

The story of life saving heart research

Thanks to the incredible advancements in the management of heart disease over the past few decades, today numerous lives are being saved.

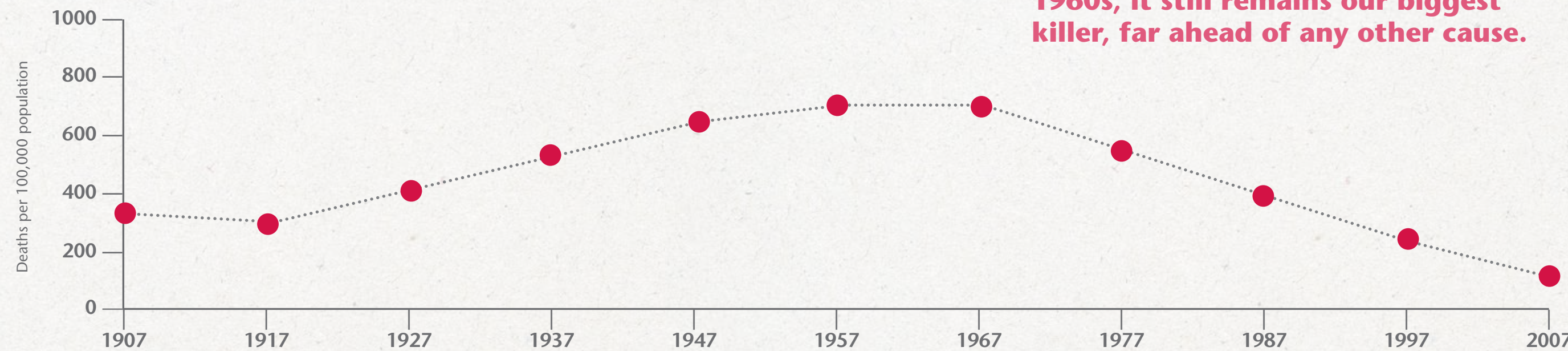
The Foundation is proud to have been a part of this story by responding to gaps in needed research over the last 25 years. Yet heart disease still remains our biggest killer, far ahead of any other cause in Australia, claiming over 125 lives each day. And even though the death toll from heart disease has been dropping since the 1960s, there is still much work to be done for future generations. For instance, the increasing rates of diabetes and of children and adults who are overweight is enough to alarm health professionals into predicting that the deaths rates from heart disease will be on the rise again soon, making the need for breakthroughs even more pressing.

Our vision
To reduce the devastating impact of heart disease on the community

Our mission
To fund innovative research into the prevention, diagnosis and treatment of heart research



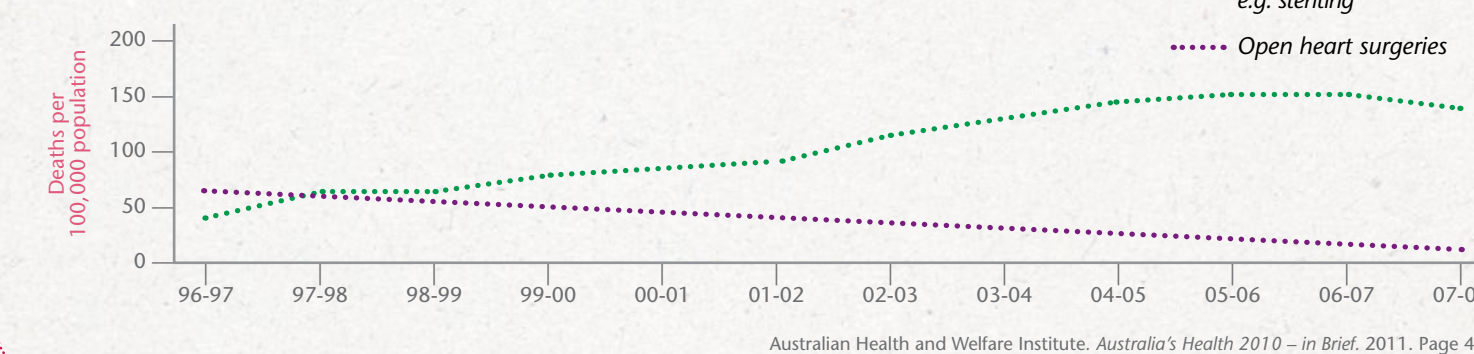
Trends in deaths from heart disease



Australian Health and Welfare Institute. Australia's Health 2010: The twelfth biennial health report of the Australian Institute of Health and Welfare. 2011. Page 153

