

# Cardiovascular Disease in Somerset Annual Report of the Director of Public Health for Somerset 2022/3





**Somerset**  
Council

# Dedication



I would like to dedicate this report to our dear friend and colleague Louise Finnis who sadly passed away suddenly from a cardiovascular event in 2022. She worked tirelessly in public health for many years and left an indelible impression on the health and wellbeing of the people of Somerset, as well as all those who had the pleasure to know and work with her. Gone too soon.

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The data supplement (APHR statistical annex) that accompanies this report can be found at the following link:

<http://www.somerset.gov.uk/organisation/departments/public-health/>

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# Foreword

## Howzat? Cricket & Cardiovascular disease

Whilst we sadly can't claim to have invented cricket in Somerset, it is a strong part of our culture. Many people in our county enjoy the sport and those that play regularly will undoubtedly feel the health benefits and experience a lower risk of cardiovascular disease as a result of regular exercise.

In this report, I consider the health of the Somerset population with a particular focus on cardiovascular disease...just for fun we will try and keep the cricket theme going throughout!

Put simply, cardiovascular diseases (CVD) are a broad range of conditions that affect the heart and blood vessels. Each day in Somerset, approximately five people die from cardiovascular disease and one of them will be under 75, so it takes a long and healthy retirement away from many people. For this reason, this group of diseases present a significant public health concern in Somerset.

CVD nationally costs our NHS £9 billion. It also costs a further £10 billion each year to the wider economy, causing significant costs in social care and lost working days, not to mention the significant impact it has on families.

As we emerge from the COVID pandemic, we have even more reason to focus on CVD. The pandemic has been a time of changed lifestyles and disrupted healthcare, with much of the CVD preventative measures being impacted. It is time for us to review the main risk factors and CVD outcomes so we can refocus our efforts to reduce the impact of CVD on Somerset's health and wellbeing.

Sadly, like many diseases, the impact falls unequally in society. We know that people living with many other challenges experience higher levels of CVD. This point will be discussed in the report and the recommendations will call for a renewed focus on preventing CVD overall and the inequalities that people experience relating to the disease.



Professor Trudi Grant

Executive Director of Public and Population Health  
Joint appointment between  
Somerset Council & NHS Somerset ICB

# What is cardiovascular disease?

Cardiovascular disease (CVD) is a broad term used to describe a range of diseases affecting the heart and blood vessels and can affect all organs of the body.

Fatty deposits, plaques, build up in our blood vessels in the same way water pipes can rust up. The older your pipes are, in general, the more furred up they will be – and in the same way age is one of the main factors for cardiovascular disease.

However, if we have high cholesterol levels, then our pipes are in the equivalent of hard water areas, and this can increase the rate at which deposits build up. As deposits build up, they narrow the space for blood to flow and also pieces may break off and travel through the body where they may lodge in other smaller blood vessels causing a blockage.



Loss of blood supply deprives the affected tissues of oxygen and this can cause temporary or permanent damage to body organs and this set of disease processes lie behind many of the cardiovascular events we can experience. These are most noticeable where lack of oxygen affects the brain or the heart but peripheral arterial disease can cause loss of blood supply and damage to muscles and organs throughout the body.

In the heart, sudden reduction in oxygenated blood supply can cause the pain of angina and if prolonged cause death of parts of heart muscle, affecting the ability of the heart to beat and causing a heart attack.

Temporary loss of blood supply in the brain can lead to what are often termed as mini strokes (transient ischaemic attacks) and again if this is prolonged then there may be permanent death of brain tissue which can be seen dramatically in effects of a stroke but on a more insidious level is the same process which causes vascular dementia.

High blood pressure increases cardiovascular disease risks putting the cardiovascular system under strain and making it more likely that any plaques may be dislodged.

Other cardiovascular events can be caused due to a blood vessel bursting, as occurs in aortic aneurysm or in some strokes.

Atrial fibrillation is a disorder of the heart rhythm and can in itself disrupt the ability of the heart to beat effectively. It can also increase the risk of small clots developing which in turn increase the risk of blockages if they move elsewhere in the circulation.

More gradual loss of heart function leads to heart failure where the heart slowly loses the ability to pump blood effectively around the body.

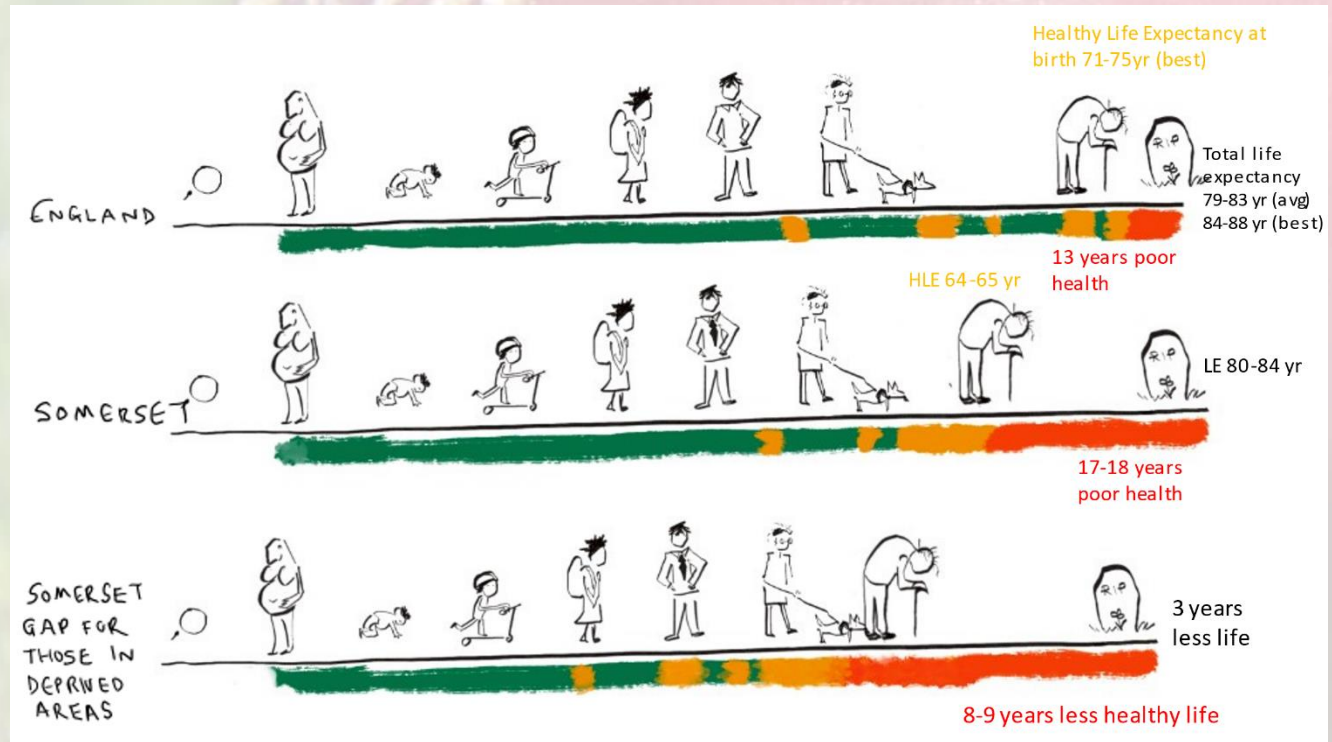


# A good innings

When in bat in cricket, you want to be scoring a lot of runs – aspiring to a century even! Life is like that too, we all want a life full of good shots, well taken and enjoyed.

But what is a good innings in life? For many years we have focussed on issues which shorten life in a reasonable goal to avoid premature mortality – statistically considered a death before the age of 75.

However increasingly now we are focussing on the issues which shorten healthy life and the issues which cause greatest inequalities in healthy life expectancy.



In Somerset, average healthy life expectancy at birth is a bit above the England average 64-65 years – not even enough to see some of us to retirement.

However, life expectancy in Somerset is good and quite a bit above the England average. Paradoxically this means that we also spend more years in poor health in Somerset than average. Sadly, the extra life expectancy in Somerset does not translate into the extra years of healthy life which so many of us want. Whilst no one generally wants to die prematurely, people are a lot more ambivalent about the value of living a long life in ill-health.

How much better would our quality of life be if we could gain years of healthy life?

# Preventing cardiovascular disease

Although cardiovascular disease does become more common with age, it should not be seen as inevitable.

It is estimated that about 90% of cardiovascular disease and 80% of premature deaths are attributable to modifiable risk factors.

Within the challenge of preventing cardiovascular disease and addressing the risk factors, it is useful to think about them at different phases of the disease progression, ideally beginning before disease has even started.

Focusing efforts on the pre and early disease stages also makes sense as taking action gets increasingly more difficult, expensive and becomes less successful the further we progress along the disease pathway. Anyone who has tried to quit smoking, adopt a healthier diet or increase their exercise levels will agree it is hard. Arguably, it would be a lot easier if we were able to avoid developing any of our less healthy habits and just saw healthy options as the norm.

Once conditions like obesity or high blood sugar levels are established it is important to identify them early to avoid further damage to the cardiovascular system.

Treatments to keep blood pressure low, cholesterol levels in check and the risks of atrial fibrillation at bay can have side effects. However often there are various options and a number of medications can be tried to try and find the right fit. We need to support people to find the most appropriate treatment for them and not just to give up on treatment due to initial unpalatable side effects.

Modifiable risk factors are often seen as those relating to behaviours which we know increase risk of CVD like smoking, excess alcohol consumption, high salt consumption and a lack of exercise. However we know that whether someone develops one of these risk factors is far from random.

Many of the behavioural risk factors for CVD like smoking or alcohol consumption may also be used as methods of stress reduction. Lack of ability to eat sufficient fresh food may be a result of limited income or time to cook more complicated meals. More risky health behaviours are often seen in those living in areas with greatest challenges and in groups experiencing burdens of other kinds like mental illness or homelessness. If we don't shift some of the factors which influence the health behaviours that put us more at risk of cardiovascular disease then we will probably never be able to improve cardiovascular health in Somerset.

So when considering the factors which result in a good innings, whilst it is clear that some individual characteristics and behaviours can increase the risk of cardiovascular disease, it is probably even more important to understand what are sometimes called "*the causes of the causes*" or wider determinants of health.

In cricket terms, it's a bit like the way the crowd, the pitch and weather all contribute to the play of the game. Even the best cricketers are not going to be able to play well, or possibly at all, on a poor pitch, with the crowd against them and in poor weather conditions.



