Our vision is a world free from the fear of heart and circulatory diseases.
Today in Scotland

Coronavirus is having a devastating impact, and more research is required to understand it, including how heart and circulatory diseases and their risk factors affect COVID-19 risk and outcomes. BHF-funded researchers are contributing to these efforts. For info/support visit bhf.org.uk/coronavirus

We are continuing our work to help and support the 700,000 people living with heart and circulatory diseases in Scotland.

Quick Links

<table>
<thead>
<tr>
<th>Heart and Circulatory Diseases</th>
<th>Cost</th>
<th>Coronary Heart Disease</th>
<th>Heart Attack</th>
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Heart and Circulatory Diseases (Cardiovascular Disease; CVD)

Heart and circulatory diseases is an umbrella term for all diseases of the heart and circulation. It includes everything from conditions that are inherited or that a person is born with, to those that are develop later, such as coronary heart disease, atrial fibrillation, heart failure, stroke and vascular dementia.

- There are an estimated 700,000 people living with heart and circulatory diseases in Scotland. An ageing and growing population and improved survival rates from heart and circulatory events could see these numbers rise still further.

**Prevalence rates for heart and circulatory diseases in the most deprived areas of Scotland are significantly higher than those in the least.**

- Heart and circulatory diseases cause more than 1 in 4 (27 per cent) of all deaths in Scotland, or 17,000 deaths each year - that's nearly 50 people per day or 1,500 per month.
- Around 5,100 people under the age of 75 in Scotland die from heart and circulatory diseases each year.
- Since the BHF was established the annual number of heart and circulatory deaths in Scotland has fallen by half.
- In 1961, 34,547 deaths - over half of all deaths that year in Scotland - were attributed to heart and circulatory diseases.

**Linked conditions**

Around 80 percent of people with heart and circulatory diseases have at least one other health condition.
Deaths from and numbers living with heart and circulatory diseases (CVD)

<table>
<thead>
<tr>
<th>Nation</th>
<th>No. of People Dying from CVD (2020)</th>
<th>No. of People Under 75 Years Old Dying from CVD (2020)</th>
<th>Estimated Number of People Living with CVD (latest)</th>
</tr>
</thead>
<tbody>
<tr>
<td>England</td>
<td>137,152</td>
<td>37,353</td>
<td>6.4 million</td>
</tr>
<tr>
<td>SCOTLAND</td>
<td>17,448</td>
<td>5,148</td>
<td>700,000</td>
</tr>
<tr>
<td>Wales</td>
<td>9,340</td>
<td>2,762</td>
<td>340,000</td>
</tr>
<tr>
<td>Northern Ireland</td>
<td>4,102</td>
<td>1,179</td>
<td>225,000</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>166,319</td>
<td>46,627</td>
<td>7.6 million +</td>
</tr>
</tbody>
</table>

Deaths - BHF analysis of latest official statistics (ONS/NISRA/NRS); UK total includes non-residents (ONS data); ICD-10 codes I00-99, F01.Q20-8, C38.0, P29, G45
Living with CVD estimates based on latest health surveys with CVD fieldwork and GP patient data

Death Rates

Death rates take the age structure (demography) of local areas into account to reveal the real differences in statistics. This is very important when there are big variations in the age profile of communities across the Scotland.

- Since 1961 the Scottish death rate from heart and circulatory diseases has declined by more than three quarters. Death rates have fallen more quickly than the actual number of deaths because people in this country are now living longer.
- The latest premature (under 75) death rate for heart and circulatory diseases for Glasgow (134 per 100,000 people) is more than twice as high as for Shetland Islands (57 per 100,000).
- Early death rates from heart and circulatory diseases (before the age of 75) are generally higher in Scotland than the rest of the UK.
Scotland premature (under 75) heart and circulatory diseases (CVD) death rates 2018-20

<table>
<thead>
<tr>
<th>Local Authority – Top Five</th>
<th>Under 75 Death Rate per 100,000 Population</th>
<th>Under 75 Annual Number of CVD Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glasgow</td>
<td>133.6</td>
<td>606</td>
</tr>
<tr>
<td>West Dunbartonshire</td>
<td>113.9</td>
<td>98</td>
</tr>
<tr>
<td>Dundee</td>
<td>110.8</td>
<td>136</td>
</tr>
<tr>
<td>Inverclyde</td>
<td>110.4</td>
<td>87</td>
</tr>
<tr>
<td>North Lanarkshire</td>
<td>109.2</td>
<td>336</td>
</tr>
</tbody>
</table>

The Cost of Heart and Circulatory Diseases

- Each year heart and circulatory diseases cost NHS Scotland around £800m.

