

# HEART STATE OF THE PARTY OF THE

FIGHT FOR EVERY HEARTBEAT Rewriting the future for the people of Scotland

**Annual Review 2016** 

bhf.org.uk

# Message from our Chief Executive

It has been another incredible year for the British Heart Foundation – our vision of a future where people do not die prematurely from heart disease has been taken forward with determination, energy and skill by our staff and volunteers.

Thanks to our supporters we are currently investing an incredible £61.7m in life saving medical research across Scotland, delivering significant breakthroughs that will help change the lives of millions of people across the UK and globally.

Each year nearly 16,000 people in Scotland lose their lives to heart and circulatory disease. But we are fighting to reduce that number and put an end to the unnecessary suffering of so many families in Scotland.

We see research as being at the heart of achieving this goal, and we continue to adapt our approach to keep the BHF at the forefront of research into the prevention, diagnosis and treatment of heart disease and stroke across the world.

We have seen some truly remarkable results from our researchers at Glasgow and Edinburgh Universities, and the progress they've made this year will transform lives across Scotland and around the world

These ground-breaking discoveries made over the past year have only been made possible by the enormous generosity of our supporters across Scotland, raising millions of pounds, donating thousands of items to our shops, and volunteering tens of thousands of hours for the BHF.

Their time and energy fuels the fight for every heartbeat and I am confident that with the partnership between our tireless supporters and dedicated researchers we can win the fight, and transform millions more lives in Scotland, the UK and beyond.

We won't stop until we've won the fight against heart disease.

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Simon Gillespie, Chief Executive

# Message from Director of BHF Scotland

Since the BHF was established, deaths from heart and circulatory disease have fallen by more than half in Scotland. Half a century ago we didn't know how to treat and save people who were dying following a heart attack, but we've made real progress since then.

The improvement in our mortality rates is huge, but make no mistake, coronary heart disease is still our biggest single killer. It is currently responsible for over 7,000 deaths in Scotland each year and most of these deaths are from heart attacks. This means that on an average day, 20 families across Scotland will suffer the devastation of losing a loved one – often without warning.

We're currently investing £61.7m on heart research across Scotland, including at our Centres of Excellence in Glasgow and Edinburgh.

And in May, the BHF brought the European Heart Network to Edinburgh, reflecting Scotland's position as a key player in world-class research. This is so important because we know that putting everything we've got into research will have the biggest impact on the nation's health.

Our scientists are transforming heart disease treatment and diagnosis today and in the future. And it's only possible because of the funds our dedicated supporters raise. You can read more about them in this report. I would like to take this opportunity to personally thank them all for giving a future back to so many people across Scotland.

James Caub.

James Cant, Director BHF Scotland

# Our research strategy

In Scotland, around 710,000 people are living with heart and circulatory disease. These devastating conditions claim the lives of nearly 16,000 people in Scotland each year. Our mission is to bring together the best of science and medicine to save lives. With the Scottish public behind us, we know we can beat heart disease.



# Our fight in Scotland

Scotland is fighting for every heartbeat. Here are just some of the incredible numbers that played a part in this year's battle. **76** 

BHF shops across Scotland fuelling the fight for every heartbeat

120+

BHF-funded research projects currently being funded in Scotland into heart and circulatory disease

£8.5m

The amount raised by fundraisers across Scotland in the last year

£61.7m

The amount we are currently investing in research in Scotland

565

The number of Call Push Rescue CPR kits issued to communities and schools in Scotland to date

325,000

The number of heart resources dispatched last year to addresses in Scotland

# Highlights from the year

Across the country our supporters, our fundraisers and our researchers are putting everything they've got into the fight against heart disease. Here's a snapshot of our year.



June 2015
The inaugural 100km
overnight trek from
Glasgow to Edinburgh
raises £52,000.



September 2015
New BHF Scotland
shop opens in Inverurie,
raising vital funds for
the fight against heart
disease.

"We are so grateful to BHF Scotland for providing the CPR kits. We hope to help save hundreds of lives in the years to come."

Scottish Fire and Rescue Service

# October 2015 Partnership with the Scottish Fire and Rescue Service launches, placing Call Push Rescue CPR kits in each of Scotland's 356 fire stations.



# **December 2015**

Perth's Furniture and Electrical shop opens, complete with research pod where scientists share work with customers and volunteers.



# June 2015 Around 100 supporters, fundraisers, partners and health professionals attend BHF Scotland's Annual Supporter Conference in Edinburgh.

August 2015
James Cant
joins as the new
Director of BHF
Scotland.