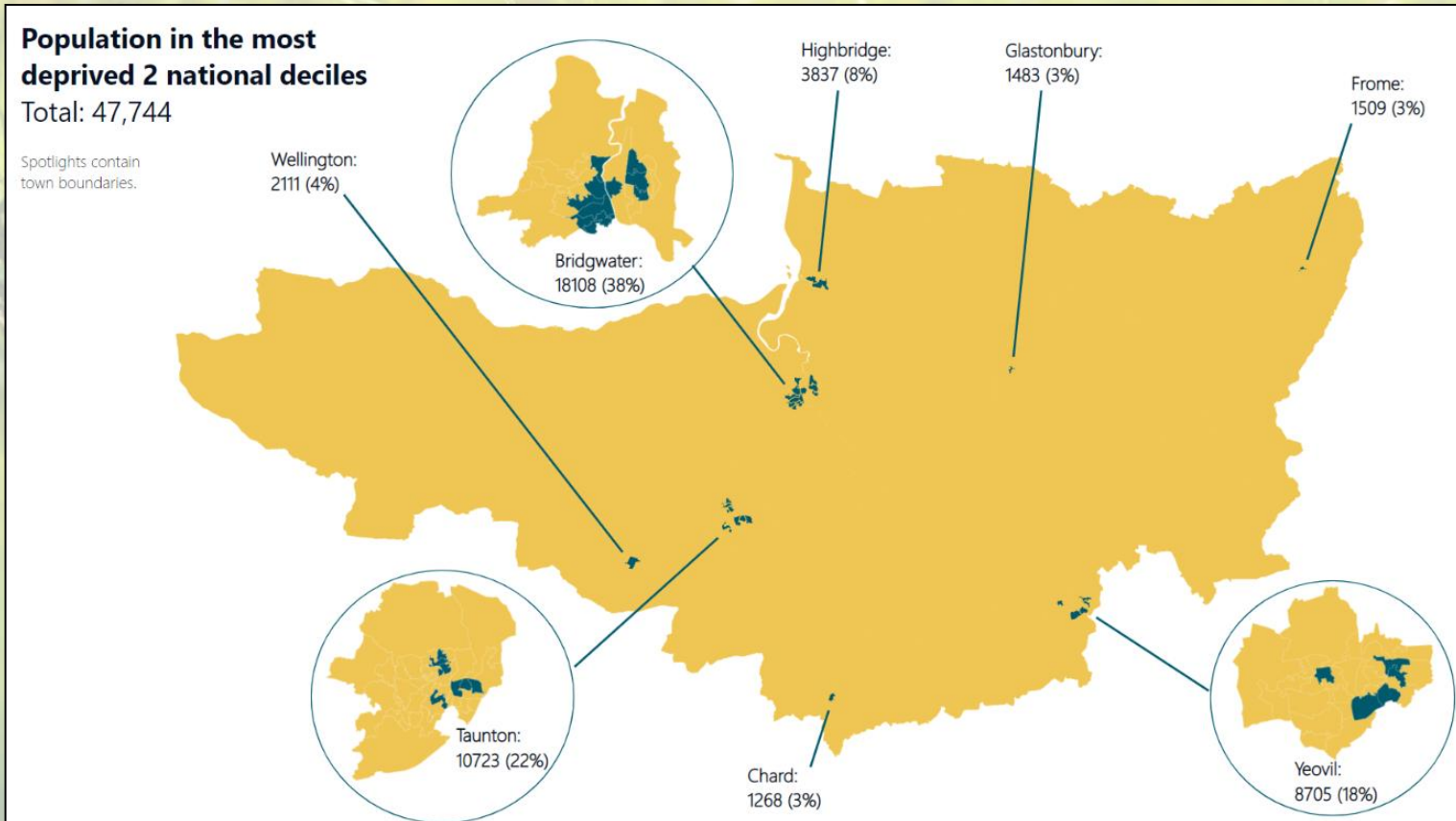
# Playing conditions: The Pitch – impact of deprivation

In cricket terms, one of the most influential factors on the play of the game is the quality of the pitch. For CVD probably the most important 'pitch' on which we play is where we live, and this can also have a critical impact on health.

One way in which we can measure the 'quality of the pitch' and the challenges of living in a specific geographic area is through the Index of Multiple Deprivation.

The Index of Multiple Deprivation takes into account local levels of income, employment, education, health, risk of crime, accessibility of good housing, access to services and the quality of the local environment.

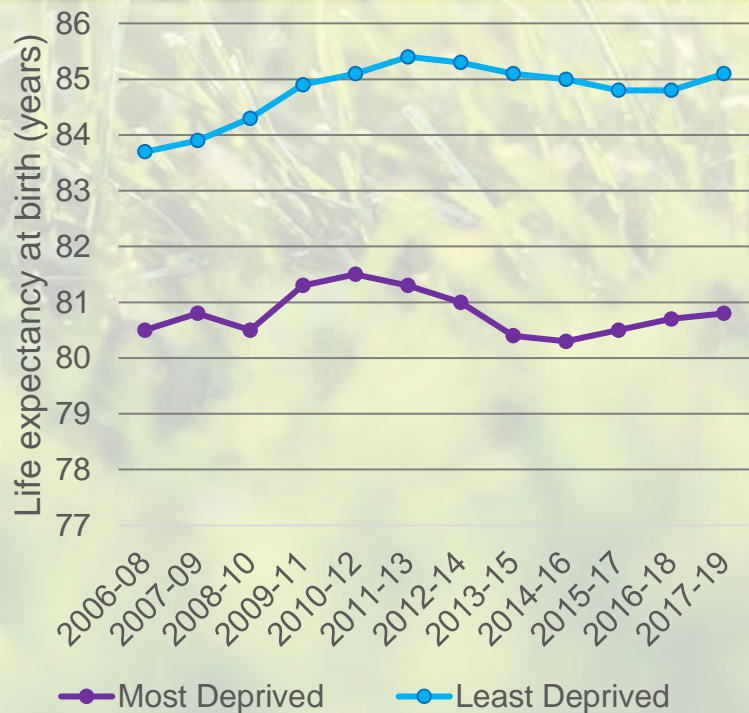
On average in Somerset about 48,000 people live in areas with deprivation scores which fall in the 20% highest levels of deprivation in England, known as the CORE20. Our most deprived areas tend to be found in parts of our larger towns as shown in the map.



# Inequalities in cardiovascular health outcomes

People living with the greatest challenges, in the 20% most deprived parts of Somerset, can experience the impact of these poorer conditions in many aspects of their lives and their health.

If we compare people who live in the 20% most and least deprived areas of our county, as shown in the graph, we can see there is a gap of about five years in life expectancy at birth. In line with the rest of England, poorer CVD outcomes are the most important reason for this gap in life expectancy in Somerset.



Overall, in Somerset rates of premature mortality (deaths under age 75) due to cardiovascular disease are lower (and therefore this is better) than in the rest of England. However, this generally good picture hides some inequalities. Rates of premature mortality due to cardiovascular disease for those with severe mental illness are four times higher than in the background population and Somerset has one of the worst outcomes in England for this measure.

We know that people living in the more deprived areas nationally are four times more likely to die prematurely (before age 75) from cardiovascular disease than in the least deprived areas. The Index of Multiple Deprivation is averaged across small areas where about 1500 people live, so even within each area there will be high and low spots and exceptions to the general pattern.

Research data shows that deaths due to cardiovascular disease in those who are homeless can be two to three times higher than in the background population.

We are addressing some of these impacts with specific initiatives which focus on those living in CORE20 areas as well as other vulnerable groups, such as those homeless or with mental illness, and seeking to further understand local inequalities in outcomes for other vulnerable groups.

Other important life circumstances that are associated with increased CVD risk include our level of education and working environment. Job characteristics like shift work and low levels of control over our job have long been linked to poorer cardiovascular health.



# Playing conditions: Wider determinants of health and social environment

One of the key wider determinants of health is the social network which surrounds us. Our family generally provide the first models of many behaviours and strongly influence eating habits, exercise behaviours and attitudes to smoking and alcohol use.

Our social network has a major impact on lifestyle behaviours. For example, if your friends and family smoke, then it is very likely that you will also smoke. On the other hand, family and social networks can also be influential in supporting people to make positive changes to their health behaviours.

Our social network can also provide a point of reference and prompt us to seek help for symptoms which may hasten diagnosis.



Our social networks provide us with a sense of belonging and are especially a support during stressful times.

Any sportsman knows the impact a supportive crowd can have in the likelihood of winning the game. In parallel, having a strong sense of social connection, such as being in a relationship, being part of a club, having a faith and feeling part of your local community are all associated with better health. They are what we call 'protective factors' and they play a beneficial effect on our physical and mental health.

'Social isolation' – a small number of social relationships and 'loneliness' – the feeling that ones social relationships are deficient, have both been associated with poorer cardiovascular outcomes.

In the Active Lives Adult Survey, levels of loneliness reported by people living in Somerset (those aged 16+) are similar to those in the rest of England, with approximately 22% of people stating they feel lonely always, often or some of the time.

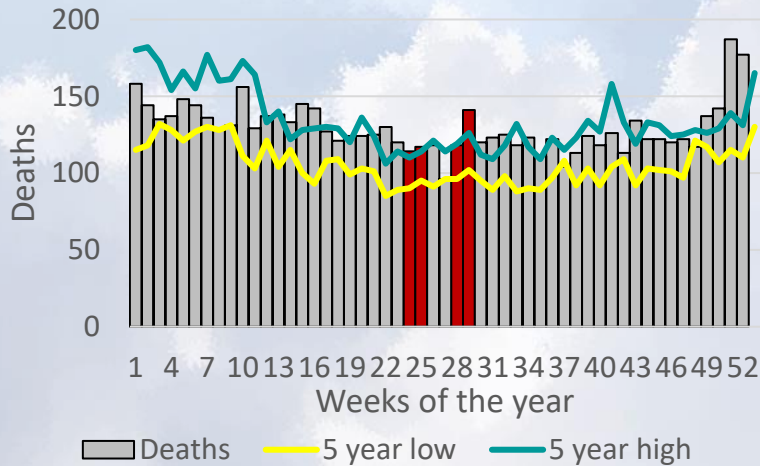
Living in a more sparsely populated rural county can magnify the impact of social isolation through lack of proximity, public transport and poor digital connectivity in some parts. On the plus side, for some it can also be a positive influence. Somerset has many areas with a strong community spirit and many opportunities for volunteering and contributing to a vibrant community life.



# Playing conditions: The Weather

Typically, it is rain which stops cricket! But both high and low temperatures can increase risk of cardiac events. Risks are higher for those in the youngest and oldest age groups and those with pre-existing CVD. For both hot and cold weather extremes, public health messaging can support protective actions for services and individuals.

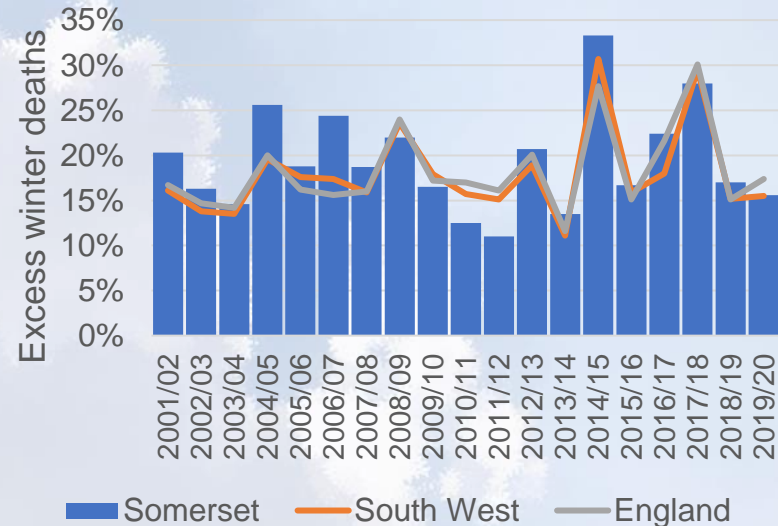
The year 2022 has been notable for periods of very high temperatures. Somerset was spared some of the extremes seen in other parts of the country, but still saw record breaking high temperatures. The first heat wave in mid-June, spread over two recording weeks, showed little impact on death rates. However, the cumulative impact of the more intense two July weeks can be clearly seen in the graph below with above average deaths.



Deaths occurring each week in Somerset residents 2022, heatwave weeks shown in red

Low temperatures are a greater risk for deaths than high temperatures. The impact of cold in causing extra respiratory and circulatory disease deaths is shown in the Excess Winter Death Statistic. This shows how much higher average winter deaths (Dec-Mar) are compared to the other seasons. Generally, Somerset follows the national trend with similar rates to England.

