

British Heart Foundation Cymru

Wales Factsheet

January 2022

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

Today in Wales

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 340,000 people living with heart and circulatory diseases in Wales.

Quick Links			
Heart and Circulatory Diseases	Cost	Coronary Heart Disease	Heart Attack
Atrial Fibrillation	Heart Failure	Stroke	Out-of-Hospital Cardiac Arrest
Congenital Heart Disease	Inherited (Genetic) Conditions	Vascular Dementia	Risk Factors

Heart and Circulatory Diseases (Cardiovascular Disease; CVD)

Heart and circulatory diseases is an umbrella term that describes 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.

- Heart and circulatory diseases cause one in four (25 per cent) of all deaths in Wales, or around 9,300 deaths each year - that's an average of 26 people each day.
- Heart and circulatory diseases kill 4,900 men and 4,400 women in Wales each year.
- Since the BHF was established the annual number of heart and circulatory deaths in Wales has fallen by half.
- Since 1961 the Welsh 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 Wales are now living longer.
- **Around 2,800 people** under the age of 75 in Wales die from heart and circulatory diseases (CVD) each year.
- There are around **340,000 people living** with heart and circulatory diseases in Wales an ageing and growing population and improved survival rates from heart and circulatory events could see these numbers rise still further in the future.



Linked conditions

Around 80 percent of people with heart and circulatory diseases have at least one other condition

Deaths from and numbers living with heart & circulatory diseases (CVD)

Nation	No. of People Dying from CVD (2020)	No. of People Under 75 Years Old Dying from CVD (2020)	Estimated Number of People Living with CVD (latest estimate)
England	137,152	37,353	6.4 million
Scotland	17,448	5,148	700,000
Wales	9,340	2,762	340,000
Northern Ireland	4,102	1,179	225,000
United Kingdom (2020)	168,319	46,627	7.6 million +

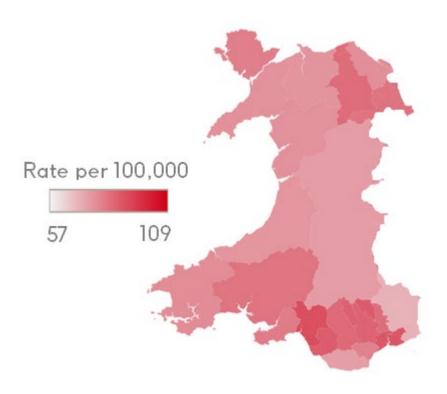
Deaths - BHF analysis of latest official statistics (ONS/NISRA/NRS); UK total includes non-residents (ONS data); ICD-10 codes 100-99, F01,Q20-8, C38.0, P29, G45 Living with CVD estimates based on latest health surveys with CVD fieldwork and GP patient data

- Premature death rates from heart and circulatory diseases (before the age of 75) are higher than in England.
- 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 country.
- The highest premature heart and circulatory death rates in Wales by local authority (2018-20) were for Neath Port Talbot and Newport.
- The latest premature (under 75) death rate for Neath Port Talbot (109 per 100,000 people) is nearly twice as high as for Monmouthshire (57).
- Regional and local statistics and rankings for heart and circulatory deaths can be found on our website

Wales premature (under 75 years) heart & circulatory diseases (CVD) death rates 2018-20

Unitary Authority – Top Five	Under 75 Death Rate per 100,000 people	Under 75 Annual Number of CVD Deaths
Neath Port Talbot / Castell-nedd Port Talbot	109.2	153
Newport / Casnewydd	104.1	134
Merthyr Tydfil / Merthyr Tudful	103.7	57
Blaenau Gwent	102.4	68
Caerphilly / Caerffili	100.5	171

Premature heart & circulatory disease (CVD) death rate by local authority 2018-20



Cost of Heart and Circulatory Diseases

Total NHS expenditure on heart and circulatory diseases (CVD) in Wales in 2019/20 was £553 million

Coronary Heart Disease (CHD; Ischaemic Heart Disease)

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).

