provided useful data on the proportion of males and females aged 15 years or older in the Republic of Ireland who visited a wide range of health professionals in the previous 12 months on their own behalf (CSO Statbank Table IH043). These professionals included GPs, dentists, physiotherapists and psychiatrists. Overall, the highest proportion of males attended GP consultations in the previous 12 months (67%) when compared with all other listed health services. The lowest proportion of males attended psychiatrist, psychologist or psychotherapist services (5%) (see Table 73).

Across all types of health professionals, a higher proportion of females than males consulted them. The largest difference (13 percentage points) was in relation to GP visits, with 80% of females attending a GP consultation during the previous 12 months compared with 67% of males. On average, males attended five GP consultations per year, compared with an average of seven for females. Males were also less likely than females to consult a nurse within a GP practice, although the average number of visits was similar for both males and females.

Table 73: Visits to health professionals, age 15+, RoI, 2015

Health Professional	Male	Female
GP consultation	67%	80%
GP nurse consultation	28%	40%
Dental / orthodontic consultation	44%	53%
Medical/surgical consultant visit	31%	38%
Physiotherapist, osteopath or chiropractor visit	19%	20%
Psychiatrist, psychologist or psychotherapist	5%	7%
Average number of GP consultations per person, per year	5%	7%
Average number of GP nurse visits per person, per year	3%	3%
Average number of medical / surgical specialist visits per person, per year	3%	3%

Source: CSO Statbank Table IH043

Similar data are not available for Northern Ireland. However, data from the first wave (2014-2016) of the *Northern Ireland Cohort for the Longitudinal Study of Ageing* (NICOLA) provides information on the use of health services in Northern Ireland for those aged 50 years and over. Overall, GP services were the most commonly used health services in Northern Ireland for males aged 50 years or older. Outpatient and emergency department health services were the next most commonly used. The least used health service was hospital admissions.

Approximately 20% of respondents had visited an emergency department in the previous year, and there was little variation between men and women, or according to age. However, slightly fewer males aged between 50-64 years visited their GP compared with those aged 65 years and older (Donnelly, Cruise and O'Reilly, 2017). In the age groups of 50-64 years and 65-74 years, a slightly lower proportion of males attended GP services in the previous year compared with females. However, in the oldest age category of 75 years or older, a similar proportion of males and females attended a GP consultation.

There were similar proportions of males and females in the same age categories attending outpatient services and being admitted to hospitals. In addition, there was a positive correlation between the older age categories and hospital admissions for both males and females.

Discussion

Survey data indicate that a higher rate of females attend GP services than males, and there is increasing usage of GP services in older aged males. As GP services were the most frequently used health service, coupled with an evident gender usage difference, this discussion explores reasons for such a trend.

The most recent *Healthy Ireland* report (Department of Health [Ireland], 2019b) found that females were more likely to have attended their GP than males in the Republic of Ireland (79% and 68%, respectively). There are potential explanations for this trend, such as females attending GP services more frequently during childbearing years for health-related concerns such as pregnancy. Importantly, the questions in the *Healthy Ireland* survey explicitly ask about health consultations 'on your own behalf', and so excludes visits where the survey respondents are attending GP services with other family members (for example, children or older parents). The *Healthy Ireland* survey found that females aged under 55 years were more likely to visit their GP than males (75% and 60%, respectively). However, this difference narrowed amongst older age categories (Department of Health [Ireland], 2019b).

Gender norms

Gender norms are important factors for explaining differences in the use of health care services amongst males and females. Traditional male gender roles and masculinity norms often emphasise risk-taking and independence. Thus, males are less likely to use preventative health care services or seek treatment for health issues (Vaidya, Partha and Karmakar, 2012). Studies have found that masculinity norms portray that men are supposed to be tough, resilient, independent, push through pain and not go to the doctor (Novak et al., 2019; Bradley et al., 2015; Farrimond, 2011; Smith et al., 2008; O'Brien et al., 2005). Novak et al. (2019) concluded that the societal level of masculine norms influence all other levels, from organisational (perceptions of the health-care system) to the individual level (perceptions of illness severity).

Economic factors

Economic factors are also important to consider when exploring the uptake of health care services. Northern Ireland and the Republic of Ireland have different health care systems. O'Reilly et al. (2007) outlined that in the Republic of Ireland a mixed public-private system is in place, with 70% of patients required to make a payment when they visit their GP. Under a means-tested system, the remaining 30% of patients are eligible to receive free health services. For those aged 70 years or older, all health care services are free. In contrast, Northern Ireland has a free health care system for all patients, regardless of income or age. The difference in health care systems may provide an explanation for different uptake rates of health services. O'Reilly et al. (2007) found that more than one in four patients in the Republic of Ireland who pay for health care had a health problem in the year prior to the study, but did not attend a GP due to costs. This suggests that those from poorer socio-economic backgrounds, who are not eligible for the General Medical Services scheme, are at greater risk of low access to health care services in the Republic of Ireland.

Isolation

Social isolation may also lead to a lower proportion of males attending health care services than females. Initiatives have been implemented in Northern Ireland to improve access to health care services for those who may have previously been at risk of low health care usage. One example is the farming community, who are at risk of poor health due to the social and economic demands placed upon them (Public Health Agency, 2020a). These include long and anti-social working hours, leading to social isolation and problems accessing health care services within traditional opening hours. The Farm Families Health Checks Programme in Northern Ireland was introduced to overcome such barriers, and provides a portable clinic for farmers and their families to access health checks for blood pressure, BMI, cholesterol and diabetes. The programme also provides individual lifestyle advice and referrals to local support services (Public Health Agency, 2020a).

In addition, social isolation may also affect those from ethnic minorities, or those for whom English is a second language. Among males from ethnic minority communities, there may be the additional barriers of cultural practices and norms, as well as language understanding, that discourage their attendance at health care services.

Summary

The usage of health care services, particularly GP services in the Republic of Ireland and Northern Ireland, reflects a gender difference in the rates of usage. Social norms, along with the expectations related to gender roles and, more specifically, masculinity, may have negative, unintended consequences on male uptake of health care services. This, in turn, has a negative impact on health outcomes. This, coupled with economic factors (for example, the role of the breadwinner within a family and means-tested access to health care), exacerbates the low uptake of health care services amongst males. Social isolation (for example, among farmers, ethnic minorities, and those for whom English is a second language) is also a risk factor for poor uptake of health care services. To improve men's health, it would be beneficial for future research and interventions to consider how to reduce these barriers and risk factors to improve health care service uptake and men's health outcomes.

KEY READING

Department of Health [Ireland] (2019), *Healthy Ireland Summary Report*
Available at: https://assets.gov.ie/41141/e5d6fea3a59a4720b081893e11fe299e.pdf

Novak, J.R. et al. (2019), 'Associations between masculine norms and health care utilization in highly religious, heterosexual men', *American Journal of Men's Health*, 13(3), pp. 1-11
Available at: http://dx.doi.org/10.1177/1557988319856739

O'Reilly, D. et al. (2007), 'Consultation Charges in Ireland Deter a Large Proportion of Patients From Seeing the GP: Results of a Cross-Sectional Survey', *European Journal of General Practice*, 13(4), pp. 231-236
Available at: http://dx.doi.org/10.1080/13814780701815082

3.3.2 Use of screening and preventative services

Screening programmes are vital elements of preventative health, although the range of screening programmes is different in Northern Ireland compared with the Republic of Ireland. The abdominal aortic aneurysm (AAA) screening programme in Northern Ireland began in 2012, and is available to men aged 65 years or over. In 2018-19, 8,138 out of 9,732 eligible males were screened, representing an uptake rate of 83.6%.(Public Health Agency, 2020b). There is no similar AAA screening programme in the Republic of Ireland.

Both jurisdictions provide a diabetic eye screening programme. In addition, the Republic of Ireland and Northern Ireland provide three national cancer screening programmes (breast, cervical and bowel), of which only bowel cancer screening is offered to males. The most recent data on the uptake of bowel cancer screening across the island of Ireland relates to 2016-17. In the Republic of Ireland, uptake was higher among females than among males (National Screening Service, not dated). Among males who were invited for the first time to take part in the programme during 2016-17, 32% of 60-64 year olds were screened, compared with 14.7% of males aged 65-69 years. The figures were 42.65 and 16.5% for females respectively. However, a very high uptake (at least 87%) was evident among males and females who had previously taken part in the screening programme. Due to concern about the low uptake rate among men, BowelScreen ran training sessions with the Irish Men's Sheds Association, and promoted the bowel screening service during the 2016 and 2017 Men's Health Weeks. In Northern Ireland in 2016/2017, 62.0% of females and 56.8% of males participated in bowel cancer screening (uptake at 6 months) (Public Health Agency, 2017).

Importantly, although rates of breast cancer are higher among females, breast cancer can also affect males (see Chapter 2.9). However, there are no screening programmes for male breast cancer.

No publicly funded prostate cancer screening service is available for males in either jurisdiction. Public Health England (2020a, 2020b) state that a PSA (prostate specific antigen) test for prostate cancer is not recommended due to the inaccuracies of the test in falsely identifying cancer and being unable to determine cancer risk. For example, a male may have high levels of PSA for reasons other than prostate cancer, such as vigorous exercise, an enlarged prostate, a urinary tract infection or prostate stimulation (Public Health England, 2020a). However, ongoing research is examining ways to improve the accuracy of the PSA test to identify men at higher risk of developing fast growing prostate cancer (Public Health England, 2020b). Such a test is not yet available.

There have been improvements in other preventative health services for men, notably the expansion of the HPV (human papillomavirus) vaccine on the island of Ireland to males. Prue et al. (2019) highlight that HPV is the most common infection that leads to cancer, and is more prevalent amongst males than females due to their weaker immune response to the virus (Giuliano, Palefsky and Goldstone, 2011). Despite this, to date, only 11 countries have implemented a universal HPV vaccination programme for both males and females (Prue et al., 2019). This may be due to cost issues or a perception that HPV is a female issue.

In the Republic of Ireland, the HPV vaccination has been offered to girls since 2010, and to both girls and boys during their first year of secondary school since September 2019. In Northern Ireland, the HPV vaccine was introduced in 2008 for females. In 2019, this was expanded, and the vaccine was also offered to male pupils aged between 12 and 13 years. Statistics outlining the male uptake of the vaccination in 2019 were not available at the time of writing this report.

Discussion

The uptake rate of a health screening programme has been viewed as the most important factor to determine its success (Parkin et al., 2008). Research studies have explored the range of factors related to the uptake and non-uptake of health screening services.

Social Factors

Bradley et al. (2015) explored reasons for non-participation in the bowel cancer screening service in Northern Ireland, and identified social and cognitive factors that influenced male uptake of bowel cancer screening:

- Fear of cancer.
- The test procedure.
- Social norms regarding masculine behaviour and health.
- Past experiences of cancer and screening.
- Lack of knowledge and understanding about bowel cancer screening.

Such factors are reiterated in other studies, in addition to males' ineffective use of health services and self-efficacy (Wilkins, 2011). Studies have found fear and denial to be prominent amongst men not participating in bowel cancer screening, as they do not want to receive a bad result (Bradley et al., 2015; Wilkins, 2011). However, Bradley et al. (2015) found that the fear of receiving bad news was something that male participants were willing to overcome after discussions with other males. More broadly, many male participants advocated using fear as a motivational tool in an advertising campaign to shock individuals into participating in screenings (Bradley et al., 2015). However, other studies have found that GPs, primary care staff and spouses are influential in promoting positive health behaviours in men, and can encourage their uptake of screening programmes (Teo, Ling and Jenn, 2018; Wilkins, 2011; Federici et al., 2006).

Social norms are of particular importance to understanding the lower uptake of health screening programmes amongst males (Bradley et al., 2015; Wilkins, 2011). More specifically, masculine norms and socialisation are influential in men being less likely to report illness and symptoms, as they do not view themselves as being vulnerable to illnesses (Teo et al., 2018; Wilkins, 2011). In addition, the traditional male breadwinner role within the family is affiliated with masculine socialisation and cultural norms, which may also result in males being less likely to share health concerns (Wilkins, 2011). This, coupled with a lack of available time to participate in screening services, may explain men's lower uptake of health screening programmes (Teo et al., 2018).

Furthermore, men being less familiar with health screening programmes due to the lack of screening available, may provide potential explanations for their lower uptake (Teo et al., 2018; Patnick, 2014; Wilkins, 2011). Less exposure to health screening programmes may lead to a lack of knowledge and understanding about bowel cancer screening which, in turn, could result in misconceptions, thus reducing uptake. For example, some believed that they did not have symptoms and, so, did not need to take the test (Bradley et al., 2015).