Although we did not have a particularly cold winter in 2022/23, the cost-of-living crisis is likely to have impacted on the ability of people to heat their homes and so the effects may be more profound.



Excess winter deaths in Somerset 2001-2020

# Team fitness

So on to the team!

Cardiovascular disease is reasonably common and we all need to be aware of our risk but, as already mentioned, some population groups have a higher risks than others based on factors such as genetics, sex, age and ethnicity. These are often considered non-modifiable factors but actually if you dig deeper, the reasons why these groups are at higher risk is often their experience of preventative healthcare.

Understanding those in our population who are most at risk of CVD is important to enable us to focus our prevention activities to reduce these inherent inequalities in risk and ensure they get the best care possible.



Some single genes can increase risk of CVD, for example the one for familial hypercholesterolaemia (high cholesterol). A family history of close relatives who have experienced heart attacks or stroke before the age of 60 may indicate an increased genetic susceptibility to high cholesterol. Although we can't do much at present to change our genes, we can look to detect this condition early so that effective treatment can be given and other close members of the family who may share the same genes can be tested.

The risk of CVD increases with age and is also greater for males compared to females. In Somerset, we have a larger proportion of people in the older age groups than in the rest of England. In the ONS 2021 census the Somerset population has a median age of 47 compared to 40 for England and Wales. This means cardiovascular disease is likely to become more common as most of the predicted population growth will be in older age groups.

Newly released data from the 2021 census shows that approximately 3% of the Somerset population are people in Black ethnic groups and or South Asian ethnic groups. These ethnic groups have a higher risk of some cardiovascular conditions. Some of this increased risk is likely to be due to untreated clinical risk factors and it is imperative we improve our recording of ethnic group in health care to improve risk stratification and outcomes for all people.

In the next few pages we outline how healthy our Somerset population are in regards to the key risk factors for cardiovascular disease. We also show how we are supporting our local population to address some of the behaviours which increase CVD risk as well as many other risks.



# Smoking

At a population level, smoking status is the single most influential risk factor on both life expectancy, early deaths, loss of quality of life and inequalities in these outcomes. Stopping smoking is acknowledged as the most effective intervention to reduce CVD risk.

Within Somerset smoking, is estimated to cause about 92 deaths per year through contribution to CVD. It is also estimated that each year smoking costs Somerset over £100m in lost productivity due to increased illnesses in smokers, about £20m in increased health care costs, £15m in increased social care costs and about £5m to deal with smoking related fires.

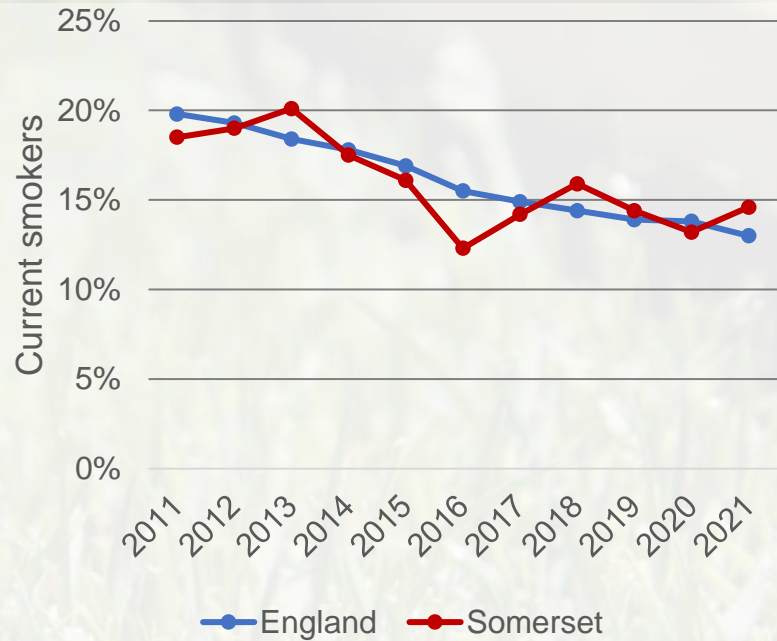
The number of active smokers in Somerset has been declining over time and undoubtedly the more widespread availability of vaping kits has enabled people to move away from the more damaging habit of smoking.

However, Somerset has a greater proportion of smokers compared to England with about 14.6% adults being current smokers. This means there are about 68,000 smokers in Somerset.

There are significant inequalities in smoking rates. Rates are more than double in those with severe mental illness and in routine and manual occupations compared to technical or managerial occupations. We estimate that rates are about four times higher in those who are homeless.

Smokers' risk of high blood pressure is double that of non-smokers. It is also associated with increased development of atherosclerosis where fatty deposits build up in blood vessels and impact on the development of clots in the blood system. Stopping smoking significantly reduces the risk of a cardiovascular event and benefits can be seen in months.

Even in those who have had a heart attack, there is a reduced risk of a second event for those who give up smoking compared to those who continue.



Prevalence of smoking among persons 18 years and over Annual Population Survey (APS)



# What are we doing: Supporting Somerset residents to stop smoking

To address inequalities, targeted work takes place with groups known to have higher rates of smoking and greater lifestyle challenges to quit.

Somerset has established a multi-partnership Tobacco Control Alliance in 2022. This group has a priority to reduce some of the inequalities due to smoking with a particular focus on harm to children and young people and smoking in pregnancy.

Just over 70% of our smokers aged 15+ in Somerset have a recorded offer of support to quit in the past two-year period. Smokefree Somerset is the key offer of stop smoking support in Somerset. It offers a 12-week quit programme. The service has continued through the pandemic, adopting a flexible model including telephone based support, groups and use of a 1:1 digital app. Nicotine replacement therapy is provided through direct supply and via pharmacies. The service also offers carbon monoxide monitors which can be borrowed.

In 2022, the Smokefree service supported 1264 people to set a quit date for smoking, 916 people, (72%) of these maintained their quit at 4 weeks (compared to the national average of 55% 2021/2022 data) and of these 701 (76%) of people maintained their quit at 12 weeks. The service have also introduced new harm reduction approaches supporting people with their readiness to quit when don't feel ready to quit smoking at referral.



[SmokeFreeLife Somerset presents "Your personal nicotine monster" – YouTube](#)

The Somerset, 'Your personal Quit Monster' is a friendly and supportive campaign which has integrated pathways with Smokefree Somerset.

The regular Stoptober campaign has been focussed on NHS and social care staff support pathways. In March 2023, Somerset has launched a new hospital based smoking service with all smokers approached with an offer of support whilst in hospital to stop smoking. On discharge patients are referred to the community Smokefree Somerset offer.

# Physical activity

Whilst a good batting team has to be physically fit, interestingly, it is the fielders not the batting side, who cover the most ground during a match. Fast bowlers cover about 23km per day in a match at international level and even the 'less' active wicket keepers still cover about 17km per day.

Cricket like many sports is great for encouraging physical activity. Not surprisingly currently playing cricketers are more likely to be meeting physical activity recommendations than the general population.

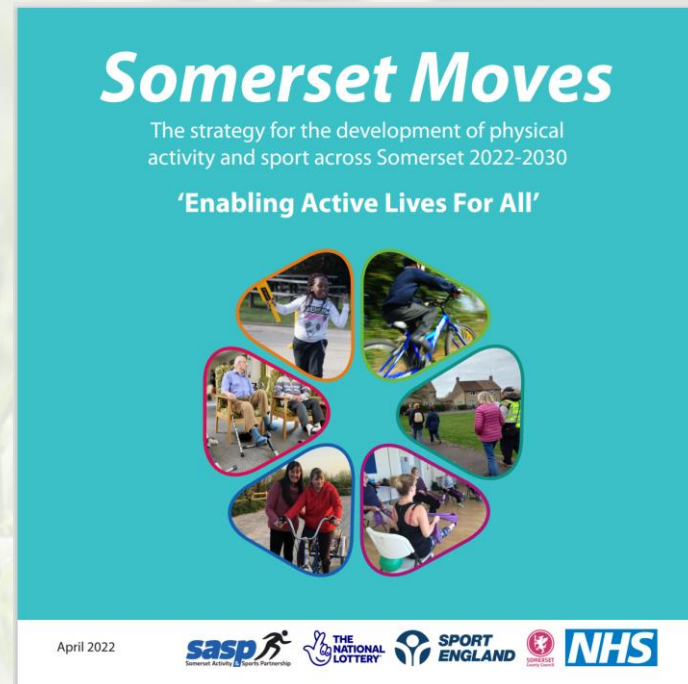
Exercise has a key value in the prevention of cardiovascular disease. Exercise appears to promote development of new blood vessels in the heart which increases the resilience of the blood supply should minor blockages occur. It also appears to improve the lipid profile, decreasing levels of 'bad' cholesterol.

According to the annual Active Lives Survey 2021/22, the number of people who are active (meeting the recommended 150 minutes or more of activity a week) in Somerset is 63% compared to England average of 61.4%. Males are slightly more likely to be active than females. The proportion of active people peaks in the 35-54 age group at 70.3% and then reduces in older age groups with only 41.9% of those in the 75+ age group being active.

The many opportunities to enjoy our wonderful Somerset countryside probably contributes to overall levels of physical activity. However, there are still clear social inequalities in levels of exercise with about 20% fewer people who are in more routine occupations or not working, in the active category, compared to those in managerial occupation categories.

Somerset Moves is a whole system physical activity strategy developed in 2022 with partnership from across all sectors in Somerset. It has six key priority areas

- ♥ Positive experiences for children and young people,
- ♥ Increasing community activity,
- ♥ Connecting with health and wellbeing,
- ♥ Developing more active environments,
- ♥ Supporting and motivating people to move,
- ♥ Developing leadership and workforce partnerships





# What are we doing: Getting Somerset moving!

During lockdown the public health funded multi-partnership campaign 'Get Outside in Somerset' promoted safe physical activity options.

As we emerge from the challenge of COVID we have seen a general deconditioning impact of pandemic with some people being less active overall. As part of our COVID recovery programme, funding has been used to expand falls prevention support, and a fund for care settings to expand moving more options e.g. walks, swimming, gardening, activity groups.

The Exercise referral and health walks for those aged 16+ has been recommissioned in 2022 with a revised and enhanced target of 2500 people engaged each year. Health walks is co-ordinated countywide by SASP the active partnership for Somerset since April 2022.

During October to December of 2022, 50 walks were available across the county, with over 3100 walkers taking part. The walks are led by volunteer walk leaders. There are exciting plans for more walk leaders, walks in new areas and at various levels (no matter what the weather!) to support any ability.

To promote active travel, Somerset has invested in Modeshift stars and Beat the Street. Beat the Street Yeovil ran in May 2022 and engaged over 7000 people with 94,303 miles covered.

Somerset Cricket Foundation is pivotal in encouraging the love of cricket in the county including different ages and abilities. For example, Walking cricket clubs are billed as the same sport but at a slightly slower and gentler pace. Participants have spoken about the benefits to them of taking part.

*"Enables me to have exercise as well as playing cricket which thought I would never be able to play again and mentally being in a group that enjoys having a laugh and really having fun."*

*"Amazing how many steps, bending, stretching, throwing etc you do but in gentle ways. Good fun, social atmosphere with like minded people. We can adapt for different abilities too which ensures inclusion."*

*"I am diabetic and needed to lose weight so the physical exercise is good for me"*

*"I have met new people and expanded my social circle"*





# Healthy eating

And after all that exercise, on to the famous cricket tea break! Cricket has a tradition of good tea breaks. However, as cricketers have noted, over-indulging in tea breaks doesn't always make for a good game.