- Around 117,000 people are living with CHD in Wales
- Coronary heart disease (CHD) is a leading cause of death in Wales.
 It was also the leading causes of death worldwide in 2019.
- CHD is responsible for around **3,600 deaths** in Wales each year; that's an average of 10 deaths each day.
- CHD kills 2,300 men and 1,300 women in Wales each year.
- Since the BHF was established the annual number of CHD deaths in Wales has fallen by more than half.
- In 1961, 9,082 deaths in Wales were attributed to CHD over a quarter of all deaths that year.
- Since 1961 the age-standardised death rate from CHD has declined by more than three quarters.
- CHD kills more than twice as many women as breast cancer in Wales; it even kills more women prematurely.
- Around 1,400 people under the age of 75 in Wales die from CHD each year.
- Coronary heart disease is the leading cause of heart attacks.

Linked conditions

Individuals with coronary heart disease, or who have had a heart attack, are twice as likely to have a stroke as those who haven't.

For more info please visit:

Coronary Heart Disease



Heart Attack (Myocardial Infarction, MI)

- In Wales as many as **5,000 hospital admissions** each year are for heart attacks: that's 14 each day or 1 around every 100 minutes.
- 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 the most common form of abnormal heart rhythm (arrhythmia) and a major cause of stroke.

- Around 79,000 people in Wales have been diagnosed with atrial fibrillation.
- It is estimated that there are at least 15,000 people aged over 65 with undiagnosed (or silent) atrial fibrillation in Wales.



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 36,000 people in Wales have been diagnosed with heart failure by their GP.
- Estimates which include diagnoses at hospital suggest that there are thousands more people living with the condition across the country.



Stroke (Cerebrovascular Disease)

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.

- Stroke causes around 1,900 deaths in Wales each year.
- In Wales as many as 7,000 hospital admissions are due to stroke each year.
- Over 70,000 people living in Wales have survived a stroke or transient ischaemic attack (TIA).
- More than half of stroke survivors in Wales are under the age of 75.

For more info please visit:

- Heart Failure
- > Stroke

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 as people without diabetes

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 hundreds of deaths each year in Wales 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 history of heart diseases are at least **twice as 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



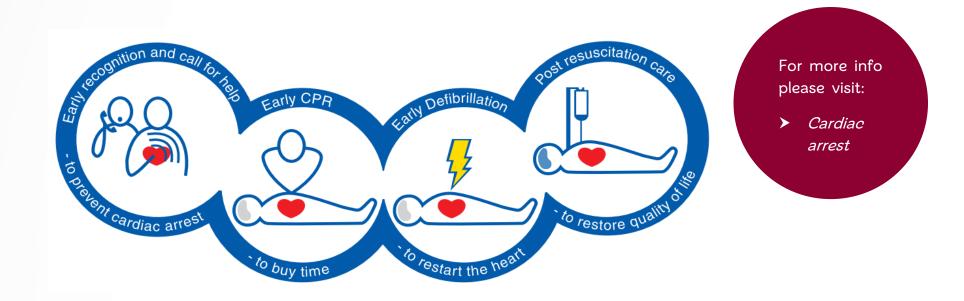
Out-of-Hospital Cardiac Arrest (OHCA)

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.

- Just 1 in 20 survive an out-of-hospital cardiac arrest (OHCA) in Wales.
- There are around 2,800 out-of-hospital cardiac arrests in Wales each year
- 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).
- It's estimated that public-access defibrillators (PADs) are used in less than 10 per cent of OHCAs.
- The Chain of Survival (below) is a sequence of steps that together maximise the chance of survival following cardiac arrest.



There are around 2,800 out-of-hospital cardiac arrests in Wales each year



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 around 1 in 150 births that's an average of 16 babies each month in Wales - 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 16,000 people in Wales 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 13,000 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.



For more info please visit:

- ➤ Congenital heart disease
- Inherited heart conditions



Around 30,000 people in Wales 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 diseases in Wales.
- It's estimated that around 700,000 adults in Wales have high blood pressure.
- More than 510,000 people are on their GP's hypertension register, suggesting that as many as 185,000 could be undiagnosed.

Linked conditions

 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 CVD.

- More than 200,000 adults in Wales have been diagnosed with 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.
- It's estimated that thousands more people across Wales are living with undiagnosed Type 2 diabetes.

High Cholesterol

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

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 as those without diabetes
- In the UK, **one third** of adults with diabetes die from a heart or circulatory disease



In the UK one third of adults with diabetes die from a heart or circulatory disease

For more information, visit our website:

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

Smoking

- More than one in six adults (18%) smoke cigarettes in Wales that's more than 400,000 adults.
- Over 5,000 people in Wales die from smokingrelated causes each year.
- Over **1,000 Welsh** deaths from heart and circulatory diseases can be attributed to smoking each year.
- Over 26,000 hospital admissions for adults over 35 are attributable to smoking each year.