Linked conditions

- There are an estimated 900,000 people living with either a heart/circulatory disease or diabetes in Scotland.
- There are an estimated 200,000 people living with a heart/circulatory disease and diabetes in Scotland.

For more info please visit:

- Regional and local statistics
Coronary heart disease (CHD) is the most common type of heart and circulatory disease. It occurs when coronary arteries become narrowed by a build-up of atheroma, a fatty material within their walls. The pain or discomfort felt from such narrowing is called angina and if a blockage occurs it can cause a myocardial infarction (heart attack).

Key Facts

- Coronary heart disease (CHD) is Scotland’s single biggest killer. It was also the leading cause of death worldwide in 2019.
- CHD is responsible for around 6,700 deaths in Scotland each year - that’s around 18 deaths per day.
- In Scotland, 1 in 8 men and 1 in 13 women die from coronary heart disease (1 in 10 overall).
- CHD kills nearly three times as many women as breast cancer in Scotland: it even kills more women prematurely (before the age of 75).

Top 4 causes of death, Scotland 2020

- Coronary Heart Disease: 6,727
- Dementia and Alzheimer’s: 6,352
- COVID-19: 6,048
- Stroke: 3,927
**Key Facts**

- Since the BHF was established the annual number of CHD deaths in Scotland has fallen by more than half.
- CHD death rates are on average higher in Scotland than the rest of the UK.
- Around 2,700 people under the age of 75 in Scotland die from CHD each year.
- There are up to 260,000 people in Scotland living with coronary heart disease – 150,000 men and 110,000 women.
- Coronary heart disease is the leading cause of heart attacks.

*Prevalence rates for coronary heart disease in the most deprived areas of Scotland are twice as high as those in the least deprived.*

**Linked conditions**

- Individuals with coronary heart disease, or who have had a heart attack, are twice as likely to have a stroke.

*For more information please visit:*

- Regional and local statistics
- Coronary Heart Disease

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**Premature CHD death rate by local authority 2018-20**

- Estimated number of people living with coronary heart disease in Scotland:
  - 150,000 men and 110,000 women
Heart Attack (Myocardial Infarction, MI)

- There are up to 10,000 hospital admissions for heart attacks in Scotland each year: that’s 29 admissions each day or 1 every 50 minutes.
- Around 135,000 people alive in Scotland today have survived a heart attack.
- In the 1960s more than 7 out of 10 heart attacks in the UK were fatal. Today at least 7 out of 10 people survive.

Atrial Fibrillation (AF)

Atrial fibrillation is one of the most common forms of abnormal heart rhythm (arrhythmia) and a major cause of stroke.

- More than 100,000 people in Scotland have been diagnosed with atrial fibrillation.
- It is estimated that there are at least 23,000 people aged over 65 with undiagnosed (or silent) atrial fibrillation in Scotland.

Linked conditions

- People with AF are five times more likely to have a stroke
- AF is a contributing factor to one in five strokes

For more info please visit:

> Heart Attacks
> Atrial Fibrillation
Heart Failure

Heart failure occurs when the heart is not pumping blood around the body as well as it should, most commonly when the heart muscle has been damaged – for example, after a heart attack.

- Around 48,000 people in Scotland have been diagnosed with heart failure by their GP
- Estimates which include diagnoses at hospital show there are thousands more people living with the condition across the country

Stroke (Cerebrovascular Disease; CBVD)

A stroke occurs when the blood supply to part of the brain is cut off, causing brain cells to become damaged. A transient ischaemic attack (TIA) is also known as a “mini-stroke” and is caused by a temporary disruption in the blood supply to part of the brain.

- Strokes cause around 3,900 deaths in Scotland each year.
- In Scotland there are up to 12,000 hospital admissions for stroke each year – that’s an average of 33 per day or 1 every 44 minutes.
- Around 150,000 people living in Scotland have survived a stroke or transient ischaemic attack (TIA).
- More than half of stroke survivors in Scotland are under 75.

Prevalence rates for stroke in the most deprived areas of Scotland are much higher than those in the least deprived.

Linked conditions

- People with heart failure are 2-3 times more likely to have a stroke.
- People with diabetes are twice as likely to have a stroke.