Food related risks with the strongest association to CVD include high sodium, high red meat, low grains and low fruit consumption. However, we know that these food characteristics are often seen in low-cost calorie dense food diets.

There is a lack of Somerset level data on levels of healthy eating. Our healthy eating initiatives therefore address a wide range of factors and focus on food production and cooking healthy meals.

The Somerset Community Food initiative has enabled a range of projects to support health eating with over 50 food growing projects involving over 12,000 people across the county. Projects supported have ranged from cooking training, community supported agriculture, community allotment groups, orchards, gardens and fields, social and therapeutic horticulture projects, and school educational gardens.



Healthy eating habits are established early in life. Whole family after school cookery clubs have encouraged development of basic skills of healthy meal production. School water campaigns have encouraged consumption of water and avoiding high empty calorie drinks.

As we recover from the challenges of the pandemic, we need to turn our attention to supporting our communities with the cost-of-living crises which can often limit affordability of healthy food choices. We have supported five local food pantries which address food waste and good value healthy foods.



# Applying behavioural science to public health campaigns

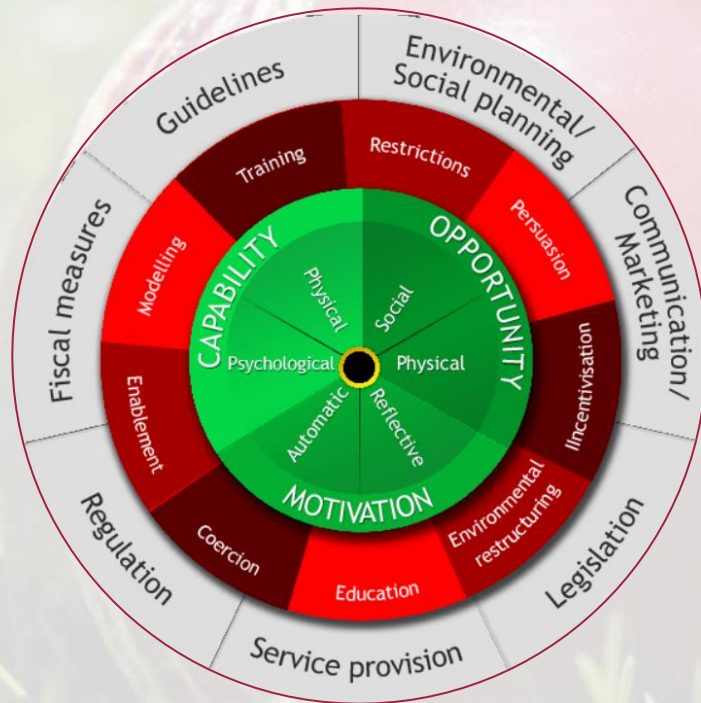
Somerset County Council has established a Behavioural Science Unit which applies evidence-based theories and techniques to understanding behaviours, using an approach similar to the Behaviour Change Wheel framework (West et al, 2020) to inform different health promotion campaigns throughout the Public Health team.

Taking this approach means firstly identifying the target behaviour and the target population of the campaign. This ensures clarity in what the behavioural outcome is, for example 'contacting Smokefree Somerset to quit smoking'; it means there is a clear view in terms of what the campaign is asking people to do and what it is aiming to achieve. Equally important is selecting a population group to target. Demographics are often used to segment populations and can assist in the selection of appropriate communication methods.

The next step is understanding what is influencing the target behaviour. The Unit uses the COM-B model of behaviour change (Michie, van Stralen & West, 2011) to understand the extent to which capability, opportunity, and motivation are influencing the behaviour. To understand the barriers and facilitators of the target behaviour, various methods are used: conducting primary research such as focus groups or surveys, conducting a literature review to find published and unpublished studies, or using professional judgement from topic experts and stakeholders.

The method selected depends on capacity, resources, and deadlines but each can add valuable contribution to understanding the target behaviour of the campaign.

The final step is selecting evidence-based techniques to address the barriers and facilitators of the target behaviour. These techniques can be used to inform the content of the campaign, ensuring that there is a behavioural rationale for why particular content has been developed and what behavioural constructs key messages are targeting.



The Behaviour Change Wheel, West et al. 2020

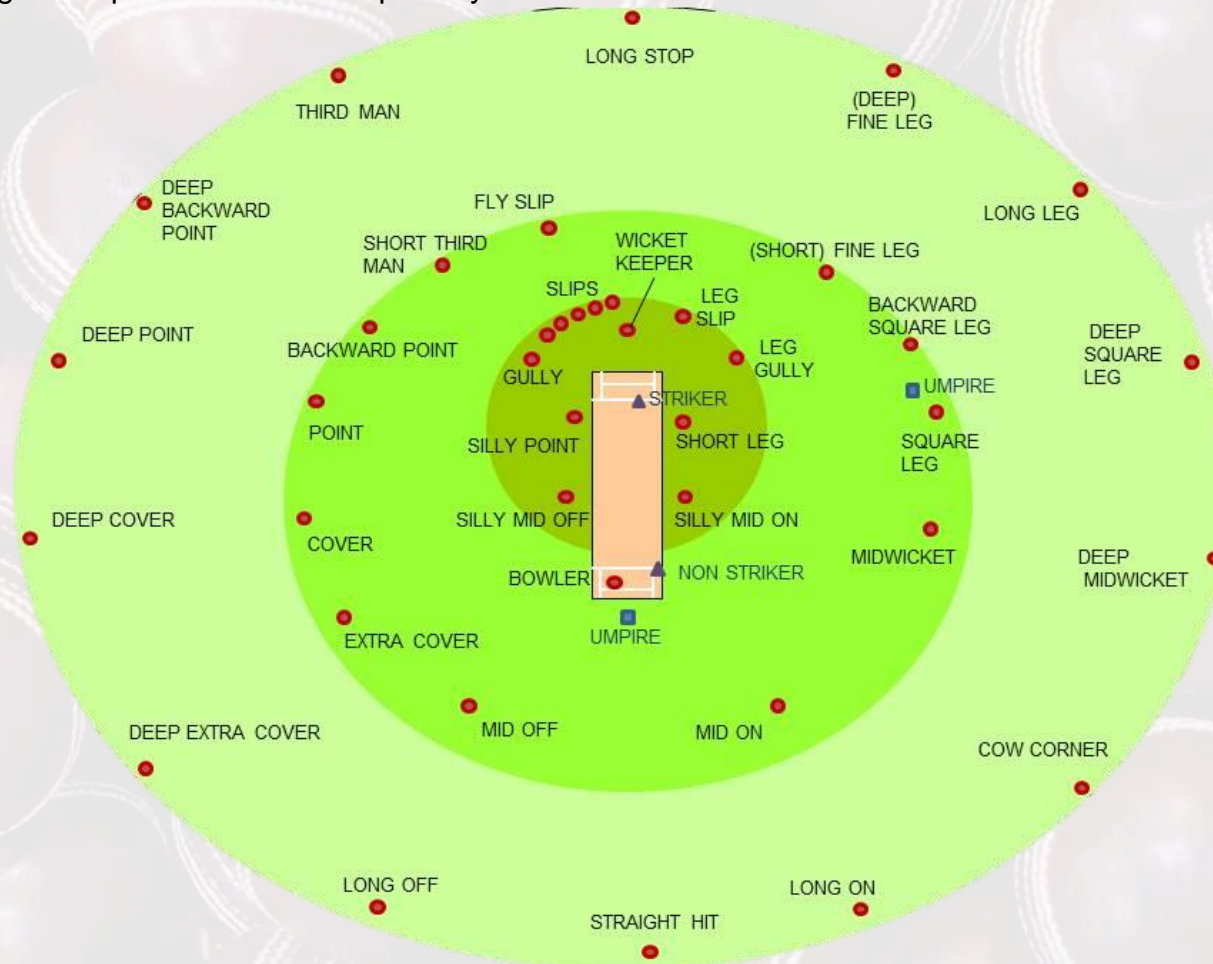


# Fielding positions in cricket

When you look at the possible fielding positions on a cricket pitch you can see potential layers of fielders who back each other up within fielding areas, e.g. silly point, point and deep point. A good fielding side is built around a skilful wicket-keeper.

The wicket keeper for cardiovascular disease is undoubtedly our general practice and wider primary care services.

General Practices and wider primary care services are the first line within the healthcare system and are responsible for catching some of the early clinical risk factors for cardiovascular disease. However, they need to be backed up by a wider set of fielders (and stretching our analogy a little), occasionally a few catches taken by the crowd...we all have a role to play!





# Fielding tactics and good CVD catches

Within the context of CVD, there are a number of clearly identified points at which you can 'catch' the disease (or early signs of relevant disease) in an effort to avoid more serious life-threatening outcomes such as heart attack, stroke and dementia. These risk factors include:

- ♥ High blood pressure (hypertension)
- ♥ High cholesterol (hypercholesteremia)
- ♥ Atrial fibrillation (disrupted heart rhythm)
- ♥ High body mass index
- ♥ High blood glucose levels and or diabetes
- ♥ Kidney dysfunction
- ♥ Abdominal aortic aneurysm (bulge/swelling in the aorta blood vessel)

Public Health England (now taken forward by the Office of Health Improvement and Disparities) set ambitions for detection and treatment of three of the key CVD risk factors; atrial fibrillation, hypertension and cholesterol. In this next section we assess our position with regard to early detection and optimising treatment for these conditions.

## Public Health England 10 Year CVD Ambitions

### Addressing Atrial Fibrillation:

- ♥ 85% of the expected number of people with atrial fibrillation are detected by 2029
- ♥ 90% of those with atrial fibrillation who are known to be at high risk of stroke to be adequately anticoagulated by 2029

### Addressing High Blood Pressure:

- ♥ 80% of the expected number of people with high blood pressure are diagnosed by 2029
- ♥ 80% of the total number of people diagnosed with high blood pressure treated to NICE Guideline targets by 2029

### Addressing High Cholesterol:

- ♥ 75% of people aged 40-74 have a primary care recorded CVD risk assessment in the last five years by 2029
- ♥ 45% of people aged 40-74 with a 20% or greater 10-year risk of developing CVD are treated with statins by 2029
- ♥ 25% of people with familial hypercholesterolaemia are diagnosed and treated optimally by 2024

# What are we doing: Risk stratification in primary care

As well as finding new cases of people with cardiovascular disease and/or risk factors, as a system we have work to do to ensure that known cases receive sufficient input so that their risk factors for disease are as well controlled as possible.

In Somerset we are promoting and trialling use of risk stratification tools which identify patients who need the most urgent input. The capacity for GPs to take an overall proactive care approach is limited and so stratifying patients by risk is helpful to identify which patients require most urgent review.

Other work on the management of medicines can send safety alerts of patients with non-optimal treatment indicators.

The UCL Proactive Care Framework provides searches and other resources to risk stratify patients who have clinical records which indicate further action is required. UCL Proactive Care Frameworks currently exist for:

- [Atrial Fibrillation](#)
- [Hypertension](#)
- [Lipid management inc. Familial Hypercholesterolaemia](#)
- [Type 2 diabetes](#)

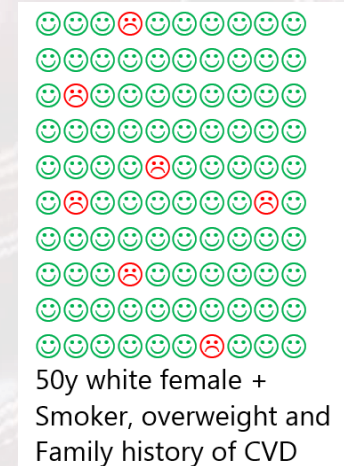
<https://uclpartners.com/our-priorities/cardiovascular/proactive-care/>

QRISK is a way of representing risk of future cardiovascular disease. The current edition is QRISK3 and anyone can access this to calculate their risk <https://qrisk.org/three/>

The example below shows the risk for a 50-year-old, white, female with no specific risk factors is 2.1% of a heart attack or stroke in the next 10 years.