Around
25%
of adults in Wales have obesity

Overweight/Obesity

- Around a quarter (25%) of adults in Wales have obesity and in addition more than a third (36%) have a body-mass index (BMI) defined as overweight.
- More than a quarter (27%) of children in reception year across Wales have a BMI defined as overweight or obese.
- In Wales around 1 in 6 heart and circulatory disease deaths are associated with a high body-mass index.

Diet and Exercise

- An estimated **47 per cent** of adults in Wales do not meet current physical activity recommendations.
- Only a quarter (25%) of adults in Wales consume the recommended five portions of fruit and veg per day.
- Nearly **one in five** adults (19%) drink more than the weekly guideline amount of alcohol but no level of consumption is without risk.



Other Risk Factors

- Poor air quality has a significant impact on heart and circulatory health.
 Each year up to 1,100 deaths in Wales are attributable to particulate matter pollution.
- Other risk factors can significantly increase your risk of developing heart and circulatory diseases, including impaired kidney function (renal failure), age, gender, family history and ethnicity.

About the British Heart Foundation (BHF)

One in four of us in the UK 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 Wales.

Find out more at bhf.org.uk

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, Scotland, England, 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.



Rydym yn ariannu MWY o waith ymchwil i glefydau'r galon a chylchrediad y gwaed na'r un corff annibynnol arall yng Nghymru



We are the
BICCEST
independent funder of
heart and circulatory
disease research in Wales

References

STATISTIC	REFERENCE	
HEART AND CIRCULATORY DISEASES (CARDIOVA	ASCULAR DISEASE; CVD)	
CVD deaths (Wales) [ICD-10 codes 100-199, C38.0, F01, G45, P29, Q20-Q28]	NOMIS - Office for National Statistics (ONS; 2021) - Deaths registered by cause, gender and age, 2020. www.nomisweb.co.uk/datasets/mortsa	
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 (Wales)	BHF analysis of Office for Nation Statistics (ONS) Nomis data (2018-20); map created in Tableau (NB local data ICD-10 100-99 only)	
340k living with CVD in Wales	BHF estimate based on National Survey for Wales 2019/20 data (adults); includes congenital heart disease in children https://gov.wales/adult-general-health-and-illness-national-survey-wales-april-2019-march-2020	
£553m CVD cost	Public Health Wales 2019/20 data https://statswales.gov.wales/Catalogue/Health-and-Social-Care/Health-Finance/NHS-Programme-Budget/	
Linked conditions: 81% people with CVD have one other condition	Tran J, Norton R, Conrad N, Rahimian F, Canoy D, Nazarzadeh M, et al. Patterns and temporal trends of comorbidity among adult patients with incident cardiovascular disease in the UK between 2000 and 2014: A population-based cohort study. PLoS Med. 2018; 15(3):e1002513. doi.org/10.1371/journal.pmed.1002513 PMID: 29509757	
CORONARY HEART DISEASE (CHD; ISCHAEMIC H	EART DISEASE)	
CHD deaths, #1 in Wales, vs breast cancer ~ worldwide	NOMIS - Office for National Statistics (ONS; 2021) - Deaths registered by cause, gender and age, 2020. www.nomisweb.co.uk/datasets/mortsa	
	World Health Organization (WHO) and Global Burden of Disease (GBD) – 2019 global estimates	
CHD death rates	BHF analysis of Office for Nation Statistics (ONS) Nomis data (2018-20); map created in Tableau	
117k living with CHD	Welsh Government (2021) Quality Assurance and Improvement Framework (QAIF) disease registers 2019/20 https://statswales.gov.wales/Catalogue/Health-and-Social-Care/NHS-Primary-and-Community-Activity/GMS-Contract	
HEART ATTACK (MYOCARDIAL INFARCTION, MI)		
Up to 5k heart attack hospital admissions	Digital Health & Care Wales (2021). PEDW hospital activity data; correspondence – NB volumes have reduced during COVID-19 pandemic	
7/10 people survive heart attack ~ 1960s estimate	Case fatality rates in Smolina's 2012 BMJ paper on acute MI mortality (www.bmj.com/content/344/bmj.d8059) ~ Goldacre's 2003 paper on myocardial infarction (Oxon)	
ATRIAL FIBRILLATION (AF)		
79k diagnosed with AF	Welsh Government (2021) Quality Assurance and Improvement Framework (QAIF) disease registers 2019/20 https://statswales.gov.wales/Catalogue/Health-and-Social-Care/NHS-Primary-and-Community-Activity/GMS-Contract	
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/15879330	
Contributor to 1 in 5 strokes	Royal College of Physicians Sentinel Stroke National Audit Programme (SSNAP) – select annual data National clinical audit annual results portfolio https://www.strokeaudit.org/results/Clinical-audit/National-Results.aspx	