Economic Factors

In the Republic of Ireland, where a mixed public-private health care system operates, socio-economic differences in the uptake of cancer screening programmes is evident, with the possession of private health insurance being a key determinant (Walsh et al., 2012). The authors explain this further, adding that the uptake in cancer screening programmes is dependent on their perceived value by an individual, which is often determined by subsequent access to diagnostic and treatment services. If an individual does not possess health insurance, then they may see no benefit in participating in cancer screening. Walsh et al. (2012) found that those with higher income and educational attainment had greater uptake rates for all types of screening, perhaps because they have greater health literacy and knowledge of how to effectively participate in the health care system (Walsh, Silles and O'Neill, 2012; Weller and Campbell, 2009).

As health literacy varies across social groups, information materials that provide comprehensive details may not be the most effective method of engagement to promote screening amongst those from lower socio-economic backgrounds (Weller and Campbell, 2009). Along with social deprivation, ethnicity has also been found to be a key determinant in cancer screening uptake, with individuals from ethnic minorities having lower uptake rates (Weller and Campbell, 2009). Disabilities and accessibility issues may also be a key determinant in health screening uptake (NHS England, 2014).

In addition, socially-isolated males may be at risk of lower uptake of health screening services. One example of such a social group is men living in rural areas and, particularly, the farming community. As outlined in the discussion of GP service usage, this may be due to such groups working long and anti-social hours, leading to issues of accessing health care services within traditional opening hours.

Moving Forward

McFerran and O'Mahony (2017) critically evaluated the structure of the bowel cancer screening programme in the Republic of Ireland and suggested technical changes that could improve its effectiveness. However, engagement with men is important for increasing the rate of take-up of screening services. Information needs to address differences in literacy and language, as well as health literacy. More generally, Teo, Ling and Jenn (2018) suggested that the increased provision of online educational information on health screening improved men's intention and uptake of screening. Men preferred to use websites and mobile apps to access health information, as it provides privacy and does not compromise masculine norms. Using online platforms and applications may, therefore, be an area for further consideration to increase male uptake of screening programmes in the future.

Summary
There is a wide range of factors associated with poor uptake rates of health care screening programmes amongst males. These include social norms related to masculinity, and the subsequent impact this has on health and help seeking behaviours. However, marital status, age and socio-economic background may help mediate the influence of masculine norms and, so, increase the uptake of health screening programmes. Lack of access to clear and simple information about screening programmes is also important, especially amongst those males with lower literacy levels. Economic factors are related to lower uptake of screening programmes, especially in the Republic of Ireland, which operates a mixed public and private health care system. It is, therefore, important that future initiatives are accessible to all males, especially those who are older, are from lower socio-economic backgrounds, or from ethnic minority communities. The engagement of BowelScreen with the Irish Men's Sheds Association and Men's Health Week is a good example of how a national screening programme can help to ensure maximum uptake.

KEY READING

Bradley, D.T. et al. (2015), 'Reasons for non-participation in the Northern Ireland Bowel Cancer Screening Programme: a qualitative study', *BMJ Open*, 5 Available at: http://dx.doi.org/10.1136/bmjopen-2015-008266

Walsh, B., Silles, M. and O'Neill, C. (2012), 'The role of private medical insurance in socio-economic inequalities in cancer screening uptake in the Republic of Ireland', *Health Economics*, 21, pp. 1250-1256 Available at: http://dx.doi.org/10.1002/hec.1784

Weller, D.P. and Campbell, C. (2009), 'Uptake in cancer screening programmes: a priority in cancer control', *British Journal of Cancer*, 3(101), pp. 55-59 Available at: http://dx.doi.org/10.1038/sj.bjc.6605391

Wilkins, D. (2011), Slow on the uptake? *Encouraging male participation in the NHS bowel cancer screening programme,* London: Men's Health Forum

3.4 COVID-19

COVID-19 or coronavirus disease is caused by the virus SARS-CoV-2 (Severe Acute Respiratory Syndrome Coronavirus 2). The most common symptoms are fever, dry cough and tiredness. Less common symptoms are aches and pains, sore throat, diarrhoea, conjunctivitis, headache, loss of taste or smell, and a rash on skin or discolouration of fingers or toes (World Health Organization, 2020).

The global outbreak of COVID-19 originated in Wuhan, Hubei Province in China, and was first reported in December 2019. Since then, the virus has spread globally, with each nation facing subsequent economic, social and health consequences. On 11 March 2020, the World Health Organization stated that the outbreak of coronavirus was a pandemic. A range of measures, including lockdown, curfews and other restrictions on movement and meeting other people, have been used to control the spread of the virus. Across the island of Ireland, these measures have been introduced at different times, and in specific places (see Table 74 for a timeline from February to September 2020).

Table 74: Lockdown Timeline, RoI and NI, February to September 2020

Republic of Ireland	
29 February	First COVID-19 case was confirmed.
11 March	First death due to COVID-19 was confirmed
12 March	Taoiseach Leo Varadkar stated that all schools, colleges and childcare facilities would close on 29 March 2020. In addition, indoor gatherings of more than 100 people and outdoor gatherings of more than 500 people were to be cancelled.
15 March	Pubs were to close until at least 29 March.
27 March	It became mandatory for people to stay and work at home for at least two weeks. People were only allowed to leave home for exercise, essential work, essential shopping, vital family visits or for attending medical appointments.
March	A job retention scheme was established.
10 April	Lockdown measures were extended for three weeks.
5 May	Lockdown restrictions began to be eased.
August	Local restrictions placed in counties such as Kildare, Laois and Offaly due to a rise in cases.
September	Schools reopened. More local restrictions confirmed.
Northern Ireland	
27 February	First coronavirus case was confirmed.
18 March	All schools were to close on 23 March.
19 March	First death due to COVID-19 was confirmed.
23 March	It became mandatory for people to stay and work from home. People were only allowed to leave home for exercise, essential work, essential shopping, medical needs or to care for a vulnerable person. Non-essential businesses were closed.
March	A job retention scheme was established.
15 April	Lockdown was extended for three weeks.
10 May	Lockdown was extended until at least the end of May.
June	Lockdown restrictions began to be eased.
September	Schools reopened. Local restrictions placed in Belfast, Ballymena and Lisburn due to a rise in COVID-19 cases.

3.4.1 Key trends

This section provides data on the number of cases and the number of deaths related to COVID-19. These are the most up-to-date figures available at the time of writing (15 September 2020). However, it is important to acknowledge that the COVID-19 pandemic is an on-going situation, with the number of cases and deaths changing daily.

The number of cases is based on the number of tests that confirmed the presence of the coronavirus. However, the availability and uptake of tests varies by place and by time. In addition, some people can have COVID-19 but they do not display any symptoms and, so, do not look for a test. Therefore, the number of positive tests is not an accurate reflection of the number of cases within the population.

There is also some variation in the data relating to COVID-related deaths. For example, in Northern Ireland, data on deaths are available from two sources:

- Department of Health: deaths reported to the Public Health Agency where the deceased has had a positive test for COVID-19 and died within 28 days, whether or not COVID-19 was the cause of death. PHA sources include data from health care professionals (GPs, hospitals), and may not include deaths that took place at home or in care homes.
- NISRA: death registration information collected by the General Register Office, which count all deaths where COVID-19 was mentioned on the death certificate by the doctor who certified the death, whether or not COVID-19 was the primary underlying cause of death. These figures will be higher than Department of Health figures, as they include deaths outside a hospital (such as a care home, hospice or private residence) and the deceased may not have had a positive test.

On 4 September 2020, the Department of Health reported 564 deaths associated with COVID-19. NISRA reported 877 deaths, of which 466 occurred in hospital (53.1%), 351 occurred in care homes (40.0%), 8 occurred in a hospice (0.9%), and 52 occurred in residential and other locations (5.9%).

REPUBLIC OF IRELAND:

Data sources

- Information on COVID-19 cases in Ireland are available on the Health Protection Surveillance Centre (HPSC) website (https://www.hpsc.ie/a-z/respiratory/coronavirus/novelcoronavirus).
- A data hub (https://covid19ireland-geohive.hub.arcgis.com) was created in June 2020, based on official figures by the HPSC and the Health Service Executive.

Cases

In the Republic of Ireland, up until 15 September 2020, a total of 13,689 males had tested positive for COVID-19, compared with 17,262 females (Government of Ireland, 2020) (Table 75). This means that a majority of the cases (55.7%) were among females, although females comprise 51% of the population.

Table 75: Number of confirmed COVID-19 cases up to 12 September 2020, Republic of Ireland

	Individual tested positive	%
Male	13,689	44.2
Female	17,262	55.7
Unknown	33	0.1

Source: Health Protection Surveillance Centre (2020)

Table 76 outlines the weekly accumulation of confirmed COVID-19 cases in the Republic of Ireland between 5 June and 4 September 2020, and the weekly number of confirmed cases according to gender (CSO, 2020f). For males, the highest number of cases (1,543) was during the week beginning on 27 March, with a decrease until 29 June, followed by a gradual increase. Among females, the peak number of cases (2,292) was during the week beginning 24 April.

Table 76: Weekly accumulation of confirmed COVID-19 cases and weekly number of confirmed cases according to gender, Republic of Ireland

Week commencing (2020)	Male	Female
6 March	101	89
13 March	510	434
20 March	1,502	1,466
27 March	1,543	1,881
3 April	1,351	2,078
10 April	1,259	2,011
17 April	1,108	1,681
24 April	1,285	2,292
1 May	874	984
8 May	443	591
15 May	367	318
22 May	209	280
29 May	151	181
5 June	55	63
12 June	50	58
19 June	30	43
26 June	31	42
3 July	40	51
10 July	60	86
17 July	61	60
24 July	87	72
31 July	158	133
7 August	379	242
14 August	307	331
21 August	365	397
28 August	398	346
4 September	376	398

Source: CSO (2020f) Table 3a

Table 77 reflects the cumulative age and gender specific incidence rates for COVID-19 per 100,000 population in the Republic of Ireland (Health Protection Surveillance Centre, 2020). In general, the incidence rate of COVID-19 cases increases with age for both males and females. For males, the highest rate was evident amongst the older age categories of 75-84 years and 85 years or older. The next highest rates were among males aged 25-34 years and 45-54 years.

Table 77: Cumulative age and sex specific incidence rate of confirmed COVID-19 cases per 100,000 population, up to 12 September 2020, RoI

Age group	Male	Female
0-4 years	98.4	112.5
5-14 years	100.0	101.5
15-24 years	339.9	601.8
25-34 years	730.5	864.5
35-44 years	621.7	781.0
45-54 years	732.7	922.8
55-64 years	652.1	769.1
65-74 years	583.9	481.4
75-84 years	1,266.3	1,175.5
85+	3,534.0	3,605.1

Source: Health Protection Surveillance Centre (2020)

Deaths

There were 1,784 deaths in all COVID-19 cases (up to 12 September 2020). A slight majority (50.7%) of these deaths were among males, although males accounted for a smaller proportion (44.2%) of cases. Table 78 shows that the number of deaths caused by COVID-19 increased with age (Health Protection Surveillance Centre, 2020). Among males, the highest number of deaths (484) was among those aged 85 years or over, which is higher than the number of deaths among females in this age group. Males make up 60% of deaths in this oldest age group, although they comprise 36% of the population.

However, it is important to highlight that Table 78 is based on all COVID-19 cases, including confirmed, possible and probable cases. Probable deaths are those awaiting validation, for example, waiting for lab results. Probable deaths may be reclassified at a future date, which means that statistics are constantly being updated.

Table 78: Number of COVID-19 deaths, by age, up to 12 September 2020, RoI

Age group	Male	Female
15-24 years	<5	<5
25-34 years	<5	<5
35-44 years	6	7
45-54 years	10	17
55-64 years	26	48
65-74 years	94	159
75-84 years	279	328
85+	484	317
Unknown	<5	<5
Total	905 (50.7%)	879 (49.3%)

Source: Health Protection Surveillance Centre (2020) Table 8

NORTHERN IRELAND:

Data sources

- NISRA provide information on COVID-related death statistics at: https://www.nisra.gov.uk/statistics/ni-summary-statistics/coronavirus-covid-19-statistics
- Department of Health provide statistics on cases and deaths related to COVID-19 at: https://www.health-ni.gov.uk/topics/doh-statistics-and-research/covid-19-statistics

Cases

Table 79 outlines the number of males and females in Northern Ireland that have completed a laboratory test for COVID-19 from 29 April 2020 to 14 September 2020 (Department of Health, 2020b). The number of males receiving laboratory tests for COVID-19 is lower than females.

Table 79: Completed laboratory tests for COVID-19, NI

	Individual tested positive	%
Male	3,651	42.9
Female	4,841	56.9
Unknown	10	0.1

Source: Department of Health [Northern Ireland] (2020d)

As of 26 May 2020, the infection rate of COVID-19 was higher by 32% amongst females (308 cases per 100,000 population) than males (234 cases per 100,000 population). However, of individuals testing positive, males (39%) were twice as likely as females to be admitted to hospitals (19%). More specifically, the age standardised hospital admission rate was 429 per 100,000 population; the rate amongst males (494 per 100,000 population) was 29% higher than females (383 per 100,000 population) (Department of Health [Northern Ireland], 2020e).