So, in a room of 100 people with those same characteristics, 2 would be expected to have a heart attack or stroke in the next 10 years. However, if that person smokes, is obese and has a family history of heart disease, that risk more than triples to 6.9%, so 7 people in the room would be expected to experience a heart attack or stroke.

Anecdotally, we know that people find this visual representation of risk helpful to understand their personal risk of cardiovascular disease and the factors which increase it.



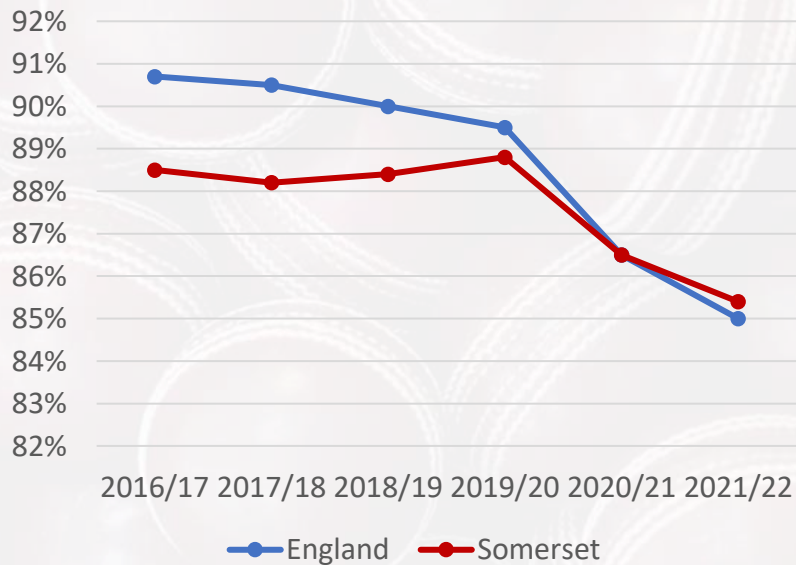
Ten-year risk of stroke or heart attack



# High Blood Pressure

High blood pressure (hypertension) is a potent risk factor for all cardiovascular diseases. It was estimated in 2019 that about a third of the people in Somerset with hypertension do not know they have it (about 50,000 people) and so receive no treatment to reduce the impact of this risk factor.

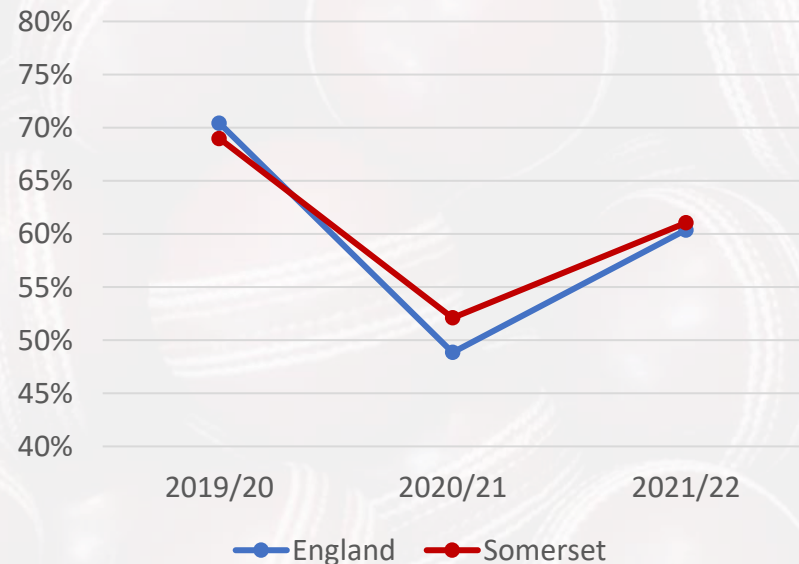
The pandemic lockdown and other system pressures, reduced opportunities for blood pressure monitoring, especially for those not already diagnosed with CVD. Our local data shows younger males, those in Black and South Asian origin ethnic groups are less likely to have a recent record of blood pressure.



Patients, aged 45+, who have a record of blood pressure in the last 5yrs (QOF)

There are about 100,000 people diagnosed with hypertension in Somerset. Lifestyle changes are the recommended as a first approach for hypertension, e.g. reducing sodium in the diet, stop smoking, reducing BMI and alcohol consumption.

The numbers of those diagnosed who have a record of making lifestyle changes and being treated with medication which brings their blood pressure down to a healthy level for their age has also dropped during lockdown. There are signs of this improving but not yet to pre-pandemic achievement. To reach the ambition of 80% of people with expected hypertension being diagnosed by 2029 we are going to need significant action right across Somerset.



Patients diagnosed with hypertension who are treated to target. (QOF)



# What are we doing: Blood pressure monitors in our libraries

Somerset is one of the first local authorities in England to roll out widespread availability of blood pressure monitors in local libraries. There are over 250 blood pressure monitors available to borrow across Somerset. On average about 30 monitors are loaned every week and this is growing over time.

Borrowers are encouraged to complete a monitoring sheet and send a week's worth of readings to their GP along with demographic information. Libraries are great locations to loan blood pressure monitors from and are perfectly set up to promote return of the monitors so they can have a wide population impact.

Somerset libraries have been the setting for other health initiatives with co-location of health coaches, free standing blood pressure and BMI machines and a whole host of books encouraging healthy lifestyle with staff trained and able to signpost people to resources.



User experience of someone who was prompted to visit their GP due to high readings on library-based machines is seen below:

*"I have continually checked it by borrowing the blood pressure monitors from the library so that I could keep an eye on it and within 4 days it dropped down to 124/74 and then continued to decrease.*

*I also gave up crisps and peanuts and reduced my caffeine intake to one a day so that really helped. Then because of the high blood pressure, blood samples were taken with an ECG and everything was ok apart from my cholesterol.*

*I didn't want to go on statins until I'd tried reducing the fat in my diet so kept to a strict diet of no cakes, biscuits, pastries, peanuts, crisps, cheese, coleslaw, mayonnaise, and creamy puddings... even over Christmas and it paid off as it reduced (my cholesterol) to 4.1 which also helped my blood pressure.*

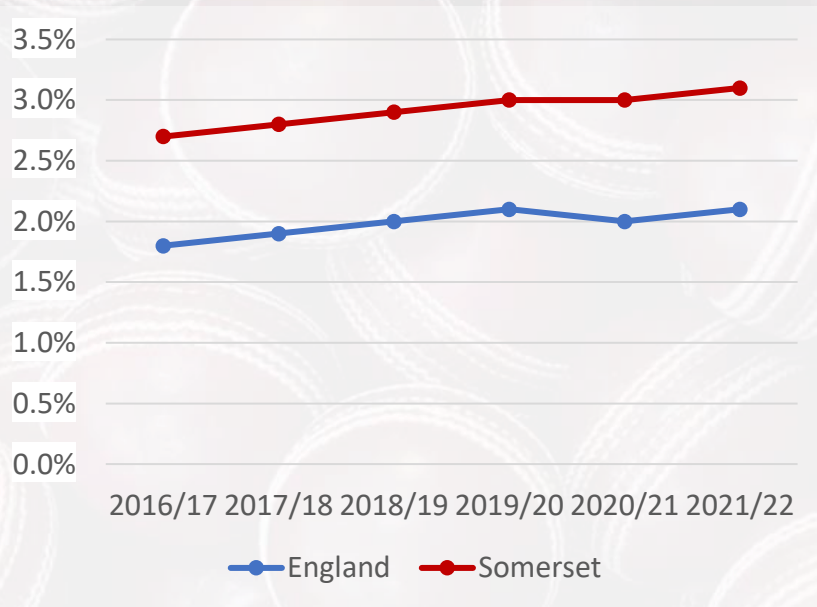
*So I'm now tablet free but I will continue to monitor my BP so I don't go high again, especially as I am allowed to add a few of the nice things back into my diet.*

*A big shout out for raising awareness of High Blood Pressure for people with no symptoms and who weren't overweight!"*

# Atrial Fibrillation

Atrial fibrillation (AF) is a heart rhythm disruption which causes 1 in 5 strokes. It is slightly more common in males and also increases with age.

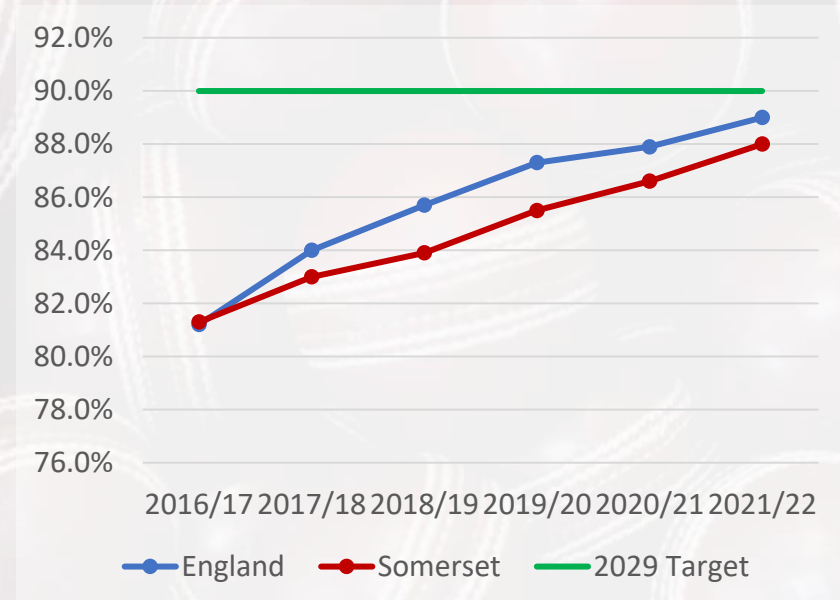
Prior to COVID in 2019, Somerset was doing well detecting AF with an estimated 90.3% of AF cases diagnosed against an ambition of detecting 85% of the expected rates. The proportion of patients with a diagnosis has been increasing and although the increase took a slight plateau during the pandemic, there are signs this is continuing to improve.



Atrial fibrillation: prevalence in GP records (QOF)

People who have signs of AF and who are at high risk of stroke may benefit from taking anti-coagulant medication as this reduces the risk. For some more serious cases AF may be treated with a pacemaker.

A starting point for adequate treatment is an anticoagulant prescription and Somerset is moving towards a goal of at least 90% of people with diagnose AF receiving anticoagulants. This fantastic performance is testament to a lot of hard work and a focus, particularly from general practice and other parts of primary care. Further data will enable us to identify where current anticoagulant treatment requires adjusting to optimise results for people.



Proportion of patients with AF, known to be at high risk of stroke who are anti-coagulated.(QOF)



# What are we doing: NHS Health Check Programme

The NHS Health Checks programme is a good example of secondary prevention. It incorporates a range of checks which offer an opportunity to detect many risk factors for cardiovascular disease at an early stage.

The programme is offered to those aged 40-74 who do not already have a diagnosed cardiovascular condition like hypertension. An NHS Health Check is recommended every five years and results are forwarded to the person's GP.