"We were all delighted to support such an important charity for Scotland."

Sarah Troughton, Director and Trustee of Blair Castle Estate September 2015
BHF chosen as the
Charity for Longines
FEI European Eventing
Championship
held at Blair Castle,
raising £11.000.



### November 2015

Parliamentary Reception held at Holyrood, showcasing BHF Scotland's work to MSPs, researchers, clinicians, patients, volunteers and fundraisers.





# February 2016

Our biggest fundraising campaign of the year – Wear It. Beat It. – sees thousands of people wear red and host a red party to raise funds for our life saving research.

# Introducing our researchers

Scotland is home to some of the most ambitious research in the fight to end heart disease. With three BHF-funded professors, and their associated teams, innovative treatments and diagnostic methods are being developed that will change the lives of thousands. Here's just a snapshot of some of the breakthroughs in 2015-16.

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The BHF is such an important force in Scotland. It makes research into heart disease better, bolder and closer to patients.

Professor Dame Anna Dominiczak



# Breaking new ground in heart failure

Each month, more than 2,000 people in Scotland go to hospital due to a heart attack. Around seven out of ten of them survive, but the damage to their hearts can lead to heart failure. New BHF-funded research at the University of Glasgow and the Golden Jubilee National Hospital will boost the fight for every heartbeat as scientists have developed a test to identify who is at risk of developing heart failure after a heart attack.

The study, led by Professor Colin Berry, uses a pressure and temperature-sensitive wire inserted into the coronary artery to work out the extent of injury in the heart.

The test – known as the index of microvascular resistance, or IMR – will allow doctors to quickly and accurately identify patients at high risk of heart failure after a heart attack.

Glasgow researchers have also been working as part of an international collaboration with BHF Professor Sir Nilesh Samani, who will take over as our new Medical Director later this year, alongside researchers from Leicester and other UK universities. as well as teams from Germany and the USA. This world-class project looked at the DNA of more than 190,000 people and discovered two new genes associated with risk of coronary heart disease. The findings could lead to new treatments that prevent heart attacks, helping to fight coronary heart disease, Scotland's single biggest killer.

### **Award-winning science**

The University of Edinburgh has been awarded The Queen's Anniversary Prize for Higher and Further Education in recognition of 30 years of research into cardiovascular disease – much of it funded by the BHF. The BHF Centre for Cardiovascular Science, led by BHF Professor David Newby, has been at the forefront of that research. Results include:

- Proving the link between air pollution and cardiovascular disease.
- Showing how high sensitivity troponin tests can improve heart attack diagnosis.
- Developing the largest ever multinational heart attack trial looking at over 102,000 patients, led by Professor Keith Fox.
- Assessing the safety of stents, now a standard treatment option for people who have had a heart attack or have narrowed arteries.

£61.7m

The BHF is currently investing £61.7 million in world-leading heart research in Scottish universities and institutions because we know that research is the only answer

When I was born the doctor said I had a hole in my heart and I needed a life saving operation immediately

BHF research is keeping kids like me alive. I've come a long way. I love judo, abseiling and climbing. I'm a bit of an action man.

Patrick, 9, from Edinburgh



# Prevention, survival and support

Preventing unnecessary suffering and early death due to cardiovascular disease is central to our mission.

That's why in 2015-16 we spent £3.6m in Scotland to help reduce the nation's risk factors and support patients.

# Putting the patient at the centre

As part of a £1m national programme called 'House of Care', NHS Tayside, NHS Lothian and NHS Greater Glasgow & Clyde have been brought together to pilot a way of working that supports patients to take the lead in decisions about their own treatment. The programme will be independently assessed in 2017, and we're hoping to show that good quality care does not cost more, and allows better use of services.

# Our battle against air pollution

This year our researchers at Edinburgh University proved that recent exposure to air pollution increases a person's risk of stroke and other circulatory diseases. Fighting this unnecessary and avoidable cause of suffering and ill health has been a significant part of our work in 2015, and we will continue to encourage the Government to bring air pollution in line with current legal limits.

## **CPR Training in Scotland**

In 2014 we launched our Nation of Lifesavers to give people the skills they need to become a lifesaver if they witness a cardiac arrest. Our new Call Push Rescue training programme enables schools, workplaces and community groups to teach the life saving skills needed in the ultimate medical emergency. Since the launch we estimate that over 44,000 people across the country have had access to CPR training and public access defibrillator awareness.

In Scotland, the BHF continues to support 373 Heartstart schemes in schools and communities to enable them to deliver a structured first aid programme. We have also awarded CPR training kits to 100 secondary schools and 106 community groups in Scotland.