Deaths

Statistics from NISRA (2020d) show that from the beginning of 2020 to 4 September 2020, 50.2% of COVID-related deaths were amongst males (n=440), whilst 49.8% were female (n=436) (Table 80).

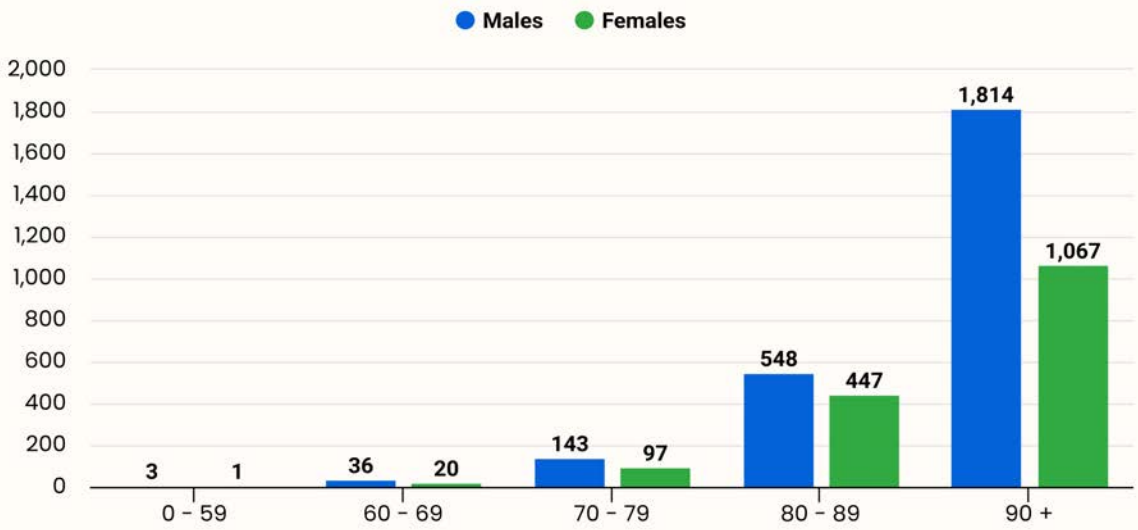
Table 80: Number of COVID-19 deaths, by age, NI, up to 12 September 2020

Age group	Male	Female
Under 15 years	0	0
15-44 years	4	4
45-64 years	37	20
65-74 years	67	47
75-84 years	157	133
85+	175	232
Total	440 (50.2%)	436 (49.8%)

Source: NISRA (2020d)

NISRA's analysis of COVID-19 related deaths during March to May 2020 (NISRA, 2020f) included the age-specific mortality rates for males and females (Figure 21). The mortality rate for both males and females increases consistently with age, particularly for the latter age groups (80-89 and 90+). Overall, males had higher age-specific COVID-19 related mortality rates than females, with the age category of 90 years and over reflecting the highest age-specific mortality rate for males (1,814 per 100,000 males). Although there were similar numbers of male and female deaths that were COVID-19 related, as there were fewer males than females in the older age categories, males had a proportionately higher death rate (NISRA, 2020e).

Figure 21: Age-specific COVID-19 related mortality rates, NI, 1 March 2020 – 31 May 2020



Source: NISRA (2020e)

3.4.2 Risk Factors

International data indicate that males make up the majority of COVID-related deaths in most countries. For example, the Men's Health Forum GB website (https://www.menshealthforum.org.uk/covid-19-statistics-international, updated 5 August) shows that males make up 86% of deaths in Nepal and 71% of deaths in Peru. The Global Health 5050 project (https://globalhealth5050.org/the-sex-gender-and-covid-19-project/the-data-tracker) shows that for every 10 female deaths, there are 14 deaths in males. However, these figures do not take into account the gender-specific death rates (that is, the proportion of deaths per 100,000 people for males and females separately). Research by Bhopal and Bhopal (2020) showed that males have twice the risk of death from COVID-19 compared with females. Nevertheless, while much data have been published on COVID-19, not all of it has been presented by age and sex groups. This means that the public cannot make informed choices about their own risk of disease, and public policy responses cannot be targeted at specific groups (Bhopal and Bhopal, 2020).

Since the beginning of the COVID-19 pandemic, a body of research has emerged that explores the characteristics of the virus, its side effects and associated risk factors. The risk factors identified in the literature are briefly outlined below.

Biological

Several biological explanations for the relationship between male health and COVID-19 are outlined by White and Kirby (2020). By way of example, the authors highlight that the angiotensin converting enzyme 2, also known as ACE2, is the main way coronavirus enters cells. As this enzyme is produced by the X chromosome, females have twice the capacity to create two different forms of it, thus providing greater immune protection from the coronavirus. Moreover, cytokine proteins were also reported as an explanatory biological factor. These proteins are involved in the pro-inflammatory process, and have a protective effect against the virus. However, they are more commonly found in females compared with males.

Health

- *Existing health conditions*: Cardiovascular disease, diabetes, respiratory disease, renal and liver disease have been reported as existing health conditions that can lead to greater COVID-19 infection and mortality rates (Caramelo, Ferreira and Oliveirios, 2020; Beeching, Fletcher and Fowler, 2020; Petrilli et al., 2020; Zheng et al., 2020).

- *Obesity*: Obesity is a risk factor for COVID-19 due to its effects on the metabolic, respiratory, inflammatory and immune system. Obesity can also cause diabetes, an additional risk factor of COVID-19 (Kass, Duggal and Cingolani, 2020).

- *Age*: As outlined in the tables and figures in this section, a greater number of positive COVID-19 cases and higher COVID-19 mortality rates are evident amongst older males. Being male and older than 65 years were identified risk factors of COVID-19 (Sanchis-Gomar et al., 2020; Zheng et al., 2020). Older-aged individuals may be at greater risk of COVID-19 as a result of changes in their immune system over time, such as greater inflammation, less responsive and diverse immune cells (B cells), and decreased levels of vitamin D (Mueller, McNamara and Sinclair, 2020).

Social

- *Ethnicity*: People from ethnic minority backgrounds have been at increased risk of death from COVID-19. This may be due to barriers faced by these people, such as problems in accessing high quality health care, linguistic and cultural barriers in health service facilities and communication, cultural practices in relation to health care, and multigenerational housing. All of these increase the risk of infection transmission.

- *Occupation*: Some occupations have a higher risk of contracting COVID-19 than others, for example, health care workers, or people whose job means that they cannot work at home and who come into contact with people. Analysis by Williams (2020) showed that some male-dominated occupations such as taxi drivers, security guards and van drivers had a higher risk of dying from COVID-19 than other occupations. In addition, people from ethnic minority groups are more likely to be employed in occupational groups that have high exposure to the public and, subsequently, higher infection risk (Aldridge et al., 2020).

- *Lifestyle factors*: Some studies have reported that men have higher rates of smoking than females, and show greater delays in help-seeking behaviours for health-related issues. Both of these are deemed to be risk factors for COVID-19 (Baker, 2020; Zheng et al., 2020).

3.4.3 Discussion

The rate of COVID-19 infections and deaths in the Republic of Ireland and Northern Ireland remains extremely fluid as the pandemic progresses. The figures provided in this chapter provide a snapshot at one point in time (September 2020). Research, to date, indicates that a range of biological and social factors are influential in understanding the risk to men's health during the COVID-19 pandemic. Nevertheless, there are gaps in our knowledge, and it is important to ensure that research and debate explores the intersectionality of gender with other social and economic factors (Smith et al., 2020).

There are several areas relating to the direct and indirect effects of the COVID-19 pandemic on male health (physical and mental). One specific example is the expected rise in unemployment. Previous research has highlighted the mental health challenges for unemployed men during a recession, as well as for those being threatened with unemployment.

The first wave of the *Irish COVID-19 Psychological Survey* showed that mental health problems were common: 41% of respondents reported feeling lonely; 23% reported clinically meaningful levels of depression; 20% reported clinically meaningful levels of anxiety; and 18% reported clinically meaningful levels of post-traumatic stress (Osborne, 2020). The mental health problems affected males and females differently. Females experienced higher levels of depression and anxiety, whereas males experienced higher rates of post-traumatic stress.

The impact of economic and social factors, along with the political context, are therefore of great importance as the pandemic evolves. Specific concerns include loneliness, use of alcohol, suicide and self-harm, and domestic violence.

KEY READING

Smith, J.A. et al. (2020), 'COVID-19, equity and men's health: using evidence to inform future public health policy, practice and research responses to pandemics', *Men's Social and Community Health,* 3(1), pp. 48-64
Available at: https://doi.org/10.22374/ijmsch.v3i1.42

White, A. and Kirby, M. (2020), 'COVID-19: biological factors in men's vulnerability', *Trends in Urology and Men's Health,* 11(4), pp. 7-9
Available at: https://doi.org/10.1002/tre.757

Zheng, Z. et al. (2020), 'Risk factors of critical and mortal COVID-19 cases: A systematic literature review and meta-analysis', *Journal of Infection,* 81, pp. 16-25
Available at: https://doi.org/10.1016/j.jinf.2020.04.021

SECTION 4: MEN'S HEALTH IN IRELAND – FIGURING IT OUT

This report provides an overview of the health of men and boys across the island of Ireland. Section 4 offers some insight into the key trends and messages emerging from the findings of the report, as well as important data-related issues.

4.1 Key trends

- Since 2008, the four main causes of death among males across the island of Ireland continue to be neoplasms, circulatory system diseases, respiratory system diseases, and external causes of injury and poisoning.
- In 2008, circulatory diseases were the leading cause of death. Since then, the death rate for circulatory diseases has fallen. This could be linked to factors such as the decrease in smoking levels and better treatment options.
- Neoplasms are now the leading cause of death among males across the island of Ireland. Reflecting this, the incidence of invasive cancer (excluding non-melanoma skin cancer) has increased since 2008. While this can cause concern, it may also reflect successful screening programmes and better diagnostic tools, as well as improvements in health literacy and help-seeking behaviours among males.
- The three mostly commonly diagnosed cancers across the island of Ireland for males are prostate, colorectal and lung, especially for middle-aged and older men. The incidence of prostate cancer in the Republic of Ireland is the highest in the European Union, and may be a consequence of high levels of PSA testing. The most commonly-diagnosed cancer among males under 45 years of age is testicular cancer.
- In general, incidence rates are higher within areas of socio-economic deprivation, although the reverse is true for testicular cancer, and NMSC. The pattern is less clear for prostate cancer.
- Overall, survival rates for many cancers are improving.
- The number of males dying by suicide across the island of Ireland has fallen since the years of the recession. Rates of suicide among middle-aged men is of increasing concern.
- The number of cases of gonorrhoea and HIV among males is rising in both jurisdictions.

4.2 Key messages

The figures provide some cause for optimism, along with some areas of concern. One key message is that males are not one homogenous group. There are significant differences in the circumstances of males, in their health behaviours and in their health outcomes. It is also important to remember that we all have multiple identities, which can relate to sex, gender, age, nationality, where we live, occupation, sexual identity, family circumstances, and much more. The statistics throughout this report consistently show that people living in areas with higher levels of deprivation tend to have poorer health outcomes (such as lower life expectancy and higher mortality rates), although there are some exceptions.

The increase in life expectancy, and the decrease in mortality rates, means that the population of males across the island of Ireland is ageing. Given the relationship between age and some illnesses, we can expect higher incidence of some cancers and other conditions (such as arthritis) in the future. Health-related and help-seeking behaviours will also have an impact on future incidence rates.

Understanding the relationship between physical health and mental health is essential: there can be no health without mental health. The social and economic context is also significant, as seen in the increased suicide figures in the Republic of Ireland during a previous economic crisis. At a time of increasing concern about mental health and suicide, the *Connecting for Life* policy highlights the significance of connections within our inter-personal relationships and among services.

4.3 Data-related issues

The availability of the freely-accessible data sources allows for a comprehensive overview of various public health and social issues that affect males within the Republic of Ireland and Northern Ireland. Moreover, trends in demography and health outcomes can be identified, and the impact of social issues and policy changes can be inferred. Despite this, there were several data-related problems that we encountered, that meant that we could not directly compare data between jurisdictions or over time. The follow discussion highlights some of these issues, but is not an exhaustive list.

4.3.1 Gaps in existing data

This report covers a wide range of factors influencing men's health on the island of Ireland. However, data were not available for several key topics. In particular, information on specific health conditions and illnesses was unobtainable, except for those conditions which are reported to national registries or surveillance centres (for example, cancer and HIV).

Due to these gaps, we contacted data suppliers to obtain background information on the data sources, clarity about the published data, and a breakdown of reported trends. Therefore, time considerations in waiting for responses from data suppliers should be accounted for in project timelines. In addition, contingency plans for a lack of necessary data, or no response from data suppliers, should also be considered.