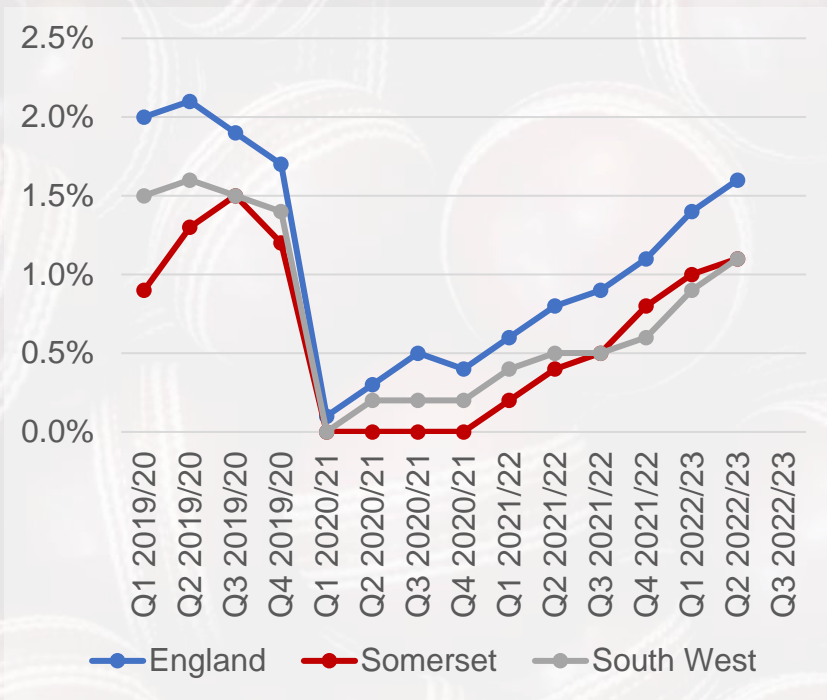
The Somerset NHS Health Check comprises of measurements, advice and referral to further support if required for the following:

- ♥ Sex, age, ethnicity and family history of CVD
- ♥ Height and weight to calculate Body Mass Index
- ♥ Blood pressure and heart rhythm check
- ♥ Cholesterol blood profile
- ♥ Blood sugar (if meeting risk filter)
- ♥ Risk of cardiovascular disease calculation
- ♥ Risk of depression (local additional assessment)
- ♥ Calf pain (local additional assessment)

Before the pandemic approximately 8500 health checks were delivered each year with 25.3% of the eligible population having been reached in the previous five-year cycle. This is lower than the England average of 41.3%.

The NHS Health Checks programme was severely disrupted due to pandemic demands, lockdowns and pressures on GP and pharmacy to support the COVID vaccination programme.

In Somerset, due to the pandemic, we estimate that up to the end of 2022, about 17,000 NHS Health Checks have been missed compared to delivery levels at the end of 2019.



NHS Health Checks Delivered to Eligible Population



# Results and coverage of our NHS Health Check

The Somerset NHS Health Check supports the local population and system with early disease detection. In 2022/3, the programme is almost back to pre-pandemic delivery levels with 8535 receiving a check.

We detected high blood pressure in 2231 people. This was 35% of males and 21% of females checked. There were 143 people considered to have an irregular pulse which may indicate atrial fibrillation. One person had their check halted and was told to seek immediate medical help due to their irregular pulse.

About half of participants were referred for further checks of their cholesterol levels. Of these, 148 people had a high total cholesterol of 7.5 mmol/L or greater.

Checks found 162, people with a raised blood sugar levels indicative of pre-diabetes risk, 33 people had a high result indicating actual undiagnosed diabetes and 2 people a very high result showing really uncontrolled diabetes requiring urgent attention.

About 2 in 5 people were overweight and 1 in 5 were obese. Only 8% said they were current smokers. Alcohol consumption was raised in 15% of those checked. All received lifestyle advice and offers of further referrals if desired.

Overall, 3830 (45%) people checked were referred to see their GP with 225 told to see their GP within two days for urgent follow-up, and 5 requested referral to other specialist services.

Comments from feedback questionnaires:

*"A very informative session and can truthfully say has changed my lifestyle"*

*"Great service... Found out I had high blood pressure and now carrying out some further tests."*

*"Efficient, friendly and have recommended a friend goes and has hers."*

As of January 2023, the NHS Health Checks programme in Somerset is offered from over 48 regular locations and employers in 36 locations. We have increased locations in more deprived areas and to workplaces therefore widening access to those of working age.

In 2022/3, of the 8535 checked, 62% were females and 38% males which, as males are at greater risk of cardiovascular disease is a gap we need to address.

Our age coverage has a bias towards those at the younger end of the age range for the programme and is a deliberate strategy, as the greatest public health gain is to focus on those who are able to benefit from early detection for longer.

We have similar proportions of people receiving a health check in each ethnic group. We are reaching fewer of those living in more deprived areas than we need to. This inequality has worsened since lockdown and is partly a function of the locations which have recovered delivery fastest.

In the health checks sample, 616, 7%, received a high or very high QRISK score  $\geq 20\%$ . This compares to an expected population rate of just over 10%. To make our programme more effective we would like to increase our reach to those in higher risk groups.

# Cholesterol



Non HDL (High Density Lipoprotein) cholesterol, including LDL (low density lipoprotein), sometimes called 'bad cholesterol', are some of the main building blocks for the process of atherosclerosis where fatty deposits clog up our blood vessels.

Reducing saturated fat in the diet, increasing exercise, stopping smoking and drinking alcohol in moderation, are all lifestyle changes which can help lower 'bad' cholesterol levels.

Lipid lowering drug treatment is recommended for all those with a 10% or greater 10-year risk of developing CVD. In Somerset, about 1 in 5 people with diagnosed CVD are not on a lipid lowering therapy at all.

In Somerset, approximately 55% of people with 20% QRISK are on statins and 44% of those with a 10% QRISK. This is exceeding the 10-year cardiovascular ambition but still leaves a large proportion of the population at risk and about 3 in 4 are not reaching target cholesterol levels.

Although more novel lipid lowering therapies are available, these frequently need specialist clinical input. At the end of 2022, current waiting times for a referral to secondary care for lipids in Somerset was approximately 82 weeks, although there is now welcome additional investment to bring this down.

Familial Hypercholesterolaemia (FH) is a genetic condition which results in much higher than usual levels of LDL cholesterol and these high levels develop at a much earlier age. CVD risk is much higher and it is not uncommon for people with FH to have CVD events like a heart attack or stroke in their 20s or 30s.

When treated with lipid lowering therapies and alongside lifestyle changes, this reduces CVD risk of FH to usual population levels. FH has its impact from birth and children as young as ten may benefit from treatment.

FH may be suspected based on pattern of cholesterol, other blood results and family history of early CVD events, but genetic testing is required for definitive diagnosis. Following detection of a case of FH, family cascade testing is offered. It is likely that half of the first-degree relatives of a case will also be at high risk. So detecting just one person with FH has the potential for positive impact on many lives.

FH is estimated to affect about 1 in 250-500 people, making the likely population in Somerset approximately 1160 - 2320.

As of 2021 in Somerset there are less than 20 people diagnosed using genetic tests and the system to follow-up family members is very under-developed.





# Diabetes

Diabetes occurs when the insulin produced by the pancreas is insufficient for the body's needs or does not work as well to control blood sugar levels.

Type 1 diabetes is primarily an autoimmune disorder. About 90% of people with diabetes have Type 2 where increasing demands for insulin due to a larger body size due to becoming more overweight drives the greatest risk. Other risk factors include poor diet, inactivity, smoking and high blood pressure. It is also more common with increasing age, in Black or South Asian ethnic groups and in those with a family history.

Somerset has about 36,000 people who are living with diabetes, a likely 10,000 undiagnosed and 35,000 who have warning signs of raised blood sugar. About 2000-2500 people are newly diagnosed with Type 2 diabetes each year in Somerset. People who are on the way to developing type 2 diabetes (prediabetic) often have raised blood glucose levels for years.

The National Diabetes Prevention Programme which identifies and supports people with this diabetes risk has been found to reduce the immediate risk of developing diabetes by 30-60%. The Diabetes UK Know Your Risk assessment offers a self-referral route into the programme where appropriate. We need to encourage greater awareness of diabetes risk and uptake of prevention programmes in Somerset.

**TYPE 2 DIABETES**  
**KNOW YOUR RISK**

<https://riskscore.diabetes.org.uk/start>

For those who develop Type 2 diabetes, this used to be thought of as a permanent condition, but evidence is building that many cases can be reversed with weight loss. The low-calorie diet is one of the newer interventions for diabetes and available in Somerset.

For those newly diagnosed with Type 2 diabetes, education can help people to manage their diabetes more effectively. In Somerset during lockdown, the DESMOND education programme paused its face-to-face offering and has still not recovered to pre-pandemic levels of delivery. In Somerset only about half of newly diagnosed diabetics are referred for education programmes – with welcomed active review of current education provision.

Overall diabetes reduces life expectancy by more than fifteen years for Type 1 and 10 years for Type 2. Diabetes accounts for about 10% of the national NHS budget and about 90% of this cost is to treat complications of diabetes. Complications can be reduced by meeting treatment targets for blood sugar levels, blood pressure and cholesterol. Checks of eyes, feet, kidney function, blood and BP can pick up complications at a stage they can be more easily treated.

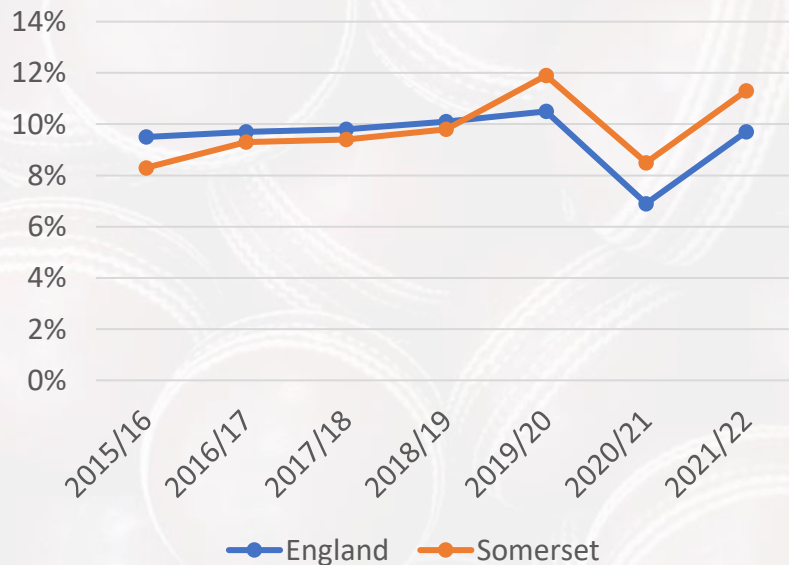
Somerset performs below average for numbers of people with diabetes supported to meet advised treatment targets. In Somerset, about half of people with diabetes receive eight care processes checking for early damage, which is better than England average but still leaves many people at risk. Somerset has a level of major lower-limb amputation slightly better than the England average but has the highest rate in England for minor lower limb amputations despite reasonable levels of foot checks occurring.



# Overweight and Obesity in Somerset

As our bodies get larger, they put more strain on our CVD system. Obesity is both a direct risk factor for development of CVD and also contributes to risk of other conditions like diabetes, high cholesterol, hypertension and sleep disorders which can independently worsen CVD risk.

In Somerset, rates of adult obesity are rising and are worse than the England average. Abdominal obesity as measured by waist circumference and waist to height are recognised as a separate risk factor to overall Body Mass Index and maybe an easier measure to take and understand.