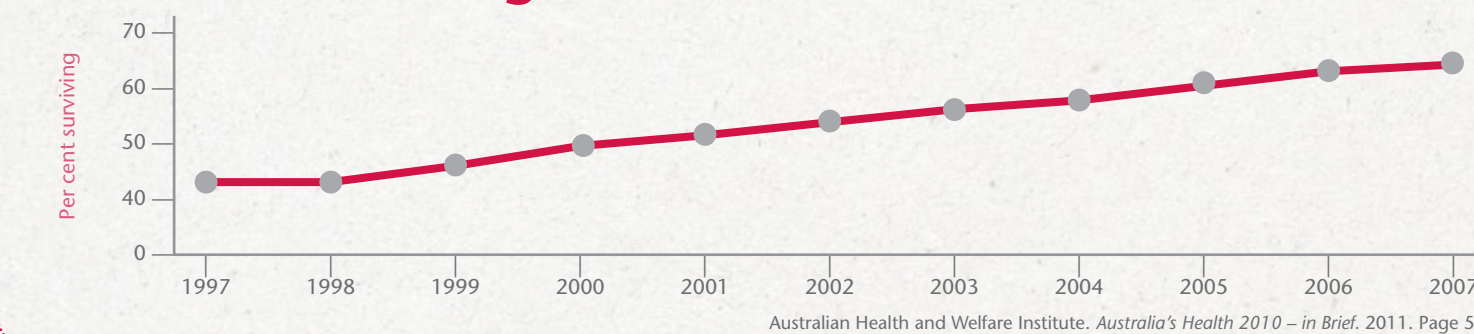
Although death rates from heart disease have fallen 75% since the 1960s, it still remains our biggest killer, far ahead of any other cause.

Treatment for heart disease has become less invasive



Australian Health and Welfare Institute. Australia's Health 2010 - in Brief. 2011. Page 47

Survival following heart attack



Australian Health and Welfare Institute. Australia's Health 2010 - in Brief. 2011. Page 52

1902-1903

Royal North Shore Hospital (RNSH) opens at its current site in St Leonards. (Before this it was a cottage in Crows Nest).

1939

A new era for heart surgery begins with a treatment for children born with a 'hole in the heart'.

1948

RNSH officially becomes a teaching hospital of the University of Sydney.

1950s

The need for effective treatment of heart disease is recognised as death rates are rising. Health surveys are instigated to pinpoint causes and risk factors.

1953

A cardiac investigation clinic is formed at RNSH.

1959

Factors found that increase the likelihood of heart disease.*

1960s

Advances are made in the diagnosis and management of heart disease, for example with specific blood tests, more effective medication, and portable ECG machines becoming more widely available.



First open heart surgery performed at RNSH.

1960-1961

The first coronary artery bypass surgery performed.

Cigarette smoking, cholesterol level and high blood pressure are found to increase the risk of heart disease.*



1967

Physical activity found to reduce the risk of heart disease, and obesity to increase the risk.*



First heart transplant performed.

Late 1960s
Number of Australians dying from heart disease peaks to over



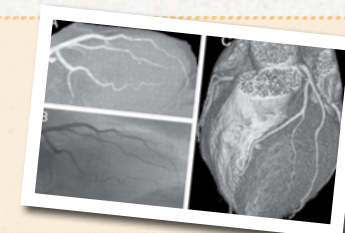
1970s

The mortality rate for heart attack victims is 30%. Researchers establish that speedy intervention is essential.

Dedicated coronary care centres appear around the world.



Outlook for heart patients starts to improve with an array of advancements in the management of heart disease: the introduction of heart ultrasound (echocardiogram), pacemakers, medications such as beta-blocking drugs, and coronary angiography (by pass surgery for narrowed arteries).



1978

Psychosocial factors found to affect heart disease.*

1980s

Blood-clot dissolving medication introduced.

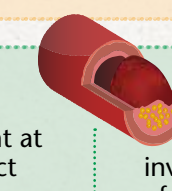


Aspirin identified as a preventative.

Revolutionary cholesterol lowering drugs created.

Education on risk factors becomes a major focus.

First implantable cardioverter defibrillator implant at RNSH (a small electrical device designed to detect and correct rapid and potentially life threatening heart rhythms, such as ventricular tachycardia).



Surgeons are investigating the use of stents in blocked arteries

1986

First coronary heart stent implanted

The North Shore Heart Research foundation is established with a mission to give heart to future generations.



1988

A catheter lab (where heart attacks are treated) is opened at RNSH.



North Shore Cardiovascular Education Centre established to provide cardiac rehabilitation services to RNSH patients. At the time it was one of only a handful of similar services operating in NSW; today it is nationally recognised as the gold standard.