For more info, visit our website:
- Stroke
- OHCA
Vascular Dementia

Vascular dementia happens when there’s a problem with the blood supply to an area of your brain. The cells in the affected area of your brain don’t get enough oxygen or nutrients and start to die. This leads to symptoms such as concentration problems and personality changes.

- Vascular dementia causes more than 2,000 deaths each year in Scotland – numbers could be higher as it can be difficult to diagnose the different types of dementia.

- Vascular dementia is the second most common type of dementia, seen in around 1 in 4 cases.

- Vascular dementia is estimated to affect at least 150,000 people in the UK.

- By 2050 it’s predicted that the numbers living with vascular dementia could double.

Linked conditions

- People with a family history of coronary heart disease are significantly more likely to develop vascular dementia

- Vascular dementia accounts for three quarters of dementia cases in stroke survivors

- People with diabetes are 2-3 times more likely to develop vascular dementia

For more info please visit:

- Vascular dementia
Out-of-Hospital Cardiac Arrest (OHCA)

Cardiac arrest is a critical medical emergency, where the heart stops pumping blood around the body. Unless treated immediately, it leads to death within minutes.

- There are around 3,200 out-of-hospital cardiac arrests (OHCAs) in Scotland each year.
- The survival rate in Scotland is just 1 in 10.
- Every minute without cardiopulmonary resuscitation (CPR) and defibrillation reduces the chance of survival by up to 10 per cent.
- Performing CPR can more than double the chances of survival in some cases (ventricular fibrillation).
- Rates of survival and bystander CPR are much lower in areas of greatest deprivation.
- The Chain of Survival (below) is a sequence of steps that together maximise the chance of survival following cardiac arrest.

For more info please visit:

Cardiac arrest
Congenital Heart Disease

Congenital heart disease is a heart condition or defect that develops in the womb before a baby is born.

- Heart defects are diagnosed in at least 1 in 150 births - that’s around 30 babies each month in Scotland - with more diagnoses later in life.
- Estimates suggest that in total as many as 1-2 per cent of the population may be affected.
- Before the BHF existed, the majority of babies diagnosed with a severe heart defect in the UK did not survive to their first birthday. Today, thanks to research, more than 8 out of 10 survive to adulthood.

Inherited (Genetic) Conditions

These are conditions which can be passed on through families, affect people of any age and may be life-threatening.

- An estimated 27,000 people in Scotland have an inherited heart condition - these include hypertrophic cardiomyopathy (HCM; 1 in 500 people), dilated cardiomyopathy (DCM) and arrhythmogenic right ventricular dysplasia/cardiomyopathy (ARVD/ARVC).
- There are other conditions which can affect the heart and circulatory system, with an unusually high risk of developing heart disease or dying suddenly at a young age, including familial hypercholesterolaemia (FH; 1 in 250, or 22,000 people).
- Every week in the UK at least 12 young people (aged under 35) die from an undiagnosed heart condition.
- Using high-intensity statins can reduce cholesterol levels by half. For many people with FH this will be reduced to a safe level, lowering their risk of death from heart disease.

Around 50,000 people in Scotland have a faulty gene that can cause an inherited heart-related condition.
Risk Factors

Many different risk factors increase your likelihood of developing heart and circulatory diseases.

High Blood Pressure (Hypertension)

- High blood pressure is the leading modifiable risk factor for heart and circulatory disease in Scotland.
- An estimated 29% of adults in Scotland have high blood pressure (that’s around 1.3 million)
- Around 790,000 people are on their GP’s hypertension register, but many of them are not receiving effective treatment.
- As many as 500,000 adults with high blood pressure are undiagnosed.

Linked conditions

- Around 50% of heart attacks and strokes are associated with high blood pressure

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Diagnosed</td>
<td>790k</td>
</tr>
<tr>
<td>Expected</td>
<td>1.3m</td>
</tr>
<tr>
<td>Undiagnosed</td>
<td>up to 500k</td>
</tr>
<tr>
<td>Untreated</td>
<td>800k</td>
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</tbody>
</table>

Around 50% of heart attacks and strokes are associated with high blood pressure.
# Diabetes

Diabetes is a condition in which blood sugar levels are elevated over a prolonged period of time. This results in damage to the inner lining of blood vessels. Consequently, diabetes is an important risk factor for heart and circulatory diseases (CVD).