4.3.2 Data disaggregation

Across topics, there was an evidential need for greater data disaggregation to explore social and health trends for males and females separately, and for specific male groups. Examples include:

- Health outcomes (particularly illness and disease prevalence) disaggregated according to sex.
- Demographics, social harms, health outcomes and health behaviours disaggregated according to sex and other factors, such as socio-economic status (SES), age, ethnicity, residential location and marital/relationship status.
- Health research on at risk groups of males, such as men who identify as LGBT, single, residing in a rural setting, from a lower socio-economic background and experiencing poor mental health.

However, we acknowledge that data providers may not release specific data due to the need to maintain anonymity. We also recognise that statistics are often collected for specific administrative purposes which do not require disaggregation by subgroups (for example, for the Quality and Outcomes Framework for GP Practices in Northern Ireland).

4.3.3 Intersectionality of data

Along with the greater need for disaggregating data, there is additional value in exploring the intersectionality of data (that is, the relationship between a range of factors or characteristics). In order to do this, researchers and data providers need to acknowledge:

- That data can provide a vital opportunity to examine the intersectionality of sex with other demographic factors such as socio-economic status, age, ethnicity, residential location and marital status.
- How the intersectionality of factors affect the health of males.
- That the intersectionality of data will provide a greater insight and understanding into health outcomes and trends over time.

4.3.4 Data measurement

Issues relating to data measurement include consistency in the reporting of statistics, as well as the validity of the measurement of specific concepts and outcomes. Some examples are outlined below:

- European Age Standardised Rate (EASR): this is the rate (for example, incidence or mortality) that would have been found if the population of a specific region had the same age-composition (proportion of total population in each five year age class) as a hypothetical European population. There are two versions of calculating this, one devised in 1976 and one devised in 2013. The use of the EASR allows for comparisons to be made across countries, as long as the same European Standard Population is used. For some of the cancer-related statistics, however, different EASR classifications are used, making it difficult to compare rates across the island of Ireland.

- Suicide: at present, death statistics by suicide in Northern Ireland comprise ICD-10 codes X60-X84, Y10-Y34, Y87.0 and Y87.2. However, due to a quality issue, NISRA is reviewing the Northern Ireland suicide deaths data series between 2015 and 2018. NISRA currently recommends that users refer to the statistics relating to self-inflicted injury only (ICD-10 codes X60-84, Y87.2), as these figures will be unaffected by any change and remain a reliable indication of suicide over the years. This recommendation varies from the ICD-10 codes used to determine deaths by suicide in the Republic of Ireland (X60-X84), highlighting further the difficulty of ensuring accurate comparisons between jurisdictions.

- Mental health and wellbeing: measurement of these concepts across the populations is difficult, as statistics often relate to hospitalisation or death rates. To gain an understanding of mental health and wellbeing amongst males in Ireland, survey data must be used. Such data often indicate higher rates of mental illness (such as depression) among females compared with males. However, males and females may experience different symptoms. It has been argued that many of the scales used to measure mental disorders (such as the General Health Questionnaire) are based on symptoms that are more appropriate for females. Therefore, these measurement scales may not be best placed to identify mental disorders among males (White, 2006). Surveys may also ask participants to rate their health, leading to under-reporting of certain conditions, especially those relating to mental health and wellbeing.

4.4 Concluding remarks

Addressing the issues highlighted in this report will require changes at personal, societal, service delivery and policy levels. Male health policies and strategies are important to raise the profile of the health issues affecting boys and men. The Republic of Ireland was the first country in the world to adopt a *National Men's Health Policy*, although there is no such policy within Northern Ireland. Thus, the development of such a policy document or framework in Northern Ireland is vital, as is the inclusion of male health in other relevant policy documents (for example, a gender equality strategy, and policies relating to mental health and suicide). However, these need to be supported by the commitment of financial and other resources. There also needs to be an accountability, monitoring and evaluation process built into the policy timeframe. The availability of high-quality data is an integral part of this.

The use of data from government and other sources allowed us to identify trends and key issues impacting upon the health of men and boys across the island of Ireland. However, we also encountered a range of data-related issues, including gaps in statistics, a lack of data disaggregation, and variation in the data collected and the definitions used between the Republic of Ireland and Northern Ireland. Moving forward, it would be beneficial if a greater availability of disaggregated data for health outcomes, behaviours and social harms were provided across both jurisdictions, or on an all-island basis. This would allow for comprehensive understanding of male health and wellbeing to inform appropriate policy, practice and interventions.

Despite the statistical robustness of government datasets, the data did not allow us to explore the circumstances of specific groups. For example, some groups are numerically small, or are hidden populations (such as homeless or trans males or some minority ethnic communities), and so are invisible within government statistics. Survey data played an important role in providing information on these groups of males.

This report focused on trends in male health since *Men's Health in Ireland* was published in 2004. Going forward, many of these trends are likely to change as a result of COVID-19. The ongoing impact of this pandemic on the physical, mental, social and financial wellbeing of men and boys is unprecedented, and will have long lasting effects.

CASE STUDY

'CHALLENGES AND CHOICES' MAN MANUAL

The 'Challenges and Choices' Man Manual is a free booklet which highlights ten key men's health issues. It then: issues a realistic and practical challenge to improve the reader's health in each area of concern; provides a reason for why it is important to consider taking action; offers three possible choices for what actions can be taken; signposts the reader to local sources of help and support.

https://www.mhfi.org/challenges2020.pdf

REFERENCES

Aldridge, R.W. et al. (2020), 'Black, Asian and Minority Ethnic groups in England are at increased risk of death from COVID-19: indirect standardisation of NHS mortality data', *Wellcome Open Research*
Available at: https://doi.org/10.12688/wellcomeopenres.15922.2

All Ireland Traveller Health Study Team (2010), *All Ireland Traveller Health Study, Summary of Findings*, Dublin: University College Dublin
Available at: https://www.paveepoint.ie/wp-content/uploads/2013/10/AITHS-Summary-of-Findings.pdf

Baker, P. et al. (2014), *The men's health gap: men must be included in the global health equity agenda*, Bulletin of the World Health Organization
Available at: https://www.who.int/bulletin/volumes/92/8/13-132795/en/

Baker, P. (2015), *Review of the National Men's Health Policy and Action Plan 2008-2013: Final report for the Health Service Executive*
Available at: https://www.mhfi.org/policyreview2015.pdf

Baker, P. (2020), *Our own fault? Men and COVID-19 (Blog post)*, London: Men's Health Forum
Available at: https://www.menshealthforum.org.uk/news/our-own-fault-men-and-covid-19

Baker, P. and Brown, A. (2018), 'Men's Health: Time for a Policy Response', *International Journal of Men's Social and Community Health*, 1(Special Issue 1), pp. e1-e5

Barker, G. et al. (2010), 'Questioning gender norms with men to improve health outcomes: evidence of impact', *Global Public Health*, 5(5), pp. 539-553
Available at: https://doi.org/10.1080/17441690902942464

Barry, M.M. et al. (2009), SLÁN 2007: *Survey of Lifestyle, Attitudes and Nutrition in Ireland. Mental Health and Social Well-being Report*, Dublin: Department of Health and Children
Available at: https://www.ucd.ie/issda/t4media/slan_wellbeing_report.pdf

Barth, J., Schneider, S. and von Känel, R. (2010), 'Lack of social support in the etiology and the prognosis of coronary heart disease: a systematic review and meta-analysis', *Psychosomatic Medicine*, 72(3), pp. 229-238
Available at: https://doi.org/10.1097/PSY.0b013e3181d01611

Beeching, N.J., Fletcher, T.E. and Fowler, R. (2020), 'Coronavirus disease 2019 (COVID-19)', *BMJ Best Practice*
Available at: https://bestpractice.bmj.com/topics/en-gb/3000201

Belfast Telegraph (2020), *90% rise in eating disorder cases 'is just tip of iceberg' in Northern Ireland*
Available at: https://www.belfasttelegraph.co.uk/news/northern-ireland/90-rise-in-eating-disorder-cases-is-just-tip-of-iceberg-in-northern-ireland-38919617.html

Bhopal, S. and Bhopal, R. (2020), 'Sex differential in COVID-19 mortality varies markedly by age', *The Lancet*, 396(10250), pp. 532-533
Available at: https://doi.org/10.1016/S0140-6736(20)31748-7

Bodywhys (2020), *Understanding Eating Disorders*
Available at: https://www.bodywhys.ie/understanding-eating-disorders

Bradley, D.T. et al. (2015), 'Reasons for non-participation in the Northern Ireland Bowel Cancer Screening Programme: A qualitative study', *BMJ Open*, 5, pp. e008266
Available at: https://doi.org/10.1136/bmjopen-2015-008266

Braveman, P. and Gottlieb, L. (2014), 'The social determinants of health: it's time to consider the causes of the causes', *Public Health Reports*, 129(2), pp. 19-31
Available at: https://doi.org/10.1177/00333549141291S206

Breen, C. (2010), *Approaches to health policy in Ireland, North and South*, Dublin: Centre for Ageing Research and Development in Ireland (CARDI)

British Heart Foundation (2020), *Cardiovascular disease statistics 2020*
Available at: https://www.bhf.org.uk/what-we-do/our-research/heart-statistics/heart-statistics-publications/cardiovascular-disease-statistics-2020

British Medical Association Northern Ireland (2011), *Improving Men's Health in Northern Ireland*
Available at: https://www.mhfi.org/bmamenspolicy.pdf

Brogden, M. and Nijhar, S.K. (not dated), *Abuse of adult males in intimate partner relationships in Northern Ireland.*
Available at: https://citeseerx.ist.psu.eduviewdocdownload?doi=10.1.1.566.4532&rep=rep1&type=pdf

Brown, A. and Jennings, S. (2014), *Country report Ireland, European Society of Cardiology*
Available at: https://www.escardio.org/static-file/Escardio/Subspecialty/EACPR/ireland-country-report.pdf

Bunting, B.P. et al. (2013), 'Trauma associated with civil conflict and posttraumatic stress disorder: evidence from the Northern Ireland study of health and stress', *Journal of Traumatic Stress*, 26(1), pp. 134-141
Available at: https://doi.org/10.1002/jts.21766

Burns, S., Leitch, R. and Hughes, J. (2015), *Education Inequalities in Northern Ireland*, Belfast: Queen's University Belfast
Available at: https://www.equalityni.org/ECNI/media/ECNI/Publications/Delivering%20Equality/EducationInequality-SummaryReport.pdf

Campbell, T., Lennon, A. and McCallion, J. (2020), *Qualifications and Destinations of Northern Ireland School Leavers 2018-19*, Bangor: Department of Education
Available at: https://www.education-ni.gov.uk/articles/school-leavers

Campbell, P. and Rice, A. (2017), *Experience of Domestic Violence: Findings from the 2011/12 to 2015/16 Northern Ireland Crime Surveys*, Research and Statistical Bulletin 17/2017, Belfast: Northern Ireland Statistics and Research Agency
Available at: https://www.justice-ni.gov.uk/sites/default/files/publications/justice/experience-of-domestic-violence-findings-201112-201516-northern-rreland-crime-surveys.pdf

Caramelo F., Ferreira N. and Oliveiros B., (2020), 'Estimation of risk factors for COVID-19 mortality – preliminary results', *medRxiv* (preprint)
Available at: https://doi.org/10.1101/2020.02.24.20027268

Carson, P., Blakley, H. and Laverty, C. (2019), *NI Health and Social Care Inequalities Monitoring System: Life Expectancy in Northern Ireland 2016-18*, Belfast: Department of Health
Available at: https://www.health-ni.gov.uk/sites/default/files/publications/health/hscims-life-expectancy-ni-2016-18.pdf

Carson, P. et al. (2020), *NI Health and Social Care Inequalities Monitoring System: Health Inequalities Annual Report 2020*, Belfast: Department of Health
Available at: https://www.health-ni.gov.uk/sites/default/files/publications/health/hscims-report-2020.pdf

Central Statistics Office [CSO] (2017a), *Census of Population 2016 – Profile 7 Migration and Diversity*
Available at: https://www.cso.ie/en/releasesandpublications/ep/p-cp7md/p7md

Central Statistics Office [CSO] (2017b), *Census of Population 2016 – Profile 5 Homeless Persons in Ireland*
Available at: https://www.cso.ie/en/releasesandpublications/ep/p-cp5hpi/cp5hpi

Central Statistics Office [CSO] (2017c), *Women and Men in Ireland 2016*
Available at: https://www.cso.ie/en/releasesandpublications/ep/p-wamii/womenandmeninireland2016/health

Central Statistics Office [CSO] (2019a), *Mortality Differentials in Ireland 2016-2017*
Available at: https://www.cso.ie/en/releasesandpublications/in/mdi/mortalitydifferentialsinireland2016-2017