STATISTIC	REFERENCE
HEART FAILURE (HF)	
36k diagnosed with heart failure by GP	Welsh Government (2021) Quality Assurance and Improvement Framework (QAIF) disease registers 2019/20 https://statswales.gov.wales/Catalogue/Health-and-Social-Care/NHS-Primary-and-Community-Activity/GMS-Contract
STROKE (CEREBROVASCULAR DISEASE)	
1.9k stroke deaths	NOMIS - Office for National Statistics (ONS) - Deaths registered by cause, gender and age, 2020. www.nomisweb.co.uk/datasets/mortsa
7k+ stroke hospital admissions	Digital Health & Care Wales (2021). PEDW hospital activity data; correspondence – NB volumes have reduced during COVID-19 pandemic
70k stroke/TIA survivors	Welsh Government (2021) Quality Assurance and Improvement Framework (QAIF) disease registers 2019/20 https://statswales.gov.wales/Catalogue/Health-and-Social-Care/NHS-Primary-and-Community-Activity/GMS-Contract
u75 stroke survivors	BHF analysis of The Health Intelligence Network (THIN) prevalence data, IQVIA/IMRD 2018
Linked conditions: CHD or heart attack more than twice as likely to have a stroke	http://stroke.ahajournals.org/content/22/8/983
Linked conditions: People with heart failure are 2-3 times more likely to have a stroke.	http://stroke.ahajournals.org/content/42/10/2977
Linked conditions: People with diabetes are twice as likely to have a stroke as people without diabetes	www.ncbi.nlm.nih.gov/pmc/articles/PMC5298897/
VASCULAR DEMENTIA	
deaths; underestimate/diagnoses	NOMIS - Office for National Statistics (ONS) - Deaths registered by cause, gender and age, 2020.
	Alzheimer's Society www.alzheimers.org.uk/about-dementia/types-dementia/diagnosis-vascular-dementia
dementia types	Alzheimer's Society www.alzheimers.org.uk/about-us/policy-and-influencing/what-we-think/demography
150k prevalence (UK)	Alzheimer's Society www.alzheimers.org.uk/sites/default/files/pdf/factsheet_what_is_vascular_dementia.pdf
350k forecast (UK)	Alzheimer's Society www.alzheimers.org.uk/news/2018-04-12/third-all-stroke-survivors-could-develop-dementia-within-five-years
Linked conditions: People with a history of heart disease are at least twice as likely to develop vascular dementia	www.ncbi.nlm.nih.gov/pmc/articles/PMC2924456/
Linked conditions: ¾ cases in stroke survivors	www.ncbi.nlm.nih.gov/pmc/articles/PMC3235558/
Linked conditions: People with diabetes are 2-3 times more likely to develop vascular dementia	www.ncbi.nlm.nih.gov/pmc/articles/PMC2174783/
OUT-OF-HOSPITAL CARDIAC ARREST (OHCA)	
Wales 4.6% survival rate; OHCA volumes	Welsh Government (2021) Press release https://gov.wales/lifesaving-programme-given-cash-boost-keep-going-welsh-government Welsh Government (2017) Out of Hospital Cardiac Arrest Plan https://gov.wales/docs/dhss/publications/170629cardiac-planen.pdf
Every min & CPR doubles survival	Resuscitation Council (2021) Resuscitation Guidelines 2021 www.resus.org.uk/library/2021-resuscitation-guidelines

