



British Heart  
Foundation

CYMRU

# THE CVD CHALLENGE IN WALES

[bhf.org.uk](http://bhf.org.uk)

Together we can save lives  
and reduce NHS pressures

## **The challenge of CVD continues today.**

Around 375,000 people in Wales live with the burden of cardiovascular disease (CVD).

Thousands more have undetected medical risk factors. CVD remains one of the biggest causes of death and disability in Wales, costing the NHS hundreds of millions of pounds each year.

And despite significant successes in reducing CVD mortality, it remains a major contributor to premature death and health inequality.

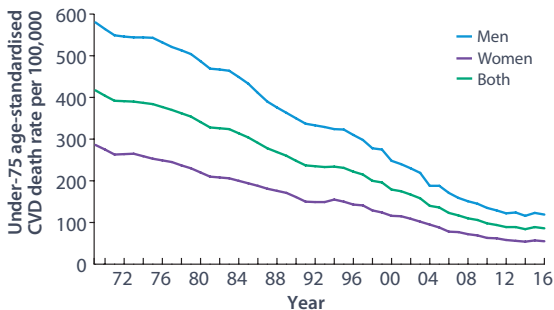
## **But it doesn't need to be like this.**

Working with health system leaders and governments, together we can tackle undetected hypertension, atrial fibrillation and high cholesterol, to reduce the burden of stroke and heart attack.

We can improve the quality of care for patients with diagnosed conditions to reduce their risk. And we can improve patient outcomes by delivering innovative services.

**Together, let us change tomorrow.**

# After 40 years of falling premature CVD deaths, progress has slowed



Premature CVD death rates in Wales have fallen 79% over the last 40 years, largely thanks to BHF-funded research, advances in treating conditions like heart attack and stroke and the decline in smoking, as well as lifestyle changes.

But progress has slowed since 2011. The reasons are unclear. And CVD remains a significant cause of death in Wales.

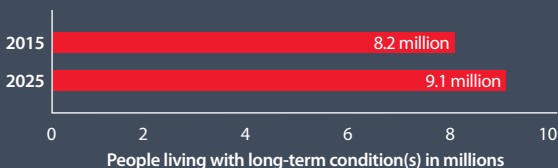
**We must do more.**

**23% of all premature deaths in Wales are caused by CVD. That's 2,500 premature CVD deaths in Wales each year**

# We are living longer, but with more long-term conditions

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By 2025, the number of people living with one or more serious long-term conditions in the UK will increase by nearly one million



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In Wales today, 375,000 people live with CVD. This makes up a significant proportion of all long-term conditions (LTCs). At least 32,500 people have heart failure.

What's more, CVD risk increases with age: almost 8% of people in their 60s are diagnosed with coronary heart disease, for instance. And many other common LTCs increase the risk of developing CVD.

By 2030, the population in Wales aged 65-84 will rise by 22% and those over 85 by 62%.

**We must plan for the future.**

Data source: Royal College of General Practitioners (2016). Responding to the needs of patients with multimorbidity: A vision for general practice

# CVD healthcare costs Wales hundreds of millions of pounds a year

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**CVD healthcare  
costs estimate**

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**CVD economic  
cost estimate**

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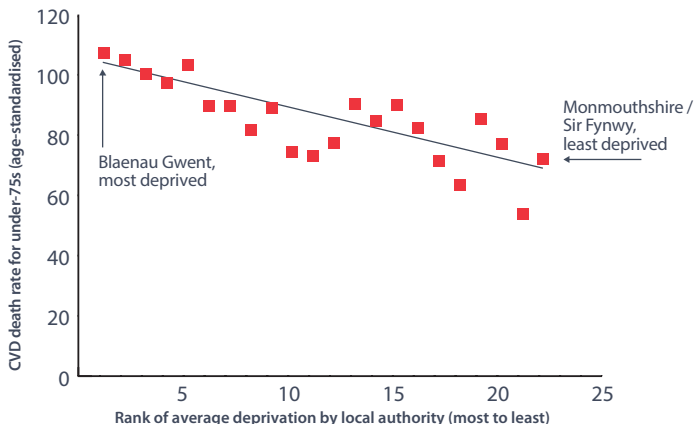
The direct and indirect costs of CVD to the NHS in Wales and the wider economy are significant.

Meanwhile, the NHS in Wales needs to make efficiency savings of £700 million by 2019/20.

**We can bring down this cost.**

# You're up to 50% more likely to die early from CVD depending on where you live

## Premature CVD death rate rises in line with deprivation



CVD risk factors such as smoking, physical inactivity and obesity are more common in deprived areas of Wales. These increase the risk of hypertension, atrial fibrillation (AF) and high cholesterol.

So the most deprived people in our society shoulder the greatest burden of death and disability from CVD.

**We must close this inequality gap.**

Data sources: Office for National Statistics 2017 and Statistics for Wales 2017, data for 2014-16

The premature CVD death rate is 1.5 times higher in the most deprived area of Wales compared to the least.