Percentage of adults (aged 18+) classified as obese (QOF)

Recognising you if are obese should not really be a surprise to most people. There are some signs however that as society norms shift and we become more used to seeing people who are above a healthy weight, recognising that current weight levels are a problem is even more difficult and people do not recognise when they are overweight at a stage when it might easier to take action. However, unlike some of the other clinical risk factors, the equipment to monitor risk, scales or tape measures, is present in most homes so we should be able to encourage greater awareness.

The National Childhood Measurement Programme was necessarily scaled back during times when COVID disrupted school attendance. Our 2021/22 programme, which has run at full capacity, has however given us a good opportunity to take stock of the present Somerset position

In 2021/22, the proportion of Somerset children in reception class who were overweight or obese, 21.8% was similar to the England average of 22.3%. In Year 6, 2021/22 data shows 34.6% Somerset children are overweight or obese compared to 37.8% England average. However, this still means that about 1 in 3 children this age are overweight now compared to 1 in 6 children in 1990.

This increase in childhood overweight and obesity is storing up problems for the future.

# What are we doing: Healthy weight services

Somerset has developed a system wide approach to obesity. We have established an obesity multi-partnership board and funded a healthy weight co-ordinator post within the ICB to drive a system wide approach forwards. Initial priorities are to integrate work with diabetes pathways and the national diabetes prevention programme.

Somerset is reviewing evidence for compassionate approaches to healthy weight for local implementation. So that conversations about weight can be more attuned to the reality for people with limited resources to address their weight. We have undertaken a pilot with care settings for those with learning difficulties providing staff training, menu analysis and resource development.

We are focusing on early years to provide supportive interventions to build healthy habits long term so children can grow into a healthy weight.

We are currently evaluating the content of our NCMP feedback letters to parents to ensure messages are clear and delivered in a sensitive manner to facilitate action. An NCMP steering group is working on enhanced training for school nurses, and an online offer for families to access support.

Healthy weight services are traditionally split into tiers which increase intensity as the factors relating to overweight become more complex and as the degree of overweight increases.

Tier 1 universal services are available to all to encourage healthy eating, exercise and healthy weight. Examples include leisure centres, commercial lifestyle programmes, Health walks, exercise on referral, Man v Fat and various food projects. Within the NHS, GP based lifestyle / health coaches can also offer advice.

Tier 2 services aim to provide more targeted, structured lifestyle and weight management services including short courses. Somerset is a pilot area for the secondary care National Digital weight management programme. This is a 12 week on-line digital programme accessed by GP or pharmacist referral and is designed for adults with a BMI 30+ who also have diabetes and or hypertension. We are hoping to develop more support in this area for people looking to manage their behaviours around their weight.

For children a key resource is the HENRY (Health, Exercise, Nutrition Really Young) training for all early years practitioners.

Tier 3 services for adults provide specialist provision via multi-disciplinary clinical input from dietitians, endocrinologist and psychologists although it is recognised this service is very under pressure. For under 5s and their families, the Splash programme provides multi-disciplinary input and links to community offers for family activity and cookery programmes.

Tier 4 services are in the main surgical and include bariatric surgery.



# Kidney dysfunction

The kidneys are an often overlooked but important part of the cardiovascular system. These two organs which are placed either side of the lower spine, usually act as the body's filters, removing waste products and excess fluid from the blood and enabling them to be excreted in urine.

Chronic kidney disease is another condition which can be present for many years at a symptomless level. However, if kidney function starts to fail then toxins are no longer able to be effectively excreted and this can cause feelings of tiredness, reduced urine production, itching, and headaches and other symptoms.

There are just over 20,000 adults in Somerset with recorded mid to late-stage kidney disease (G3a-G5), who have less than 60% of normal kidney function. Stage 5 is kidney failure where less than 15% of normal function remains and people require either a kidney transplant or dialysis or to stay alive. Dialysis is a treatment which replaces the function of the kidneys but it requires hours of attachment to a filtration machine.

The key risk factors influencing kidney disease are high blood pressure and diabetes. If uncontrolled then the higher levels of blood sugar which can be seen with diabetes can damage the kidneys. High blood pressure can also damage the delicate kidney blood vessels.

Nationally we know that those from more deprived living areas and also ethnic minority groups are at greater risk of kidney disease and also less likely to receive a kidney transplant.

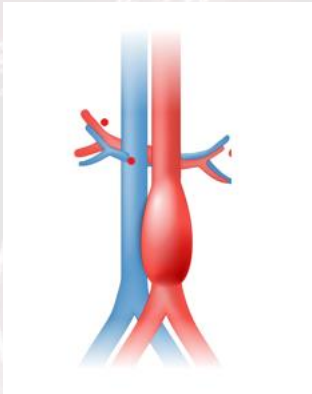
As high blood pressure is such a risk for kidney disease and also a marker for kidney disease progression, many of the initiatives to diagnose the estimated 50,000 in Somerset who are unaware of their hypertension risk will also benefit those at greatest risk of worsening kidney disease.

Somerset has been trialling work to send patients home based tests to measure their Albumin Creatinine Ratio (ACR) from a simple urine sample. To date, the work has identified over 300 new cases of kidney disease, in some cases picking up people who had not engaged with previous test offers for 15 years. The challenge now is to engage these people with actions to slow progression of their kidney disease.



# Abdominal Aortic Aneurysm

The abdominal aorta is the major blood vessel which takes blood from the heart, running down the abdomen. An abdominal aortic aneurysm (AAA) is a weakness which can be seen as a bulge in the vessel, as shown in the picture below.



The weak area can be prone to bursting. If this happens blood flow is disrupted and this is a serious medical emergency requiring urgent surgical treatment.

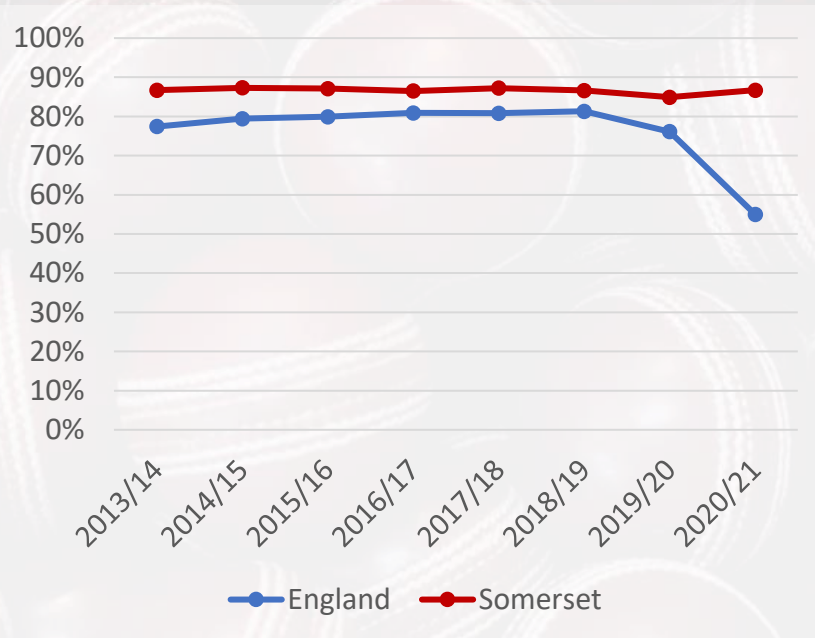
Only 1 in 5 people will survive a burst aortic aneurysm.

Aortic aneurysms generally give no symptoms prior to rupture, so screening is absolutely key to risk reduction. Risk of aortic aneurysm is increased in males and also increases with age. About one in a thousand males have the most severe level of aneurysm.

Somerset runs a national screening programme for Abdominal Aortic Aneurysm. This is offered to males aged 65 and involves an abdominal ultrasound to check the size of the abdominal aorta and indicate any weaknesses.

Dependent on the size of any aneurysm detected then further screening and or surgery may be recommended. Healthy lifestyle advice is also given which if followed can help to avoid increasing the size of aneurysm and the strain it is under.

Somerset has one of the top three best performing AAA screening programmes in England, reaching almost 90% of those eligible and screening about 3000 a year. The screening coverage levels have been maintained throughout the pandemic.



Proportion of males aged 65 eligible for AAA screening who are successfully screened each year



# COVID stops play

To state that the COVID pandemic stopped play is an under-statement. The normality of everyday life came to a crashing halt for the vast majority of people with the start of lockdown in March 2020.

In our past two Annual Director of Public Health reports, we have tracked the acute impact of COVID on the health and wellbeing of the Somerset population.

Many of the risk factors for CVD, like smoking and obesity, are also risk factors for other causes of death like cancer. It is now clear that they are also factors that worsen COVID infection outcomes. We know COVID infection was more serious for those with pre-existing CVD. In the first UK COVID wave, people with diagnosed CVD had a 3.9 times greater risk of a severe infection and 2.7 times greater risk of death.

Overall Somerset emergency hospital admissions fell by about 20% with the start of lockdown. However, a similar dramatic drop was not really seen for emergency admissions for circulatory diseases – rates in 2020/21 remained fairly stable and were similar to previous years. This is probably not surprisingly given the (eventual) severity of a major cardiovascular event and the usually unambiguous signals that emergency care is required and can't be ignored.

The heroic input of general practice and pharmacy colleagues to the challenges of the pandemic has necessarily reduced capacity to focus on the CVD risk factor detection which usually occurs in primary care. The NHS Health Check programme was also brought to a half in 2020/21 and severely reduced in 2021/22. The impact of this disruption to cardiovascular disease prevention is just starting to be calculated.

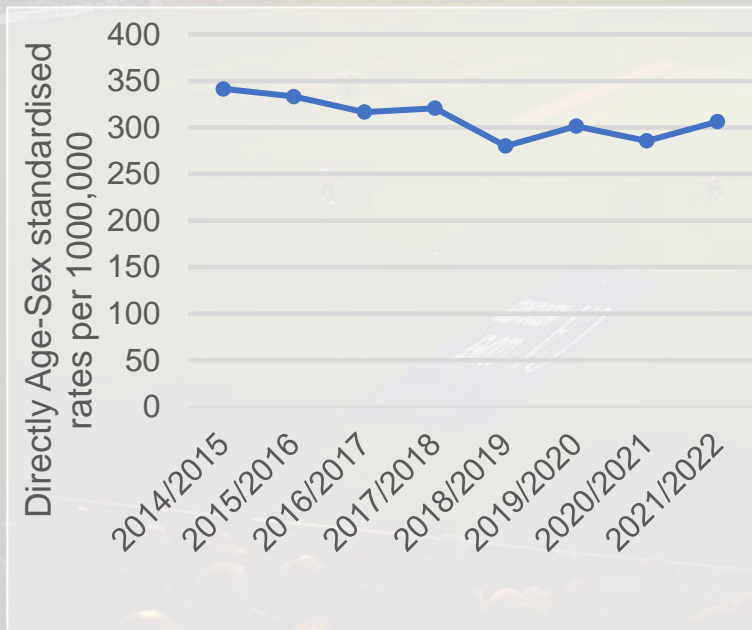
For example, given disruption to hypertension care, if the reduction in recorded numbers of patients treated to target is taken at face value, in Somerset alone this is likely to result in approximately 252 extra heart attacks and strokes in the next three years. We suspect the actual risk is probably less than this due to changes in recording during the pandemic, but this still means COVID will leave us with a legacy of increased CVD.



# Dismissal and the end of the innings: Cardiovascular events

In 2021 there were 6,182 deaths of Somerset residents, and 1,547 of these deaths had circulatory diseases stated as an underlying cause. Therefore, for every 100 deaths about 23 are due to cardiovascular disease. Of these 23, about 5 are due to stroke, 3 to heart attack, 1 ruptured aortic aneurysm, 1 heart failure and the rest a mix of less common CVD causes.