1990s
Heart attack mortality rates at RNSH fall from 30% to just 8% through the introduction of stents in the treatment of heart attacks.

1991

A heart research centre is set up at RNSH, a first for the hospital, with research laboratories, specialist staff, and other much needed research facilities.

1996

First Patron of the Foundation appointed, Dame Leonie Kramer AC DBE.

1997

The Foundation establishes the academic Chair of Cardiology in association with the University of Sydney, a first for the Department of Cardiology, opening up new research avenues. Professor Helge Rasmussen still holds this position today.



1998

The Foundation establishes the academic Chair of Preventative Cardiology currently held by Professor Geoffrey Tofler.



1999

The North Shore Private Hospital opens.



2000s

During this decade, research funded by the Foundation sees some remarkable results. For instance, by instigating the diagnosis and triage of heart attack victims in ambulances, the death rate from heart attacks is reduced further to 2% - setting a new international standard in cardiac care.

Researchers identify triggers and subsequently prevention strategies for heart attack; and links between bereavement and heart attacks. Also, research results in improvements in heart function in preterm babies preventing disability; and while investigating a novel treatment for heart failure researchers discover its potential to help in the treatment of cancer.

2001

The first Annual Sportsman's Lunch is held by Con Dedes, raising over \$200,000 in the years to come.

The first drug-eluting heart stent is implanted. Releasing an anti-closure drug after cardiac angioplasty, the resulting improvement in survival rates has led to a reduction in the use of bypass surgery in favour of stent implantation.

2004

The first Annual Women's Heart Lunch is held by a group of volunteers, today known as the Red & White Committee (The lunch has since raised over \$100,000 for heart research).

Findings from Professor Helge Rasmussen's research in heart failure are patented.

2008

Our researchers move into new cutting edge research centre, the Kolling Building at RNSH, bringing together over 350 researchers from across the campus and opening up new doors for research collaboration. Our supporters donate over \$370,000 to upgrade equipment as part of this move.



A cardiac magnetic resonance imaging research facility is established at RNSH with financial support from the Foundation. The non-invasive imaging capabilities provide researchers with a revolutionary tool for investigating heart disease.

2010

Dr Ravinay Bhandi is awarded a Life Sciences Award by the Office of Science and Medical Research in recognition of his contribution to research.

Dr John Gunning, Head of Cardiology, RNSH, and Foundation Vice Chairman, receives an AM for his services to medicine and contributions to the community.

Foundation funded research by Dr Gemma Figtree, Professor Helge Rasmussen and Dr Ravinay Bhandi is recognised with significant grants from the National Health and Medical Research Foundation.



2011

Professor Helge Rasmussen receives RT Hall Prize, the Cardiac Society of Australia and New Zealand's most prestigious research award.

Today

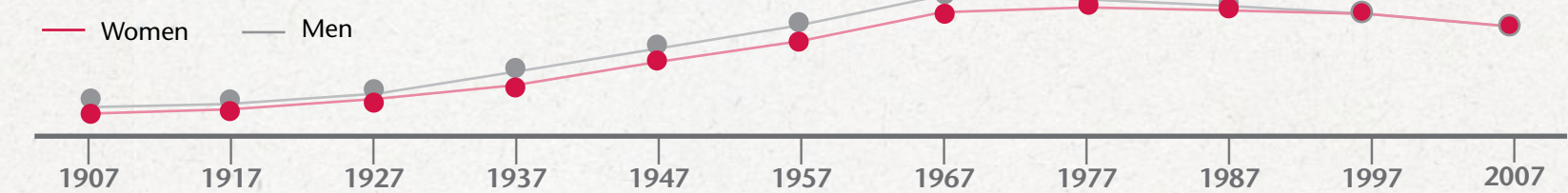
The Foundation, thanks to its family of supporters, has given over \$20 million to lifesaving heart research. It funds an array of research projects in prevention, treatment and diagnosis of heart disease, as well as PhD scholarships, two academic Chairs of Cardiology, cardiac rehabilitation, and specialist support staff, all of which is helping researchers to contribute to worldwide cardiac care.

By 2020 if weight gain continues at its current levels 80% of Australians will be overweight or obese.¹

Worldwide obesity has more than doubled since 1980, with the World Health Organisation calling it a global epidemic.

Heart disease continues to be Australia's biggest killer, responsible for 33% of deaths, far more than any other cause.²

Men vs women (deaths from heart disease)



<http://www.aihw.gov.au/national-grim-books/>

¹modi.monash.edu.au ²Australian Bureau of Statistics Causes of Death 2009