Central Statistics Office [CSO] (2019b), Statbank Table *VSA08: Deaths occurring by sex, cause of death, age at death and year*

Central Statistics Office [CSO] (2020a), *Population and Migration Estimates*
Available at: https://www.cso.ie/en/releasesandpublications/er/pme/populationandmigrationestimatesapril2020/

Central Statistics Office [CSO] (2020b), *Census of Population 2016 – Profile 4 Households and Families*
Available at: https://www.cso.ie/en/releasesandpublications/ep/p-cp4hf/cp4hf/ms

Central Statistics Office [CSO] (2020c), *Census of Population 2016 – Profile 10 Education, Skills and the Irish Language*
Available at: https://www.cso.ie/en/releasesandpublications/ep/p-cp10esil/p10esil/le

Central Statistics Office [CSO] (2020d), *Women and Men in Ireland 2019*
Available at: https://www.cso.ie/en/releasesandpublications/ep/p-wamii/womenandmeninireland2019

Central Statistics Office [CSO] (2020e), *Recorded Crime Victims 2019 and Suspected Offenders 2018*
Available at: https://www.cso.ie/en/releasesandpublications/ep/p-rcvo/recordedcrimevictims2019andsuspectedoffenders2018

Central Statistics Office [CSO] (2020f), *COVID-19 Deaths and Cases, Series 10*
Available at: https://www.cso.ie/en/releasesandpublications/br/b-cdc/covid-19deathsandcasesseries10

Cho, J. et al. (2011), 'The relationship between physical health and psychological well-being among oldest-old adults', *Journal of Aging Research*, article ID 605041
Available at: https://doi.org/10.4061/2011/605041

Clarke, N. et al. (2013), *A report on the excess burden of cancer among men in the Republic of Ireland*, Cork: National Cancer Registry Ireland
Available at: https://www.ncri.ie/sites/ncri/files/pubs/ReportOnTheExcessBurdenofCancerAmongMenintheRepublicofIreland%28FullReport%29.pdf

Cosc (2016), *Second National Strategy on Domestic, Sexual and Gender-based Violence 2016-2021*, Dublin: Cosc
Available at: http://www.cosc.ie/en/COSC/Second%20National%20Strategy.pdf/Files/Second%20National%20Strategy.pdf

Courtin, E. and Knapp, M. (2017), 'Social isolation, loneliness and health in old age: a scoping review', *Health and Social Care in the Community*, 25(3), pp. 799-812
Available at: https://doi.org/10.1111/hsc.12311

Criminal Justice Inspection Northern Ireland [CJINI] (2018), *Report on an unannounced inspection of Maghaberry Prison, 9-19 April 2018*, Belfast: CJINI
Available at: http://www.cjini.org/getattachment/cedf8f4d-34e8-47e1-916d-8fb31c141b8d/picture.aspx

Crisp, A. (2006), 'Anorexia Nervosa in Males: Similarities and Differences to Anorexia Nervosa in Females', *European Eating Disorders Review*, 14, pp. 163-167
Available at: http://dx.doi.org/10.1002/erv.703

Cruise, S.M. et al. (2017), 'The impact of risk factors for coronary heart disease on related disability in older Irish adults', *Journal of Aging and Health*, 31(1), pp. 165-184

Deane, K.D. et al. (2017), 'Genetic and environmental risk factors for rheumatoid arthritis', *Best Practice Research in Clinical Rheumatology*, 31(1), pp. 3-18
Available at: https://doi.org/10.1016/j.berh.2017.08.003

Department for Communities (2019), *Northern Ireland Housing Statistics 2018-19*, Belfast: Department for Communities
Available at: https://www.communities-ni.gov.uk/system/files/publications/communities/ni-housing-stats-18-19-full-copy.PDF

Department for Communities (2020), *Minister announces work is to commence on development of Social Inclusion Strategies*
Available at: https://www.communities-ni.gov.uk/news/minister-announces-work-commence-development-social-inclusion-strategies

Department of Finance (2020), *FOI DOF/2020-0006 – Deaths as a Result of an Eating Disorder in NI from 1999*, Belfast: Department of Finance
Available at: https://www.finance-ni.gov.uk/publications/foi-dof2020-0006-deaths-result-eating-disorder-ni-1999

Department of Health [Australia] (2020a), *National Men's Health Strategy 2020-2030*, Canberra: Australian Government Department of Health
Available at: https://www1.health.gov.au/internet/main/publishing.nsf/content/86BBADC780E6058CCA257BF000191627/$File/19-0320%20National%20Mens%20Health%20Strategy%20Print%20ready%20accessible1.pdf

Department of Health [Ireland] (2015), *Connecting for Life: Ireland's National Strategy to Reduce Suicide 2015-2020*, Dublin: Department of Health
Available at: https://www.hse.ie/eng/services/list/4/mental-health-services/nosp/preventionstrategy/connectingforlife.pdf

Department of Health [Ireland] (2019a) *Health in Ireland – Key Trends 2019*, Dublin: Department of Health
Available at: https://www.gov.ie/en/publication/f1bb64-health-in-ireland-key-trends-2019

Department of Health [Ireland] (2019b), *Healthy Ireland Summary Report 2019*, Dublin: Department of Health
Available at: https://assets.gov.ie/41141/e5d6fea3a59a4720b081893e11fe299e.pdf

Department of Health [Northern Ireland] (2019a), *Protect Life 2: A Strategy for Preventing Suicide and Self Harm in Northern Ireland 2019-2024*, Belfast: Department of Health
Available at: https://www.health-ni.gov.uk/sites/default/files/publications/health/pl-strategy.PDF

Department of Health [Northern Ireland] (2019b), *Quality and Outcomes Framework 2018-19*, Belfast: Department of Health
Available at: https://www.health-ni.gov.uk/sites/default/files/publications/health/qof-stats-ni-2018-19.pdf

Department of Health [Northern Ireland] (2020a), *Health Survey NI Trend Tables 2018/19*, Belfast: Department of Health
Available at: https://www.health-ni.gov.uk/sites/default/files/publications/health/hsni-trend-tables-18-19.xlsx

Department of Health [Northern Ireland] (2020b) *Young Persons Behaviour and Attitudes Survey 2019 – Substance Use Data tables*
Available at: https://www.health-ni.gov.uk/publications/young-persons-behaviour-and-attitudes-survey-2019-substance-use-data-tables

Department of Health [Northern Ireland] (2020c), *Mental Health Action Plan*, Belfast: Department of Health
Available at: https://www.health-ni.gov.uk/sites/default/files/publications/health/mh-action-plan-plus-covid-response-plan.pdf

Department of Health [Northern Ireland] (2020d), *COVID-19 Daily Dashboard*
Available at: https://www.health-ni.gov.uk/sites/default/files/publications/health/doh-db-150920.pdf

Department of Health [Northern Ireland] (2020e), *Coronavirus related health inequalities report*, Belfast: Department of Health
Available at: https://www.health-ni.gov.uk/sites/default/files/publications/health/Coronavirus-related-health-inequalities-report.pdf

Department of Health and Ageing (2010), *National Male Health Policy: Building on the strengths of Australian males*, Canberra: Australian Government Department of Health
Available at: https://www1.health.gov.au/internet/main/publishing.nsf/Content/7935AC78159969D4CA257BF0001C6B07/$File/MainDocument.pdf

Department of Health and Children (2009), *National Men's Health Policy 2008-2013: working with men in Ireland to achieve optimum health and wellbeing*, Dublin: Department of Health and Children
Available at: https://www.mhfi.org/menshealthpolicy.pdf

Department of Health and Children (2010), *Changing Cardiovascular Health: National Cardiovascular Health Policy 2010-2019*, Dublin: Department of Health and Children
Available at: https://assets.gov.ie/14907/9fa9221a41374006a7fc2e1d4c4706fc.pdf

Devine, P. et al. (2014), *A review of service provision for men aged 50+ (Belfast)*, Belfast: Volunteer Now
Available at: https://www.ark.ac.uk/ap/wp-content/uploads/2020/08/oldermenreport.pdf

Donnelly, D.W., Anderson, L.A. and Gavin, A. (2020), 'Cancer incidence projections in Northern Ireland to 2040', *Cancer Epidemiology, Biomarkers and Prevention*, 29(7)
Available at: https://www.qub.ac.uk/research-centres/nicr/FileStore/PDF/Filetoupload,965682,en.pdf

Donnelly, D.W. and Gavin, A.T. (2020), *Cancer Incidence Trends 1993-2013 with projections to 2035*, Belfast: Northern Ireland Cancer Registry
Available at: https://www.qub.ac.uk/research-centres/nicr/FileStore/PDF/NIrelandReports/Filetoupload,531911,en.pdf

Donnelly, M., Cruise, S. and O'Reilly, D. (2017), 'Health Service Utilisation by Older People', in Cruise, S. and Kee, F. (eds.), *Early key findings from a study of older people in Northern Ireland. The NICOLA Study*, Belfast: Queen's University Belfast, pp. 80-88
Available at: https://www.qub.ac.uk/sites/NICOLA/FileStore/Filetoupload,783215,en.pdf

Drewnowski, A. (2007), 'The real contribution of added sugars and fats to obesity', *Epidemiological Review*, 29, pp. 160-171
Available at: https://doi.org/10.1093/epirev/mxm011

Egan, K.B. (2016) 'The Epidemiology of Benign Prostatic Hyperplasia Associated with Lower Urinary Tract Symptoms. Prevalence and Incident rates', *Urologic Clinics of North America*, 43, pp. 289-297

Esmailzade, H. et al. (2016), 'Devising a National Men's Health Policy Document: The Current Challenges to Men's Health in Iran', *International Journal of Men's Health*, 15(2), pp. 174-193
Available at: https://www.researchgate.net/publication/308618448_Devising_a_National_Men%27s_Health_Policy_Document_The_Current_Challenges_to_Men%27s_Health_in_Iran

European Centre for Disease Prevention and Control [ECDC]/WHO Regional Office for Europe (2019), *HIV/AIDS surveillance in Europe 2019-2018 data*, Stockholm: ECDC
Available at: https://www.ecdc.europa.eu/sites/default/files/documents/hiv-surveillance-report-2019.pdf

European Commission (2018), *Annual Accident Report 2018* (EU28)
Available at: https://ec.europa.eu/transport/road_safety/sites/roadsafety/files/pdf/statistics/dacota/asr2018.pdf

European Men's Health Forum (2005), *The Vienna Declaration on the health of men and boys in Europe*
Available at: https://www.yumpu.com/en/document/read/5780580/the-vienna-declaration-european-mens-health-forum

Farrimond, H. (2011), 'Beyond the caveman: Rethinking masculinity in relation to men's help-seeking', *Health*, 16(2), pp. 208-225
Available at: https://doi.org/10.1177/1363459311403943

Federici, A. et al. (2006), 'The role of GPs in increasing compliance to colorectal cancer screening: a randomised controlled trial (Italy)', *Cancer causes control*, 17(1), pp. 45-52
Available at: https://doi.org/10.1007/s10552-005-0380-9

Fitzpatrick, S. et al. (2020), *The homelessness monitor for Northern Ireland 2020*, London: Crisis
Available at: https://www.crisis.org.uk/media/241613/the_homelessness_monitor_northern_ireland_2020.pdf

Foster, C., Scarlett, M. and Stewart, B. (2019), *Census of Drug and Alcohol Treatment Services in Northern Ireland*, Belfast: Department of Health
Available at: https://www.health-ni.gov.uk/sites/default/files/publications/health/drug-alcohol-census-2019.html

Foster, T. (2011), 'Adverse Life Events Proximal to Adult Suicide: A Synthesis of Findings from Psychological Autopsy Studies', *Archives of Suicide Research*, 15(1), pp. 1-15
Available at: https://doi.org/10.1080/13811118.2011.540213

Gallagher, A.G. and Sheehy, N.P. (1994), 'Suicide in rural communities', *Journal of Community and Applied Social Psychology*, 4(3), pp. 145-155
Available at: https://doi.org/10.1002/casp.2450040302

Garcia, F. (2013), *Coping and suicide amongst 'the lads': expectations of masculinity in post-traditional Ireland*, PhD Thesis, NUI Maynooth
Available at: https://pdfs.semanticscholar.org/c751/612f9650b7032854b243879e46d197693bb1.pdf

Giuliano, A., Palefsky, J. and Goldstone, S. (2011), 'Efficacy of quadrivalent HPV vaccine against HPV infection and disease in males', *New England Journal of Medicine*, 364(5), pp. 401-411
Available at: https://doi.org/10.1056/nejmoa0909537

Government of Ireland (2020), *COVID-19 Ireland – Detailed Profile of Total Cases*
Available at: https://covid19ireland-geohive.hub.arcgis.com/pages/detailed-profile-of-cases

Griffin, E. et al. (2019), *National Self-Harm Registry Ireland Annual Report 2018*, Cork: National Suicide Foundation
Available at: https://www.nsrf.ie/wp-content/uploads/2019/10/NSRF-National-Self-Harm-Registry-Ireland-Annual-Report-2018-for-website.pdf