Overall, there is good news as the rate of deaths due to CVD has been dropping for the last 70 years. Rates of CVD deaths in Somerset are proportionately lower than the rest of England. However, CVD still remains one of the leading causes of death for our county and we are still monitoring to see if COVID is going to cause rates to rise significantly.



Somerset Deaths due to CVD

Pre-diagnosis, many CVD risk factors do not have a strong impact on quality of life as they remain mostly symptomless until the point of a cardiac event. This means that an event like a heart attack or stroke can often appear to come out of the blue with little warning.

At the time of an acute cardiac event, it is critical that early signs are recognised as the important warning they are. Further medical attention should be immediately sought so that specialist medical interventions can be accessed as quickly as possible.

For stroke, the 'FAST' campaign has greatly increased awareness of early stroke symptoms. Similar campaigns exist to raise awareness of less well-known heart attack symptoms like sweating and unease.

**Act **FAST** and call 999.**

**Facial** weakness  
**Arm** weakness  
**Speech** problems  
**Time** to call 999

In the case of a heart attack which occurs out of hospital, bystander first aid whilst awaiting an ambulance can double survival rates.

For survivors of an acute cardiac event, this often results in disruption to daily life and starts the challenge of recovering as far as possible back to match fitness.



# A six for Somerset! Getting over the boundary on cardiovascular disease prevention

There is a lot of good work going on across the Somerset system to promote healthy lifestyles, detect cardiovascular risk factors and promote appropriate lifestyle and pharmaceutical treatments. However, it is also clear there are areas where we perform below the England average, miss some of our most vulnerable populations or despite an above average performance in a poor field leave many at risk.

All of our systems have limited capacity, so we need to focus our efforts wisely rather than spread too thinly.

We also need actions which can be completed outside of the traditional health service to boost capacity and relieve pressure. However, we also need to push our boundaries so we can make a real difference to cardiovascular disease prevention.

In the spirit of exceeding our current boundaries, we are suggesting six goals for Somerset:

- ♥ Pitch preparation
- ♥ Working on the Ashes
- ♥ Doing it off your own bat
- ♥ A good fielding system
- ♥ Treatment delivery
- ♥ Keeping an eye on the scoreboard

## **The Laws of Cricket**

### **19.7 Runs scored from boundaries**

**19.7.1** A Boundary 6 will be scored if and only if the ball has been struck by the bat and is first grounded beyond the boundary without having been in contact with the ground within the field of play.

# Recommendation: Good pitch preparation

*“A quality cricket surface allows players to express and develop their skills, ensures the cricketer has a rewarding experience and that the game of cricket can be enjoyed by players, and supporters alike across all levels of participation”.* Pitch Preparation — The basic fundamentals

We need to turn our gaze back to the ‘playing conditions’ for those who live in Somerset. We want to ensure that we live in communities that are as conducive as possible to living a healthy lifestyle.

We know in Somerset that whilst we enjoy relatively long lives, we know that some sections of our community struggle to live a healthy lifestyle resulting in large inequalities in life expectancy, healthy life expectancy and premature mortality for some communities and population groups.

We need to work with our communities and specific groups of the population to understand what would help them to live healthier lifestyles.



## Recommendation 1:

**We need to develop our environment with the purpose of improving health and environmental sustainability.**

The local authority has a key role to play in putting health and tackling inequalities into all policies. Focussing our efforts on active choices for transport and ensuring major planning developments are putting the health and wellbeing of residents at the centre are good examples of how, with a specific focus, we could make the healthier choices the easier choices.



# Recommendation: Doing it off your own bat

Pressures on health and social care services following the pandemic have been considerable. Many people have experienced a deterioration in their health and wellbeing, either through lack of social contact, inability to conduct activities of normal living or due to disruption within health services which has meant that people with long term conditions or specific health needs have not necessarily had some of the proactive and preventative care they would have received prior to the pandemic.

We all have a role to play in taking responsibility for our own health and wellbeing and that of the people around us. The initial prevention of cardiovascular disease (called primary prevention) predominantly lies with us. The lifestyles that we lead have a significant impact on our risk of cardiovascular disease. It is a health condition, but it is largely preventable and, for most of us, within our own control.

In recommendation 1 we have talked about setting the right environment for the healthy behaviours to be the easier ones. This second recommendation is focused on those individual lifestyle behaviours and the need for us all to take responsibility for:

- ♥ participating in regular physical activity,
- ♥ eating a healthy diet and maintaining a healthy weight
- ♥ staying within sensible alcohol levels
- ♥ being a non-smoker
- ♥ keeping stress levels manageable

## Recommendation 2:

**Together with communities we need to re-invigorate efforts to promote, encourage and support people in Somerset to enjoy a healthy lifestyle and all the benefits that it brings.**

Improving your lifestyle isn't easy as most of us know, it often takes small steps over a long period to time. New healthier habits need to be formed.

Where people are able to use them, we need to use some of the technological solutions that are now available to help us form these new habits and keep track of our progress, backing this up with face to face where its needed.

For some people challenges in the rest of their lives mean living a healthier lifestyle is more difficult. Some people will need support, others could take more responsibility themselves.



# Recommendation: Working on the Ashes



## Recommendation 3:

**Call for renewed action to meet the national challenge to reduce smoking rates to 5% or less by 2030.**

Smoking is still the number one modifiable risk factor for CVD and health inequalities and supporting people to stop smoking needs to remain a key priority.

Despite clear reductions in smoking over recent years, there remains an estimated 68,000 smokers in Somerset. Smoking is a significant driver of health inequalities with smoking rates twice as high persisting in those in routine and manual occupations compared to managerial and professional occupations.

We have a strong community stop smoking service and have also just established a hospital-based service to address smoking for hospital in-patients.

We need to think creatively as a system about how we can have an even more effective approach to stop smoking, particularly targeted to the needs of those people who remain regular smokers.

In 1882 a mock death notice for English Cricket was placed in The Sporting Times following Australia's victory over England that year.

Following England's victory the following year in Australia, a small urn of ashes was presented to the English team, jokingly dubbed the ashes of Australian cricket – and so the joke triggered the establishment of the annual tournament where the 'ashes of cricket' are fought over each year. This remains one of the greatest challenges in cricket.



# Recommendation: A good fielding system

A good fielding team will anticipate the game well and will post their fielders strategically across the field, ideally to catch the ball or at least to prevent too many runs.

A good fielding system is needed for cardiovascular disease. We need to identify disease early and, once diagnosed, we need to act early (catch it). Preventing the progression of disease once it has been identified is called 'secondary prevention'. In some instances, such as when someone has been identified as prediabetic, it is possible to reverse the disease with a healthy lifestyle.

To concentrate our efforts in Somerset we will be focussing on high blood pressure (hypertension). There are estimated to be around 50,000 adults in Somerset who do not realise they have high blood pressure therefore we have a major opportunity to improve public health.

High blood pressure often has no symptoms therefore we need to work hard to find those undiagnosed 50,000 cases. This is action we can and must take both inside and outside of the health system. It will need to be mindful that risk of high blood pressure is associated with inequalities, there are groups of the population that are at higher risk.

## Recommendation 4:

### **A system-wide focus on finding and supporting those with high blood pressure**

We should build on the excellent work we have done with our libraries and provide monitoring opportunities into new locations so that we can reach people who are less likely to engage with traditional health services.

A concerted effort to find cases of high blood pressure also means we need to look carefully at how we provide support and treatment to these people

We will need to look at new models of care and put in place solutions that can scale up our response to high blood pressure – all the while making sure we address the inequalities that exist in the diagnosis and treatment of it.



# Recommendation: Treatment delivery

Local data shows that many people within our system are known to have risk factors for disease but are not receiving optimal lifestyle support or treatment.

For example, three quarters of people with known CVD do not have cholesterol levels treated to an ideal level. Ten percent of those with atrial fibrillation and a high risk are not treated with anticoagulation drug treatment. About a half of those with diabetes are missing treatment targets. And a third of those with hypertension still have blood pressure which is higher than healthy for their age.

We need to think creatively about how we can lever in capacity to be able to move to proactive care as opposed to the reactive care our system too frequently finds itself in now.

We can widen opportunities for making sure people are receiving the optimum care, as long as its done appropriately. This could be achieved by several parts of the health and care system. The public can also have an important part of play by monitoring their own health and wellbeing and feeding back their data.

There is potential for sensible diversification for the workforce to improve access to services and ensure we are making the best use of the skills and capabilities we have in Somerset.

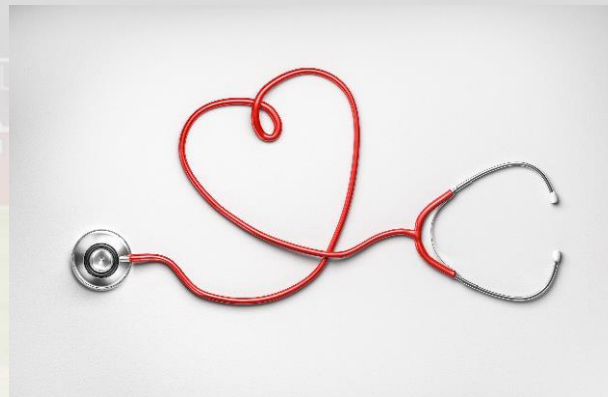
## Recommendation 5:

### Finding and sticking to the right treatments

Where it is required, finding and taking the right level of medication is fundamental to reducing the risk or progression of disease once it has already been diagnosed.

Patients need to be fully engaged in treatment decisions so they are more likely to take it and gain the health benefits. We need to understand the factors which mean that many people do not persevere with treatments despite the health benefits.

In some cases, people may not be able to take specific medications, or the patient may have made an informed choice not to take medication. However, people often stop medication if they find the side effects intolerable. If medication is the required course of action, there needs to be a joint concerted effort to find the right type and level of medication to encourage people to continue with the treatment.





# Recommendation: Keep an eye on the scoreboard

Keeping a careful score and changing tactics accordingly is what cricket is all about.

Cardiovascular disease is an area that lends itself to what in the NHS is termed a 'Population Health Management Approach'. This is a methodology that brings together health-related data to identify specific populations that may be at increased risk and could be prioritised for particular services.

This methodology could be employed for example to help us to identify people who may be in that group of 50,000 with undiagnosed high blood pressure. However, this approach is relatively new and does require development in its use across Somerset.

One aspect of that development is the improvement of data collection and the ability to bring it together and use it to develop more targeted patient care. When you play cricket you look at all kinds of data, player statistics, time, overs, even the weather. They all play a part in assessing the risk of winning or losing.

Bringing data together to benefit a patient's health is no different; it looks at a number of different parts of the data and puts it together to give us a better idea of risk for an individual. Importantly, it also allows us to undertake equity audits. These look at the types of people that are accessing support and services so we can make sure services are meeting the needs who need them most.

## Recommendation 6:

**Improve data collection and use it to help predict risk of disease and diagnose and intervene early**

Somerset has agreed to developing integrated data to improve individual patient care and look to detect and prevent ill health to a greater extent in the future. Prevention is far better than treatment for everyone.



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**Title page:** Photo courtesy of Somerset Cricket Club

**Dedication:** Photo of Louse Finnis by Rachael Parker

**Foreword:** Background photo courtesy of Somerset Cricket Club

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**Recommendation 6: Keep an eye on the scoreboard** Photos courtesy of Somerset County Cricket Club

All other background and other images from stock catalogues or courtesy of Somerset County Cricket Club.