- **Around 300,000 adults** in Scotland have been diagnosed with diabetes.
- It's estimated that there may be **thousands more** in Scotland with undiagnosed Type 2 diabetes.
- Around 90 per cent of those diagnosed are living with Type 2 diabetes and 10 per cent have either Type 1 or rarer types.

**Prevalence rates for diabetes in the most deprived areas of Scotland are twice as high as those in the least deprived.**

## High Blood Cholesterol

- High blood cholesterol is a significant risk factor for developing heart and circulatory disease.
- More than 1 in 4 deaths from heart and circulatory diseases in Scotland are associated with high LDL (low-density lipoprotein) cholesterol.

For more information, visit our website:

- High Blood Pressure (Hypertension)
- High Cholesterol
- Diabetes

### Linked conditions

- Adults with diabetes are **2-3 times** more likely to develop CVD, and are **nearly twice as likely** to die from heart disease or stroke.
- In the UK, **one third** of adults with diabetes die from a heart or circulatory disease.
Smoking
- Up to one in five adults smoke cigarettes in Scotland – or up to 840,000 adults.
- There are around 52,000 smoking-related hospital admissions each year in Scotland.
- There are up to 10,000 smoking-related deaths each year in Scotland.
- Each year up to 2,000 deaths from heart and circulatory diseases in Scotland are attributable to smoking.

Overweight/Obesity
- An estimated 29 per cent of adults in Scotland have obesity and in addition more than a third (37 per cent) have a body-mass index (BMI) defined as overweight.
- Nearly 3 out of 10 (29 per cent) children in Scotland have a BMI defined as overweight or obese.
- In Scotland nearly 1 in 5 heart and circulatory disease deaths are associated with a high body-mass index.

Diet and Exercise
- Over a third of adults in Scotland (34 per cent) do not achieve recommended levels of physical activity.
- Less than 1 in 4 adults in Scotland (22 per cent) eat the recommended five portions of fruit and veg per day.
- Nearly 1 in 4 adults in Scotland (24 per cent) regularly exceed guidelines for daily alcohol intake; no level of use is without risk.
Other Risk Factors

- Poor air quality has a significant impact on cardiovascular health. Each year up to 700 deaths from heart and circulatory disease in Scotland are attributable to particulate matter pollution.

- Other risk factors can significantly increase your risk of developing heart and circulatory diseases, including impaired kidney function, age, gender, family history and ethnicity.
About the British Heart Foundation (BHF)

Three in ten of us in Scotland and one in three globally die from heart and circulatory diseases. That’s why the British Heart Foundation funds world-leading research into their causes, prevention, treatment and cure. Advances from our research have saved and improved millions of lives, but heart diseases, stroke, vascular dementia and their risk factors such as diabetes still cause heartbreak on every street. With the public’s support, our funding will drive the new discoveries to end that heartbreak.

We are the biggest independent funder of heart and circulatory disease research in Scotland. Find out more at bhf.org.uk

bhf.org.uk/donate

More BHF Health Statistics

Including exclusive content and local statistics
Visit our website bhf.org.uk/statistics

This factsheet is compiled by the British Heart Foundation.
Last reviewed and updated January 2022.
Statistics are the latest available from the UK’s health and statistical agencies
Other factsheets: Global, UK, England, Wales, Northern Ireland and coronavirus.

For any queries, contact us and we will do our best to help - please mark for the attention of the Health Intelligence team.
# References