Harland, K. and McCready, S. (2012), *Taking Boys Seriously: A Longitudinal Study of Adolescent Male School-Life Experiences in Northern Ireland*, Belfast: Ulster University
Available at: https://pure.ulster.ac.uk/files/11350226/Taking_Boys_Seriously_DE_FINAL_PDF.pdf

Harvard Medical School (2017), *Gender matters: heart disease risk in women*, Cambridge, MA: Harvard Health Publishing
Available at: https://www.health.harvard.edu/heart-health/gender-matters-heart-disease-risk-in-women

Health Protection Surveillance Centre [HPSC] (2010), *Annual Report 2009*
Available at: https://www.hpsc.ie/abouthpsc/annualreports/annualepidemiologicalreports1999-2016/File,4751,en.pdf

Health Protection Surveillance Centre [HPSC] (2011), *Sexually transmitted infections in Ireland, 2010*, Dublin: Health Protection Surveillance Centre
Available at: https://www.hpsc.ie/a-z/sexuallytransmittedinfections/publications/stireports/2010-2012reports/File,15423,en.pdf

Health Protection Surveillance Centre [HPSC] (2019), *Sexually Transmitted Infection (STI) notifications, Ireland, 2018*, Dublin: Health Protection Surveillance Centre
Available at: https://www.hpsc.ie/a-z/sexuallytransmittedinfections/publications/stireports/2018reports/STI%20annual%20data%20tables%202018%20v1.pdf

Health Protection Surveillance Centre (2020), *Epidemiology of COVID-19 in Ireland*, 14 September 2020, Dublin: Health Protection Surveillance Centre
Available at: https://www.hpsc.ie/a-z/respiratory/coronavirus/novelcoronavirus/casesinireland/epidemiologyofcovid-19inireland

Health Research Board (2019a), *Activities of Irish Psychiatric Units and Hospitals 2018*, Dublin: Health Research Board
Available at: https://www.hrb.ie/fileadmin/2._Plugin_related_files/Publications/2019_Publication_files/MHIS/NPIRS_Activities_2018_all_tables.pdf

Health Research Board (2019b), *Irish Psychiatric Units and Hospitals Census 2019 Main Findings*, Dublin: Health Research Board
Available at: https://www.hrb.ie/fileadmin/2._Plugin_related_files/Publications/2019_Publication_files/2019_HIE/NPIRS/Census/Irish_Psychiatric_In-patient_Census_2019_Main_Findings.pdf

Health Research Board (2018), *Drug Treatment in Ireland 2012 to 2018*, Dublin: Health Research Board
Available at: https://www.drugsandalcohol.ie/30969/

Health and Safety Executive for Northern Ireland [HSENI] (not dated) *Occupational lung disease*
Available at: https://www.hseni.gov.uk/articles/occupational-lung-disease

Health Service Executive (2016), *Healthy Ireland – Men HI-M 2017-2021: Working with men in Ireland to achieve optimum health and wellbeing*, Dublin: Health Service Executive
Available at: https://www.mhfi.org/HI-M.pdf

Health Service Executive (2020), *HSE Management Data Report December 2018*, Dublin: Health Services Executive
Available at: https://www.hse.ie/eng/services/publications/performancereports/december-2019-management-data-report.pdf

Healthcare Pricing Office (2019), *Activity in Acute Public Hospitals in Ireland Annual Report, 2018*, Dublin: Health Service Executive
Available at: http://www.nprs.ie/latest_hipe_nprs_reports/HIPE_2018/HIPE_Report_2018.pdf

Higgins, A. et al. (2016), *The LGBTIreland Report: national study of the mental health and wellbeing of lesbian, gay, bisexual, transgender and intersex people in Ireland*, Dublin: GLEN and BeLonG To
Available at: https://www.tcd.ie/equality/assets/docs/LGBTIrelandReport_KeyFindings.pdf

Horgan, J. et al. (2008), *Attitudes to domestic abuse in Ireland. Report of a survey on perceptions and beliefs of domestic abuse among the general population of Ireland*, Dublin: Cosc
Available at: http://www.cosc.ie/en/COSC/Cosc_Attitudinal_Report_08.pdf/Files/Cosc_Attitudinal_Report_08.pdf

Houses of the Oireachtas (2019), *Mental Health Services Expenditure*
Available at: https://www.oireachtas.ie/en/debates/question/2019-10-10/7

Hughes, J. et al. (2017), 'Cardiovascular risk factors – using repeated cross-sectional surveys to assess time trends in socio-economic inequalities in neighbouring countries', *BMJ Open*, 7, p. e013442
Available at: https://doi.org/10.1136/bmjopen-2016-013442

Institute of Public Health in Ireland, Dillon, B. and Butler, P. (2011), *Facing the Challenge. The Impact of Recession and Unemployment on Men's Health in Ireland*, Dublin: The Institute of Public Health in Ireland
Available at: https://www.mhfi.org/IPHreport2011.pdf

Irish Prison Service (not dated), *Persons committed each year by age and gender from years 2007 to 2019*, Longford: Irish Prison Service
Available at: https://www.irishprisons.ie/wp-content/uploads/documents_pdf/AGE-AND-GENDER-Year-2007-to-2019.pdf

Irish Prison Service (2020), *Self-harm in Irish Prisons 2018. Second report from the Self-Harm Assessment and Data Analysis (SADA) Project*, Longford: Irish Prison Service
Available at: https://www.nsrf.ie/wp-content/uploads/2020/08/Self-harm-in-Irish-Prisons-2018-Second-report-from-the-SADA-Project.pdf

Ivers, J. and Barry, J. (2019), *Mortality amongst the homeless population in Dublin*, Dublin: Trinity College Dublin
Available at: http://drugs.ie/images/uploads/Mortality_amongst_the_homeless_population_in_Dublin_(3).pdf

Kass, D.A., Duggal, P. and Cingolani, O. (2020), 'Obesity could shift severe COVID-19 disease to younger ages', *The Lancet*, 395
Available at: https://doi.org/10.1016/S0140-6736(20)31024-2

Kivimäki, M. et al. (2020), 'Association between socio-economic status and the development of mental and physical health conditions in adulthood: a multi-cohort study', *Lancet Public Health*, 5, pp. 140-149
Available at: https://doi.org/10.1016/S2468-2667(19)30248-8

Lima, D.C. and Schwarz, E. (2018), 'The Brazilian National Policy of Comprehensive Healthcare to Men', *International Journal of Men's Social and Community Health*, 1 (Special Issue 1), pp. e35-e49

Macdonald, J. (2018), 'The Australian Male Policy: Unfinished Business', *International Journal of Men's Social and Community Health*, 1 (Special Issue 1), pp. e50-e56

MacNamara, C., Varley, L. and McNamara, P.M. (2016), *Improving Prison Conditions by Strengthening the Monitoring of HIV, HCV, TB and Harm Reduction Mapping Report Ireland*, Dublin: Irish Penal Reform Trust
Available at: https://www.iprt.ie/site/assets/files/6371/prisonprojectreport_ireland_print_a5.pdf

Maguire, S. et al. (2020), 'Common susceptibility loci for male breast cancer', *Journal of the National Cancer Institute*, djaa101
Available at: https://doi.org/10.1093/jnci/djaa101

Man Matters (Prepared by Noel Richardson and Nick Clarke) (2011), *Men's Health in Northern Ireland: Tackling the Root Causes of Men's [ill]-Health*, Man Matters Policy Briefing Paper 1
Available at: https://www.mhfi.org/manmattersbriefing1.pdf

McFerran, E. and O'Mahony, J.F. (2017), 'How Ireland's colorectal screening programme could save more lives, save money and stay within existing colonoscopy capacity limits: evidence from the miscan microsimulation model', *Value in Health*, 20, p. 408

McNicholas, F. et al. (2012), 'The Impact of Self-Reported Pubertal Status and Pubertal Timing on Disordered Eating in Irish Adolescents', *European Eating Disorders Review*, 20, pp. 355-362

McNicholas, T. and Laird, E. (2018), 'Change in chronic disease prevalence and health behaviours over the first four waves of TILDA', in Turner, N., Donoghue, O. and Kenny, R.A. (eds.), *Wellbeing and Health in Ireland's over 50s 2009-2016*. Dublin: TILDA
Available at: https://tilda.tcd.ie/publications/reports/pdf/w4-key-findings-report/Chapter%206.pdf

Men's Health Forum in Ireland [MHFI] (Prepared by Rachel McEvoy and Noel Richardson) (2004), *Men's Health in Ireland*, Dublin: Men's Health Forum in Ireland
Available at: https://www.mhfi.org/fullreport.pdf

Men's Health Forum in Ireland [MHFI] (Prepared by Shane O'Donnell and Noel Richardson) (2018), *Middle-Aged Men and Suicide in Ireland*, Dublin: Men's Health Forum in Ireland
Available at: https://www.mhfi.org/MAMRMreport.pdf

Mental Health Ireland (2020), *Five Ways to Well-being*
Available at: https://www.mentalhealthireland.ie/five-ways-to-wellbeing

Milner, A. et al. (2013), 'Suicide by occupation: systematic review and meta analysis', *British Journal of Psychiatry*, 203(6), pp. 409-416
Available at: https://doi.org/10.1192/bjp.bp.113.128405

Mosca, L., Barrett-Connor, E. and Wenger, N.K. (2011), 'Sex/gender differences in cardiovascular disease prevention what a difference a decade makes', *Circulation*, 124(19), pp. 2145-2154
Available at: https://doi.org/10.1161/CIRCULATIONAHA.110.968792

Mueller, A.L., McNamara, M.S. and Sinclair, D.A. (2020), 'Why does COVID-19 disproportionately affect older people?', *Aging*, 12(10), pp. 9959-9981
Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7288963/pdf/aging-12-103344.pdf

Murray, C. (2019), *"Do your whack": Investigating the needs and experiences of young men imprisoned in Northern Ireland*, ARK Policy Brief 13
Available at: https://www.ark.ac.uk/ARK/sites/default/files/2019-11/policybrief13_0.pdf

National Cancer Registry of Ireland [NCRI] (2016), *Cancer trends number 30: prostate*, Cork: NCRI
Available at: https://www.ncri.ie/sites/ncri/files/pubs/prostateTrends2016.pdf

National Cancer Registry Ireland [NCRI] (2018a), *Cancer factsheet: Prostate*, Cork: NCRI
Available at: https://www.ncri.ie/sites/ncri/files/factsheets/Factsheet%20prostate.pdf

National Cancer Registry Ireland [NCRI] (2018b), *Cancer factsheet: Testis*, Cork: NCRI
Available at: https://www.ncri.ie/sites/ncri/files/factsheets/Factsheet%20testis.pdf

National Cancer Registry Ireland [NCRI] (2019a), *Cancer in Ireland 1994-2017 with estimates for 2017-2019: Annual Report of the National Cancer Registry*, Cork: NCRI
Available at: https://www.ncri.ie/publications/statistical-reports/cancer-ireland-1994-2017-estimates-2017-2019-annual-report-national

National Cancer Registry Ireland [NCRI] (2019b),
Cancer Incidence Projections for Ireland 2020-2045, Cork: NCRI
Available at: https://www.ncri.ie/sites/ncri/files/pubs/CancerIncidenceProjections_NCRI_fullreport_09042019_final.pdf

National Office for Suicide Prevention (2020), *Briefing on CSO Suicide Figures, 4 November 2020*, Dublin: National Office for Suicide Prevention
Available at: https://www.hse.ie/eng/services/list/4/mental-health-services/connecting-for-life/publications/nosp-briefing-nov-2020.pdf

National Screening Service (not dated), *BowelScreen Programme Report 2016-2017*. Round Two, Dublin: National Screening Service
Available at: http://www.screeningservice.ie/publications/BowelScreen-Programme-Report-2016-2017-FINAL210120.pdf

NHS (2018), *Alcohol units*
Available at: https://www.nhs.uk/live-well/alcohol-support/calculating-alcohol-units

NHS England (2014), *Factsheet: Uptake of cancer screening among under-represented groups*
Available at: https://www.england.nhs.uk/wp-content/uploads/2014/02/sm-ft-4-2.pdf

Northern Ireland Cancer Registry [NICR] (2018), *All cancers excluding non-melanoma skin cancer,* Belfast: NICR
Available at: https://www.qub.ac.uk/research-centres/nicr/FileStore/OfficialStats2018/Factsheets2018/Filetoupload,957477,en.pdf

Northern Ireland Cancer Registry [NICR] (2020), *Breast Cancer*
Available at: http://www.qub.ac.uk/research-centres/nicr/CancerInformation/official-statistics/BySite/Breast

Northern Ireland Statistics and Research Agency [NISRA] (2018a), *Healthy Life Expectancy at Birth*, Belfast: NISRA
Available at: https://www.nisra.gov.uk/publications/pfg-measurement-annex-healthy-life-expectancy-birth