In addition the BHF has partnered with the Scottish Fire and Rescue service and donated CPR kits to each of the 356 fire stations in Scotland to make CPR training accessible to even more communities.

We partnered with Save a Life for Scotland to help deliver the new Out-of-Hospital Cardiac Arrest (OHCA) strategy objectives to equip an additional 500,000 people with CPR skills and help improve survival rates.

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# A nation of supporters

When the reality of heart disease comes into a person's life, they want to fight back. Thousands of people across Scotland raised funds this year to fuel vital research and make heart disease a thing of the past. Here's a snapshot of what some of our wonderful supporters did for the battle against heart disease.

# **Fundraising heroes**

Around 700 people tackled the Glasgow Winter Warmer 5k and 10k event raising around £39,000 to help fund our life saving research.

Ellie Robertson from West Lothian, whose grandson Aidan was born with a congenital heart condition, raised £5,800 by holding a charity fête.

Alison Carstairs, from Dunfermline, took part in a skydive to raise money in memory of her dad Walter, who sadly died of a heart attack. She raised more than £450.

Eloise, who had a heart transplant at just 15 months old, and her sister Aine Lowrie, raised over £157 at Rayne North Primary in Inverurie.



Graham Smith's annual fundraiser at Drumpellier Golf Club in Coatbridge, in memory of his brother Gordon who died of a heart attack, raised more than £5,200 this year. This brings his fundraising total to an incredible £46,166.

The workforce at SSE were fighting for every heartbeat during Heart Month and their red events raised an amazing £6,110. The sum was generously matchfunded by the energy company.

Heart Hero award winner Nichola Dougan raised £13,925 from the annual ball she holds in her daughter Scarlett's name.

The business organisation Aberdeen Inspired has provided life saving defibrillators for Aberdeen city centre. The machines are in the Grosvenor G Casino, McDonald's Restaurant on Union Street and Soul Casino.

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# Changing lives through retail

Our retail outlets are the nation's favourite charity shops and they play a massive part in the battle for every heartbeat. As well as generating £16.5m in sales in the last year to help fund life saving research, our 76 shops are increasingly used as a place where the public find out about heart research and learn about their own heart health.

£16.5m

The amount generated in sales by BHF shops in Scotland in the last year

### **Beyond the high street**

In 2015-16, the public donated goods worth around £6 million to Scotland's 15 Furniture and Electrical stores. We opened a large out-of-town store to meet demand for high quality, affordable household items in Perth. The number of this type of BHF store in Scotland has grown in recent years to raise as much as possible for research to diagnose and treat heart and circulatory disease.

Our 76 shops across the nation continue to bring in huge sums for research while acting as a beacon for heart health on the high street. We gave our flagship Furniture and Electrical store in Glasgow a dramatic refresh to improve the shop layout and celebrate 10 years of business this year, and we have held a number of events for the public at retail outlets across the country.



### Science pod

At the opening of our Perth store, BHF funded Professor Dr Will Fuller, from the University of Dundee, with colleagues Jacquie Howie and Fiona Plain, used the store's science pod to talk to locals about heart research. He showed heart cells through a microscope and shared images of beating hearts.

# Our fight in your area

This map shows just some of the activity that's been going on in Scotland over the past year.



### Research

We are currently funding £61.7m of research in eight institutions across Scotland.



### Support

We support 314 healthcare practitioners across Scotland through the BHF Alliance. This free membership programme offers professional development and support for those who work with people affected by, or at the risk of developing, heart and circulatory disease.



### Survival

Training the public in CPR increases the chances of someone surviving an out of hospital cardiac arrest. To date more than 44,000 people have been trained in life saving CPR in schools, communities and workplaces across the country using our Call Push Rescue kits. And as part of our mission to create a Nation of Lifesavers, BHF Scotland is working with the Scottish Government to make sure that half a million more people in Scotland know CPR by 2020.



### **Prevention**

We are leading on prevention projects that will reduce the chances of people in Scotland developing heart and circulatory disease.



### **Grow income**

We have 76 BHF Scotland shops helping to fund life saving research.





For over 50 years we've pioneered research that's transformed the lives of people living with heart and circulatory conditions. Our work has been central to the discoveries of vital treatments that are changing the fight against heart disease.

But so many people still need our help.

From babies born with life-threatening heart problems to the many mums, dads and grandparents who survive a heart attack and endure the daily battles of heart failure.

Join our fight for every heartbeat in Scotland. Every pound raised, minute of your time and donation to our shops will help make a difference to people's lives.



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