STATISTIC	REFERENCE	
CONGENITAL HEART DISEASE		
1:150 babies diagnosed	BHF estimates for Wales based on Public Health England (2020) NCARDRS congenital anomaly statistics: 2018 data www.gov.uk/government/publications/ncardrs-congenital-anomaly-annual-data	
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)	
Survival comparison (pre-BHF/today)	MacMahon BMJ (http://heart.bmj.com/content/heartjnl/15/2/121.full.pdf) and British Cardiac Society https://heart.bmj.com/content/88/suppl_1/i1	
INHERITED (GENETIC) CONDITIONS		
16k inherited heart conditions; 30k with faulty gene	BHF estimate for Wales derived from PHG Foundation, <i>Heart to Heart: inherited cardiovascular conditions services</i> (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	
1:250 with familial hypercholesterolaemia (FH)	NB average recent prevalence is 1:250 but our preferred reference reports 1:273 Wald et al, NEJM 2016 www.nejm.org/doi/full/10.1056/NEJMoa1602777	
1:500 with hypertrophic cardiomyopathy (HCM)	Priori et al, Task Force on Sudden Cardiac Death ESC eurheartj.oxfordjournals.org/content/ehj/22/16/1374.full.pdf	
UK 12 cardiac deaths/week under-35s	Cardiac Risk in the Young www.c-r-y.org.uk/statistics	
RISK FACTORS		
Hypertension (High Blood Pressure)		
Adults with HBP ~ numbers diagnosed by GP	BHF Welsh prevalence estimate based on latest UK health surveys (England and Scotland data)	
numbers diagnosed by OF	Welsh Government (2021) Quality Assurance and Improvement Framework (QAIF) disease registers 2019/20 https://statswales.gov.wales/Catalogue/Health-and-Social-Care/NHS-Primary-and-Community-Activity/GMS-Contract	
High BP #1 risk factor ~ CVD risk	Global Burden of Disease 2019 estimates for Wales ~ Vasan et al NEJM 2001 www.ncbi.nlm.nih.gov/pubmed/11794147/	
Linked conditions: Around 50% of heart attacks and strokes are associated with high blood pressure	Global Burden of Disease (GBD) risk burden estimates (Wales and UK) 2019	
Diabetes		
200k+ adults diagnosed with diabetes ~ undiagnosed	Welsh Government (2021) Quality Assurance and Improvement Framework (QAIF) disease registers 2019/20 https://statswales.gov.wales/Catalogue/Health-and-Social-Care/NHS-Primary-and-Community-Activity/GMS-Contract	
	Diabetes UK www.diabetes.org.uk/professionals/position-statements-reports/statistics	
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	www.ncbi.nlm.nih.gov/pubmed/20609967	
	www.ncbi.nlm.nih.gov/pmc/articles/PMC2809299/	
	www.thelancet.com/journals/lancet/article/PIIS0140-6736(10)60484-9/fulltext	
Linked conditions: In the UK, one third of adults with diabetes die from a heart or circulatory disease	NHS Digital (2019) National Diabetes Audit, Complications and Mortality, Report 2a, 2017-18 (combined data for England & Wales) https://digital.nhs.uk/data-and-information/publications/statistical/national-diabetes-audit/report-2complications-and-mortality-2017-18	

STATISTIC	REFERENCE
Other Risk Factors	
High cholesterol; air pollution, high BMI mortality	Global Burden of Disease (GBD) Wales mortality estimates 2019
Adults 18% smoke ~ c. 400k smokers	National Survey for Wales 2019/20 - https://gov.wales/adult-general-health-and-illness-national-survey-wales-april-2019-march-2020 Updated in the 2020/21 survey but with different methodology — those smoking figures are not cited here; see publication for details BHF estimate based on survey data and ONS population estimates; <i>NB</i> ONS Smoking Habits in the UK 2019 has lower prevalence estimate (15.5%)
5k deaths; 1k CVD deaths/year due to smoking ~ 26k hospital admissions/year	NHS Wales estimate/BHF estimate – <i>NB</i> Global Burden of Disease (GBD) Wales mortality estimates for tobacco/smoking are higher (7k/1.7k) ~ ASH Wales https://ash.wales/
Physical activity, adult BMI/obesity, alcohol, 5-a-day	National Survey for Wales 2019/20 - https://gov.wales/adult-general-health-and-illness-national-survey-wales-april-2019-march-2020 Some updates in the 2020/21 survey but with different methodology — figures are not cited here; see publication for details
Children BMI/obesity prevalence	National Child Measurement Programme Wales 2018/19 (NB data for reception year only) - https://phw.nhs.wales/services-and-teams/child-measurement-programme/ [the final edition of the Welsh Health Survey was the last all-ages survey – 2015 fieldwork, published 2016]