Northern Ireland Statistics and Research Agency [NISRA] (2018b), *Northern Ireland Housing Projections (2016-based)*, Belfast: NISRA
Available at: https://www.nisra.gov.uk/sites/nisra.gov.uk/files/publications/HP16-bulletin.pdf

Northern Ireland Statistics and Research Agency [NISRA] (2018c), User Requested Deaths Data, Table: *Suicide rates by ten year age band and sex, 2010-2015*, Belfast: NISRA
Available at: https://www.nisra.gov.uk/publications/user-requested-deaths-data

Northern Ireland Statistics and Research Agency [NISRA] (2018d), *NI Registrar General Annual Report 2018, Cause of Death tables*, Belfast: NISRA
Available at: https://www.nisra.gov.uk/publications/registrar-general-annual-report-2018-cause-death

Northern Ireland Statistics and Research Agency [NISRA] (2019a), *Estimates of the population aged 85 and over, 2018*, Belfast: NISRA
Available at: https://www.nisra.gov.uk/sites/nisra.gov.uk/files/publications/85AndOver-Bulletin2018.pdf

Northern Ireland Statistics and Research Agency [NISRA] (2019b) *Northern Ireland Annual Survey of Hours and Earnings 2019*, Belfast: NISRA
Available at: https://www.nisra.gov.uk/system/files/statistics/NI-ASHE-Bulletin-2019-2-Gender-pay-gap.pdf

Northern Ireland Statistics and Research Agency [NISRA] (2020a), *2019 Mid-year Population Estimates for Northern Ireland*, Belfast: NISRA
Available at: https://www.nisra.gov.uk/publications/2019-mid-year-population-estimates-northern-ireland

Northern Ireland Statistics and Research Agency [NISRA] (2020b), *Labour Force Survey Annual Summary 2019*, Belfast: NISRA
Available at: https://www.nisra.gov.uk/system/files/statistics/Labour%20Force%20Survey%20Annual%20Summary%202019_0.PDF

Northern Ireland Statistics and Research Agency [NISRA] (2020c), *Guidance Note to Users on Suicide Statistics in Northern Ireland*, Belfast: NISRA
Available at: https://www.nisra.gov.uk/sites/nisra.gov.uk/files/publications/Guidance%20Note%20to%20Users%20Northern%20Ireland%20Suicide%20Statistics.pdf

Northern Ireland Statistics and Research Agency [NISRA] (2020d), *Weekly Deaths Bulletin, Week ending 4th September 2020*, Belfast: NISRA
Available at: https://www.nisra.gov.uk/sites/nisra.gov.uk/files/publications/Deaths%20Registered%20in%20NI%20-%20Week%2035%202020.pdf (Accessed: 9th September 2020)

Northern Ireland Statistics and Research Agency [NISRA] (2020e), *COVID-19 Related Deaths in Northern Ireland. Deaths occurring during March to May 2020*, Belfast: NISRA
Available at: https://www.nisra.gov.uk/sites/nisra.gov.uk/files/publications/COVID-19%20Deaths%20Bulletin%201%20March-31%20May%202020.pdf

Novak, J.R. et al. (2019), 'Associations between masculine norms and health care utilization in highly religious, heterosexual men', *American Journal of Men's Health*, 13(3), pp. 1-11
Available at: https://doi.org/10.1177/1557988319856739

O'Brien, R., Hunt, K. and Hart, G. (2005), 'It's caveman stuff, but that is to a certain extent how guys still operate': men's accounts of masculinity and help seeking, *Social Science and Medicine*, 61(3), pp. 503-516
Available at: https://doi.org/10.1016/j.socscimed.2004.12.008

O'Connor, M. et al. (2018), *Respiratory Health of the Nation, 2018*, Dublin: Irish Thoracic Society
Available at: https://irishthoracicsociety.com/wp-content/uploads/2018/12/RESP-Health-LATEST19.12.pdf

O'Connor, R.C. and Sheehy, N.P. (1997), 'Suicide and Gender', *Mortality*, 2, pp. 239-254

O'Donnell, K. and Igoe, D. (2019), *HIV in Ireland,* 2018, Dublin: Health Protection Surveillance Centre
Available at: https://www.hpsc.ie/a-z/hivandaids/hivdataandreports/HIV_2018_final.pdf

OECD (2019), *Ireland: Country Health Profile 2019*
Available at: https://www.oecd.org/publications/ireland-country-health-profile-2019-2393fd0a-en.htm

Office for National Statistics (2019), *National Life Tables: Northern Ireland*
Available at: https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/lifeexpectancies/datasets/nationallifetablesnorthernirelandreferencetables

Office of the First Minister and Deputy First Minister (OFMDFM) (2010), *A Gender Equality Strategy for Northern Ireland, 2006-2016, 2nd Edition 2010*, Belfast: OFMDFM
Available at: https://www.communities-ni.gov.uk/sites/default/files/publications/ofmdfm_dev/gender-equality-strategy-2006-2016.pdf

Ohrnberger, J., Fichera, E. and Sutton, M. (2017), 'The relationship between physical and mental health: a mediation analysis', *Social Science and Medicine*, 195, pp. 42-49
Available at: https://doi.org/10.1016/j.socscimed.2017.11.008

O'Neill, S. et al. (2014a), 'Patterns of suicidal ideation and behaviour in Northern Ireland and associations with conflict related trauma', *PLoS ONE*, 9(3)
Available at: https://journals.plos.org/plosone/article/file?id=10.1371/journal.pone.0091532&type=printable

O'Neill, S. et al. (2014b), 'Characteristics of deaths by suicide in Northern Ireland from 2005 to 2011 and use of health services prior to death', *Journal of Affective Disorders*, 168(15), pp. 466-471
Available at: https://doi.org/10.1016/j.jad.2014.07.028

O'Neill, S. et al. (2015), 'Suicide in Northern Ireland. An Analysis of Gender Differences in Demographic, Psychological, and Contextual Factors', *Crisis*, 37(1), pp. 13-20
Available at https://doi.org/10.1027/0227-5910/a000360

O'Reilly, D. et al. (2007), 'Consultation Charges in Ireland Deter a Large Proportion of Patients from Seeing the GP: Results of a Cross-Sectional Survey', *European Journal of General Practice*, 13(4), pp. 231-236
Available at: https://doi.org/10.1080/13814780701815082

Osborne, B. (2020), 'The significant impact of COVID-19 on mental health', *Irish Medical Times*, 10 June 2020

Palmer, M. and Taylor, C. (2018), *British Association of Urological Surgeons and The Specialist Advisory Committee in Urology Workforce Report*
Available at: https://www.baus.org.uk/_userfiles/pages/files/publications/Workforce_Report_Sep%202018%20ver%201.1.pdf

Parkin, D.M. et al. (2008), 'Predicting the impact of the screening programme for colorectal cancer in the UK', *Journal of Medical Screening*, 15(4), pp. 163-174
Available at: https://doi.org/10.1258/jms.2008.008024

Patnick, J. (2014), *Public Health Matters: Why do we see gender differences in bowel cancer screening?*
Available at: https://publichealthmatters.blog.gov.uk/2014/12/05/why-do-we-see-gender-differences-in-bowel-cancer-screening

Patterson, A.C. and Veenstra, G. (2010), 'Loneliness and risk of mortality: a longitudinal investigation in Alameda County, California', *Social Science and Medicine*, 71(1), pp. 181-186
Available at: https://doi.org/10.1016/j.socscimed.2010.03.024

Perissinotto, C.M., Stijacic Cenzer, I. and Covinsky, K.E. (2012), 'Loneliness in older persons: A predictor of functional decline and death', *Archives of Internal Medicine*, 172(14), pp. 1078-1083
Available at: https://doi.org/10.1001/archinternmed.2012.1993

Petrilli, C.M. et al. (2020), 'Factors associated with hospitalization and critical illness among 5,279 patients with Covid-19 disease in New York City', *BMJ*, 369, p. m1966
Available at: https://doi.org/10.1136/bmj.m1966

Police Service Northern Ireland [PSNI] (2019a), *Police Recorded Injury Road Traffic Collisions and Casualties Northern Ireland. Detailed Trends Report 2018*, Belfast: PSNI
Available at: https://www.psni.police.uk/globalassets/inside-the-psni/our-statistics/road-traffic-collision-statistics/2018/2018-detailed-trends-report.pdf

Police Service Northern Ireland [PSNI] (2019b), *Police recorded crime Annual Trends 1998/99 to 2018/19 (Excel spreadsheet)*
Available at: https://www.psni.police.uk/inside-psni/Statistics/police-recorded-crime-statistics

Police Service Northern Ireland [PSNI] (2019c), *Trends in Domestic Abuse Incidents and Crimes Recorded by the Police in Northern Ireland 2004/05 to 2018/19*, Belfast: PSNI
Available at: https://www.psni.police.uk/globalassets/inside-the-psni/our-statistics/domestic-abuse-statistics/2018-19/domestic-abuse-incidents-and-crimes-in-northern-ireland-2004-05-to-2018-19.pdf

Police Service Northern Ireland [PSNI] (2020a), *Police Recorded Injury Road Traffic Collisions and Casualties Northern Ireland. 2019 Key Statistics Report*
Available at: https://www.psni.police.uk/globalassets/inside-the-psni/our-statistics/road-traffic-collision-statistics/2019/2019-key-statistics-report.pdf

Police Service Northern Ireland [PSNI] (2020b), *Domestic Abuse Incidents and Crimes Recorded by the Police in Northern Ireland. Update to 30 June 2020*
Available at: https://www.psni.police.uk/globalassets/inside-the-psni/our-statistics/domestic-abuse-statistics/2020-21/q1/domestic-abuse-bulletin-jun_-20.pdf

Polivy, J. and Herman, C.P. (2002), 'Causes of Eating Disorders', *Annual Review of Psychology*, 53, pp. 187-213
Available at: https://www.annualreviews.org/doi/pdf/10.1146/annurev.psych.53.100901.135103

Prince, M. et al. (2007) 'No health without mental health', *The Lancet*, 370(9590), pp. 859-877
Available at: https://doi.org/10.1016/S0140-6736(07)61238-0

Prue, G. et al. (2019), 'Universal HPV Vaccination – a global prerogative', *International Journal of Men's Social and Community Health*, 1(1), pp. 14-22
Available at: https://doi.org/10.22374/ijmsch.v1iSP1.7

Public Health Agency [PHA] (2017), *Bowel Cancer Screening*
Available at: http://www.cancerscreening.hscni.net/pdf/Bowel%20Factsheet%20241017revised.pdf

Public Health Agency [PHA] (2019a), *Sexually Transmitted Infection Surveillance in Northern Ireland 2019. An analysis of data for the calendar year 2018*, Belfast: Public Health Agency
Available at: https://www.publichealth.hscni.net/sites/default/files/2019-08/STI%20surveillance%20report%202019.pdf

Public Health Agency [PHA] (2019b), *Northern Ireland Registry of Self-Harm Annual Report 2017-2018*
Available at: https://www.publichealth.hscni.net/sites/default/files/2019-07/NIRSH%20Annual%20Report%202017.18%20final%20for%20publication_0.pdf

Public Health Agency [PHA] (2019c), *Core Tables 2018: Supporting the Director of Public Health Annual Report 2019*
Available at: https://www.publichealth.hscni.net/sites/default/files/2020-02/Core%20Tables%202018%20-%20final%20-%20Dec%202019.pdf

Public Health Agency [PHA] (2020a), *Farm families health checks programme*
Available at: https://www.publichealth.hscni.net/directorates/public-health/service-development-and-screening/screening/farm-families-health-checks

Public Health Agency [PHA] (2020b), *Abdominal Aortic Aneurysm Screening*
Available at: https://www.publichealth.hscni.net/directorate-public-health/service-development-and-screening/abdominal-aortic-aneurysm-aaa-screening

Public Health England (2019), *United Kingdom Country and PHE region HIV data tables*
Available at: https://www.gov.uk/government/statistics/hiv-annual-data-tables

Public Health England (2020a), *PHE Screening: Guidance updated on PSA testing for prostate cancer*
Available at: https://phescreening.blog.gov.uk/2020/01/20/psa-testing-guidance

Public Health England (2020b), *The UK NSC recommendation on Prostate cancer screening/PSA testing in men over the age of 50 (currently in consultation)*
Available at: https://legacyscreening.phe.org.uk/prostatecancer

Räisänen, U. and Hunt, K. (2014), 'The role of gendered constructions of eating disorders in delayed help-seeking in men: a qualitative interview study', *BMJ Open*, 4, pp. e004342
Available at: http://dx.doi.org/10.1136/bmjopen-2013-004342

Redmond, R. and Palmer, P. (2020), *The Northern Ireland Prison Population 2019/20*, Belfast: Department of Justice
Available from: https://www.justice-ni.gov.uk/sites/default/files/publications/justice/northern-ireland-prison-population-2019-20.pdf