More information at [bhf.org.uk/cvd-wales](http://bhf.org.uk/cvd-wales)

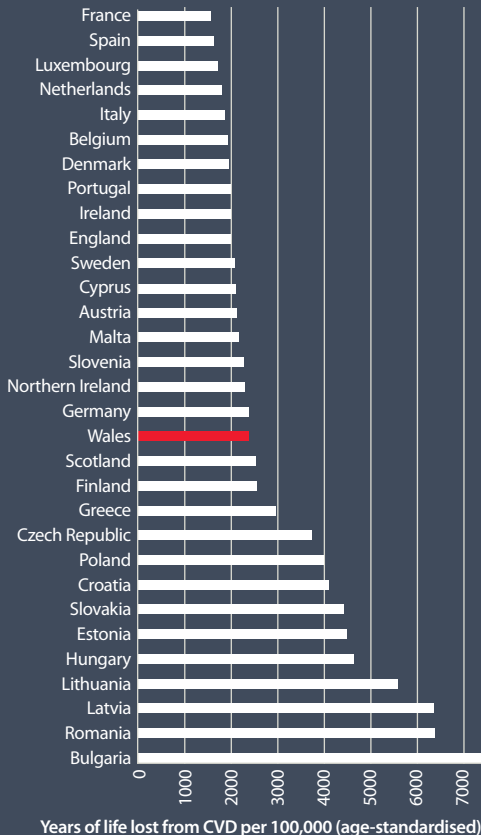
# We could perform better against other EU nations for premature CVD deaths

Despite decades of success bringing down the premature CVD death rate, Wales still ranks lower than 17 other EU nations – behind Slovenia, Cyprus and Malta.

**We can do better.**

**Wales's premature CVD death rate is 51% more than France, which has the lowest rate among EU countries**

Together, we can make the difference.  
**Turn over to find out how.**



Data source: Global Burden of Disease, 2015

**Together, we can act to reduce this burden.**

Thousands of people have undetected medical risk factors that increase their chance of developing CVD.

**We can diagnose and treat them earlier.**

Many with diagnosed risk factors receive sub-optimal treatment.

**We can improve care.**

Patients experience varying standards of care and outcomes depending on where they live.

**We can innovate to improve patient outcomes.**



# Thousands could benefit from earlier risk factor detection and treatment

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Hypertension is implicated in half of all strokes and heart attacks



People with AF are five times more likely to have a stroke



Raised cholesterol increases the risk of heart attack and stroke

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**We already have effective treatments available**

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Every 10mmHg drop in systolic blood pressure reduces the risk of strokes and heart attacks by 20%.

Anticoagulation for AF prevents 66% of related strokes.

Every 1mmol/l fall in LDL cholesterol from statin treatment reduces yearly risk of heart attack and stroke by 25%.

The problem is that significant variation in detection rate and treatment remains.

# Better risk factor management could avoid hundreds of CVD events

## The missed opportunities



**117,800 (23%)**

Adults with diagnosed hypertension not treated to guidelines



**116,700 (51%)**

Estimated number of adults with 10-year CVD risk above 20% not treated with statins



**10,000 (19%)**

High-risk AF patients not anticoagulated

## The potential

Over 3 years, optimally treating adults with diagnosed hypertension can avoid:



**1,050 strokes**

**710 heart attacks**

And optimally treating high-risk AF patients can avoid:



**800 strokes**

# It's time to think differently about CVD services

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The BHF has piloted and evaluated models of care that can avoid hospital admissions, improve patient outcomes and save the NHS millions of pounds a year.

**Now they need wider roll-out.**

## Atrial fibrillation

### The challenge

Around 800 strokes in Wales could be avoided over three years if everyone with AF was diagnosed and received appropriate anticoagulation therapy.

### The solution

Arrhythmia Care Coordinators can help to enhance and optimise AF detection and management, reducing stroke incidence.

Learn more at [bhf.org.uk/acc](https://bhf.org.uk/acc)

## Familial hypercholesterolaemia (FH)

### The challenge

The inheritable gene mutation leads to abnormally high blood cholesterol levels, raising an otherwise healthy person's risk of dying from a heart attack in their 20s, 30s or 40s.

### The solution

Cascade testing first-degree relatives of people with FH can help identify and treat at-risk family members. A BHF pilot has so far found over 1,400 cases and offered treatment to lower CVD risk.

Learn more at [bhf.org.uk/fhservice](https://bhf.org.uk/fhservice)

## Hypertension

A significant proportion of adults with hypertension remain undiagnosed. Of those who are, one in four are not treated to target.

### How can we do better?

The BHF and partners in primary care, public health and the third sector came together to produce a resource that highlights these problems and offers solutions.

Learn more at [bhf.org.uk/bp-better](https://bhf.org.uk/bp-better)

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## What's next?

Find out more about the challenge of CVD today and what the BHF is doing to change tomorrow.

Visit [bhf.org.uk/cvd-wales](https://bhf.org.uk/cvd-wales)



**British Heart  
Foundation**

For over 50 years our research has saved lives.

We've broken new ground, revolutionised treatments and transformed care.

But heart and circulatory disease still kills one in four people in the UK.

That's why we need you.

With your support, your time, your donations, our research will beat heart disease for good.

The BHF would like to thank the Institute of Applied Health Research at the University of Birmingham for its contribution to this publication.

For full references visit [bhf.org.uk/cvd-wales](https://www.bhf.org.uk/cvd-wales)