<table>
<thead>
<tr>
<th>STATISTIC</th>
<th>REFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HEART AND CIRCULATORY DISEASES (CARDIOVASCULAR DISEASE; CVD)</strong></td>
<td></td>
</tr>
<tr>
<td>700k living with CVD, deprived areas, with diabetes</td>
<td>BHF estimate based on Scottish Health Survey 2019 data using ONS mid-2020 population estimates; includes congenital heart disease in children</td>
</tr>
</tbody>
</table>
| CVD deaths/year (Scotland) [ICD-10 codes I00-I99, C38.0, F01, G45, P29, Q20-Q28] | National Records of Scotland (2021) Deaths, by gender, age and cause, 2020  
| CVD deaths/year (UK)                                                      | BHF analysis of latest UK mortality statistics: ONS/NRS/NISRA (2020 data)                     |
| CVD prevalence (UK)                                                       | BHF estimate based on latest Quality & Outcomes Framework prevalence data;  
NHS Digital/Public Health Scotland/StatsWales/DH Northern Ireland and health surveys with CVD fieldwork;  
NHS Digital/Scottish Government/ StatsWales/ DH Northern Ireland |
| CVD death rates; local death rates (Scotland)                             | BHF analysis of NRS (2018-20) mortality data for Scottish local authorities; map created in Tableau  
(NB local data ICD-10 I00-99 only) |
| £800m CVD cost                                                            | NHS Expenditure, Population Health Analytical Services, Scottish Government 2011/12  
[updates not published]                                                                 |
| **CORONARY HEART DISEASE (CHD; ISCHAEMIC HEART DISEASE)**                 |                                                                                               |
| CHD biggest killer Scotland; vs breast cancer ~ worldwide                 | National Records of Scotland (2021) Deaths, by gender, age and cause, 2020  
~ Global Burden of Disease and World Health Organization, 2019 estimates |  
| CHD death rates                                                            | BHF analysis of NRS (2018-20) mortality data for Scottish local authorities; map created in Tableau |  
BHF estimate based on Scottish Health Survey 2019 data using ONS mid-2020 population estimates |
| 260k living with CHD; gender split                                        | BHF analysis of Scottish Health Survey 2019 data                                               |
| Prevalence rates higher in deprived areas                                 | BHF analysis of Scottish Health Survey 2019 data                                               |
| Linked conditions: twice as likely to have a stroke                       | BHF analysis of Scottish Health Survey 2019 data                                               |
| **HEART ATTACK (MYOCARDIAL INFARCTION, MI)**                              |                                                                                               |
| 10k heart attack hospital admissions                                       | Public Health Scotland (2021) hospital data  
(NB volumes have reduced during COVID-19 pandemic)                                             |
| 7/10 people survive heart attack ~ 1960s estimate                          | Case fatality rates in Smolina (2012) acute MI mortality  
www.bmj.com/content/344/bmj.d8059 ~ Goldacre (2003) myocardial infarction (Oxon, Eng) |
| 135k surviving MI                                                          | BHF estimate based on Scottish Health Survey 2019 data using ONS mid-2020 population estimates |
| **ATRIAL FIBRILLATION (AF)**                                              |                                                                                               |
| 100k+ diagnosed with AF ~ undiagnosed                                     | BHF analysis of Public Health Scotland GP patient prevalence data 2018/19  
silent/undiagnosed BHF estimate based on UK Biobank data (Barbara Casadei Live & Ticking presentation) |
| 5 times more likely to have a stroke                                      | Marini C, De Santis F, Sacco S. Contribution atrial fibrillation to incidence and outcome of ischemic stroke: results from a population-based study.  
www.ncbi.nlm.nih.gov/pubmed/15079330 |
| Contributor to 1 in 5 strokes                                              | Royal College of Physicians Sentinel Stroke National Audit Programme (SSNAP)  
[NB not Scotland]  
National clinical audit annual results portfolio www.strokeaudit.org/results/Clinical-audit/National-Results.aspx |
<table>
<thead>
<tr>
<th>STATISTIC</th>
<th>REFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HEART FAILURE (HF)</strong></td>
<td></td>
</tr>
<tr>
<td>48k diagnosed with heart failure by GP</td>
<td>BHF analysis of Public Health Scotland GP patient prevalence data 2018/19</td>
</tr>
<tr>
<td><strong>STROKE (CEREBROVASCULAR DISEASE)</strong></td>
<td></td>
</tr>
<tr>
<td>12k+ stroke hospital admissions</td>
<td>Public Health Scotland (2020) 2019/20 hospital data</td>
</tr>
<tr>
<td>150k stroke/TIA survivors</td>
<td>BHF estimate based on Scottish Health Survey 2019 data using ONS mid-2019 population estimates</td>
</tr>
<tr>
<td>u75 stroke survivors</td>
<td>BHF analysis of The Health Intelligence Network (THIN) prevalence data, IQVIA/IMRD 2018</td>
</tr>
<tr>
<td>prevalence rates higher in deprived areas</td>
<td>BHF analysis of Scottish Health Survey 2019 data</td>
</tr>
<tr>
<td><strong>VASCULAR DEMENTIA</strong></td>
<td></td>
</tr>
<tr>
<td><strong>OUT-OF-HOSPITAL CARDIAC ARREST (OHCA)</strong></td>
<td></td>
</tr>
</tbody>
</table>