Regulation and Quality Improvement Authority [RQIA] (2018), *How current practice of Prostate Specific Antigen (PSA) testing fits with local and national guidelines*, Belfast: RQIA
Available at: https://www.rqia.org.uk/RQIA/files/37/3771a623-0b5e-4482-9935-d07dcca333b0.pdf

Richardson, N. and Smith, J.A. (2011), 'National men's health policies in Ireland and Australia: what are the challenges associated with transitioning from development to implementation?', *Public Health*, 125(7), pp. 424-432
Available at: https://doi.org/10.1016/j.puhe.2011.04.015

Richardson, N., Clarke, N. and Fowler, C. (2013), *A Report on the All-Ireland Young Men and Suicide Project*, Dublin: Men's Health Forum in Ireland
Available at: https://www.mhfi.org/ymspfullreport.pdf

Road Safety Authority (2016), *Fatal Collisions 2008-2012: Alcohol as a Factor*, Ballina: Road Safety Authority
Available at: https://alcoholireland.ie/download/reports/alcohol_driving/Fatal-Collisions-2008-2012_Alcohol-as-a-Factor.pdf

Roehrborn, C.G. (2005), 'Benign Prostatic Hyperplasia: An Overview', *Reviews in Urology*, 7 (Suppl 9): pp. S3-S14

Russell, C.J. and Keel, P.K. (2001), 'Homosexuality as a Specific Risk Factor for Eating Disorders in Men', *International Journal of Eating Disorders*, 31, pp. 300-306

Sanchis-Gomar, G. et al. (2020), 'Obesity and Outcomes in COVID-19: When an Epidemic and Pandemic Collide', *Mayo Clinic Proceedings*, 95(7), pp. 1445-1453
Available at: https://doi.org/10.1016/j.mayocp.2020.05.006

Savage, R. and Russell, R. (2014), *Census 2011 – Key Statistics for Gender*, Northern Ireland Assembly Research and Information Service Research Paper NIAR 491-14, Belfast: Northern Ireland Assembly
Available at: http://www.niassembly.gov.uk/globalassets/documents/raise/publications/2015/general/3415.pdf

Sheehan, A. and O'Sullivan, R. (2020), *Ageing and Public Health – an overview of key statistics in Ireland and Northern Ireland*, Dublin: Institute of Public Health
Available at: https://publichealth.ie/wp-content/uploads/2020/04/20200416-AGEING-PUBLIC-HEALTH-MAIN.pdf

Shiovitz-Ezra, S. and Ayalon, L. (2010), 'Situational versus chronic loneliness as risk factors for all-cause mortality', *International Psychogeriatrics,* 22(3), pp. 455-462
Available at: https://doi.org/10.1017/S1041610209991426

Smith, J.A. et al. (2020), 'COVID-19, equity and men's health: using evidence to inform future public health policy, practice and research responses to pandemics', *Men's Social and Community Health*, 3(1), pp. 48-64
Available at: https://doi.org/10.22374/ijmsch.v3i1.42

Smith, J.A. et al., (2008), '"It's sort of like being a detective': Understanding how Australian men self-monitor their health prior to seeking help", *BMC Health Services Research*, 8(56)
Available at: https://doi.org/10.1186/1472-6963-8-56

Smith, T. (2017), '"On their own': Social isolation, loneliness and chronic musculoskeletal pain in older adults", *Quality in ageing: policy, practice and research*, 18(2), pp. 87-92
Available at: https://doi.org/10.1108/QAOA-03-2017-0010

Smyth, B. et al. (2012), "The farming population in Ireland: mortality trends during the 'Celtic Tiger' years", *European Journal of Public Health*, 23(1), pp. 50-55
Available at: https://doi.org/10.1093/eurpub/cks017

Spindler, E. (2015), *Beyond the Prostate: Brazil's National Healthcare Policy for Men (PNAISH), EMERGE Case Study 1*, Promundo-US, Sonke Gender Justice and the Institute of Development Studies
Available at: https://opendocs.ids.ac.uk/opendocs/bitstream/handle/20.500.12413/7057/EMERGE_CaseStudy1.pdf?sequence=5

Steptoe, A. et al. (2013), 'Social isolation, loneliness, and all-cause mortality in older men and women', *Proceedings of the National Academy of Sciences*, 110(15), pp. 5795-5801
Available at: https://doi.org/10.1073/pnas.1219686110

Stother, E. et al. (2012), 'Eating Disorders in Men: Underdiagnosed, Undertreated, and Misunderstood', *Eating Disorders*, 20, pp. 346-355
Available at: https://doi.org/10.1080/10640266.2012.715512

Striegel-Moore, R.H. and Bulik, C.M. (2007), 'Risk Factors for Eating Disorders', *American Psychologist*, 62(3), pp. 181-198
Available at: https://doi.org/10.1037/0003-066X.62.3.181

Sweet, D. (2010), *Towards Gender Equality. Exploratory evidence of the attitudes towards the needs of male victims of domestic violence and abuse in Northern Ireland with recommendations for change*, Belfast: Men's Advisory Project
Available at: http://www.mapni.co.uk/ucontrol/resources/researchreport.pdf

Tedstone Doherty, D., Moran, R. and Kartalova-O'Doherty, Y. (2008), *Psychological distress, mental health problems and use of health services in Ireland*, HRB Research Series 5, Dublin: Health Research Board
Available at: https://www.ucd.ie/issda/t4media/National%20Psychological%20Wellebing%20and%20Distress%20Survey%20Report%202006.pdf

Teo, C.H., Ling, C.J. and Jenn, J. (2018), 'Improving health screening uptake in men: a systematic review and meta analysis', *American Journal of Preventive Medicine*, 54(1), pp. 133-143
Available at: https://doi.org/10.1016/j.amepre.2017.08.028

The EUGenMed et al. (2016), 'Gender in cardiovascular diseases: impact on clinical manifestations, management, and outcomes', *European Heart Journal*, 37(1), pp. 24-34
Available at: https://doi.org/10.1093/eurheartj/ehv598

The Irish Longitudinal Study of Ageing [TILDA] (2020), *Where are we now?*
Available at: https://tilda.tcd.ie/about/where-are-we-now/

Tomlinson, M. (2012), 'War, peace and suicide: the case of Northern Ireland', *International Sociology,* 27(4) pp. 464-482
Available at: https://doi.org/10.1177/0268580912443579

Trueman, P. et al. (1999), 'Prevalence of lower urinary tract symptoms and self-reported diagnosed 'benign prostatic hyperplasia', and their effect on quality of life in a community-based survey of men in the UK', *BJU International*, 83, pp. 410-415

Tyler, R.E. and Williams, S. (2014), 'Masculinity in young men's health: Exploring health, help-seeking and health service use in an online environment, *Journal of Health Psychology*, 19(4), pp. 457-470
Available at: https://doi.org/10.1177/1359105312473784

UK Parliament (2019), *Mental Health*
Available at: https://publications.parliament.uk/pa/cm201919/cmselect/cmniaf/300/30008.htm

United Nations (2015), *Transforming our World: The 2030 Agenda for Sustainable Development*
Available at: https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf

Vaidya V., Partha G. and Karmakar M. (2012), 'Gender differences in utilization of preventive care services in the United States', *Journal of Women's Health*, 21(2), pp. 140-145
Available at: https://doi.org/10.1089/jwh.2011.2876

Van Boheeman, L. and van Schaardenburg, D. (2019), 'Predicting rheumatoid arthritis in at-risk individuals', *Clinical Therapeutics*, 41, pp. 1286-1298
Available at: https://doi.org/10.1016/j.clinthera.2019.04.017

Versini, M. et al. (2014), 'Obesity in autoimmune diseases: not a passive bystander', *Autoimmunity Reviews*, 13, pp. 981-1000
Available at: https://doi.org/10.1016/j.autrev.2014.07.001

Versus Arthritis (2018), *State of Musculoskeletal Health 2018. Arthritis and other musculoskeletal conditions in numbers*
Available at: https://www.versusarthritis.org/about-arthritis/data-and-statistics/state-of-musculoskeletal-health-2019/

Wallin, K. et al. (2014), 'A Qualitative Study of Males' Perceptions about Causes of Eating Disorder', *Psychology*, 5, pp. 1813-1820
Available at: https://doi.org/10.4236/psych.2014.515187

Walsh, B., Silles, M. and O'Neill, C. (2012), 'The role of private medical insurance in socio-economic inequalities in cancer screening uptake in the Republic of Ireland', *Health Economics*, 21, pp. 1250-1256

Ward, M. et al. (2009), SLÁN 2007: *Survey of lifestyle, attitudes and nutrition in Ireland ("One Island - One Lifestyle?" Health and lifestyles in the Republic of Ireland and Northern Ireland: Comparing the population surveys SLÁN 2007 and NIHSWS 2005)*, Dublin, Ireland: Department of Health and Children

Watson, D., Kenny, O. and McGinnity, F. (2017), *A Social Portrait of Travellers in Ireland*, ESRI Research Series 56, Dublin: Economic and Social Research Institute
Available at: https://www.esri.ie/system/files/publications/RS56.pdf

Watson, D. and Parson, S. (2005), *Domestic Abuse of Women and Men in Ireland: Report on the National Study of Domestic Abuse*, Dublin: National Crime Council
Available at: http://www.cosc.ie/en/COSC/Abuse%20Report%20NCC.pdf/Files/Abuse%20Report%20NCC.pdf

Weller, D.P. and Campbell, C. (2009), 'Uptake in cancer screening programmes: a priority in cancer control', *British Journal of Cancer*, 3(101), pp. 55-59
Available at: https://doi.org/10.1038/sj.bjc.6605391

White, A. (2006), 'Men and Mental Wellbeing – Encouraging Gender Sensitivity', *The Mental Health Review*, 11(4), pp. 3-6

White, A. and Kirby, M. (2020), 'COVID-19: biological factors in men's vulnerability', *Trends in Urology and Men's Health*, 11(4), pp. 7-9
Available at: https://doi.org/10.1002/tre.757

Wilkins, D. (2011), *Slow on the uptake? Encouraging male participation in the NHS bowel cancer screening programme*, London: Men's Health Forum

Williams, M. (2020), 'Coronavirus class divide – the jobs most at risk of contracting and dying from COVID-19', *The Conversation*, 19 May 2020
Available at: https://theconversation.com/coronavirus-class-divide-the-jobs-most-at-risk-of-contracting-and-dying-from-covid-19-138857

World Health Organization (not dated, a), *About social determinants of health*
Available at: https://www.who.int/social_determinants/sdh_definition/en

World Health Organization (not dated, b), *WHO urges more investments, services for mental health*
Available at: https://www.who.int/mental_health/who_urges_investment/en

World Health Organization (2005), *Promoting mental health: concepts, emerging evidence, practice*, Geneva: WHO
Available at: http://www.who.int/mental_health/evidence/MH_Promotion_Book.pdf

World Health Organization (2018a), *The health and well-being of men in the WHO European Region: better health through a gender approach*

World Health Organization (2018b), *Strategy on the health and well-being of men in the WHO European Region*
Available at: https://www.mhfi.org/WHO-Europe-MensHealthStrategy.pdf Accessed 21 May 2020

World Health Organization (2020), *Coronavirus*
Available at: https://www.who.int/health-topics/coronavirus

Xu, B. and Lin, J. (2017), 'Characteristics and risk factors of rheumatoid arthritis in the United States: an NHANES analysis', *PeerJ*, 5, p. e4035
Available at: https://doi.org/10.7717/peerj.4035

Yucesoy, B.C. et al. (2015), 'Occupational and genetic risk factors for osteoarthritis: A review', *Work*, 50(2), pp. 261-273
Available at: https://doi.org/10.3233/WOR-131739

Zheng, Z. et al. (2020), 'Risk factors of critical and mortal COVID-19 cases: A systematic literature review and meta-analysis', *Journal of Infection*, 81, pp. 16-25
Available at: https://doi.org/10.1016/j.jinf.2020.04.021

CASE STUDY

MEN'S HEALTH ONLINE

While the Internet offers an ideal platform for accessing information about men's health and wellbeing, there is also a real danger of stumbling upon 'fake news'. The Men's Health Forum in Ireland (MHFI) website and social media channels offer a trustworthy portal of up-to-date information, as well as signposting to reliable sources of help and support.

https://www.mhfi.org
https://twitter.com/menshealthirl
https://www.facebook.com/MensHealthForumIreland
www.youtube.com/c/MensHealthForuminIreland

CITATION:

Devine, P. and Early, E. (2020), Men's Health in Numbers: Trends on the Island of Ireland. Dublin: Men's Health Forum in Ireland.

This report is available online at:

www.mhfi.org/MensHealthInNumbers1.pdf

MEN'S HEALTH IN NUMBERS

men's health FORUM in ireland