**CONGENITAL HEART DISEASE**

| 1-2% prevalence | various estimates including Hoffman & Kaplan, JACC –19 per 1,000 includes “BAVs which will eventually need cardiologic care”  [www.sciencedirect.com/science/article/pii/S0735109702018867](www.sciencedirect.com/science/article/pii/S0735109702018867) |
| Survival comparison (pre-BHF/today) | MacMahon BM, [https://heart.bmj.com/content/heartjnjl/15/2/121.full.pdf](https://heart.bmj.com/content/heartjnjl/15/2/121.full.pdf) and British Cardiac Society [https://heart.bmj.com/content/88/suppl_1/](https://heart.bmj.com/content/88/suppl_1/) |
## Inherited (Genetic) Conditions

<table>
<thead>
<tr>
<th>Condition</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>27k with inherited heart condition; 50k with faulty gene</td>
<td>BHF estimate for Scotland derived from PHG Foundation, <em>Heart to Heart: inherited cardiovascular conditions services</em> (2009); updated to reflect revised FH/DCM prevalence estimates. NB only one third of the burden of dilated cardiomyopathy (DCM) is thought to be inherited – that proportion is included here.</td>
</tr>
<tr>
<td>1:500 with hypertrophic cardiomyopathy (HCM)</td>
<td>Priori et al, Task Force on Sudden Cardiac Death ESC  <a href="http://eurheartj.oxfordjournals.org/content/ehj/22/16/1374.full.pdf">eurheartj.oxfordjournals.org/content/ehj/22/16/1374.full.pdf</a></td>
</tr>
</tbody>
</table>

## Risk Factors

### Hypertension - High Blood Pressure

<table>
<thead>
<tr>
<th>Condition</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adults living with hypertension, control rates</td>
<td>Scottish Health Survey 2019, Scottish Government</td>
</tr>
<tr>
<td>Diagnosed numbers (at GP)</td>
<td>BHF analysis of Public Health Scotland GP patient prevalence data 2018/19</td>
</tr>
<tr>
<td>Undiagnosed and untreated estimates</td>
<td>BHF analysis of health survey &amp; Public Health Scotland data.</td>
</tr>
<tr>
<td>#1 modifiable risk factor in Scotland</td>
<td>Global Burden of Disease (GBD) Scotland estimates 2019</td>
</tr>
</tbody>
</table>

### Diabetes

<table>
<thead>
<tr>
<th>Condition</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence rates higher in deprived communities</td>
<td>BHF analysis of Scottish Health Survey 2019 data</td>
</tr>
<tr>
<td>Diabetes: 2-3 times more likely to develop CVD, twice as likely to die from heart disease or stroke</td>
<td><a href="http://circ.ahajournals.org/content/59/1/8.short">circ.ahajournals.org/content/59/1/8.short</a> <a href="http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2809299/">www.ncbi.nlm.nih.gov/pmc/articles/PMC2809299/</a></td>
</tr>
</tbody>
</table>

### Smoking

<table>
<thead>
<tr>
<th>Condition</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-19% of adults smoke ~ up to 840k smokers</td>
<td>Scottish Health Survey 2019 (19%). Scottish Government (2020) <a href="http://www.gov.scot/collections/scottish-health-survey/">www.gov.scot/collections/scottish-health-survey/</a> BHF analysis using ONS mid-2020 population estimates; see also ONS Smoking Habits in the UK 2019 (15%) NB updated in the 2020 &amp; 2021 telephone surveys but with different methodology – those figures are not cited here; see publication for details</td>
</tr>
<tr>
<td>10k deaths, 2k heart and circulatory disease deaths</td>
<td>ASH Scotland (Scottish Government data); BHF CVD estimate NB Global Burden of Disease (GBD) has higher estimates (14k and 3.5k)</td>
</tr>
</tbody>
</table>

### Other Risk Factors

<table>
<thead>
<tr>
<th>Condition</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obesity, physical activity, 5-a-day, alcohol</td>
<td>Scottish Government (2020) Scottish Health Survey 2019 <a href="http://www.gov.scot/collections/scottish-health-survey/">www.gov.scot/collections/scottish-health-survey/</a> NB some updates in telephone surveys during pandemic but using different methodology – those figures are not cited here; see publication for details</td>
</tr>
<tr>
<td>Air pollution, high cholesterol, high BMI mortality</td>
<td>Global Burden of Disease (GBD) Scotland mortality estimates 2019</td>
</tr>
</tbody>
</table>