



Why Cure Kids?

The case for supporting child health research
through Cure Kids New Zealand

Ben was the first unborn Kiwi to undergo surgery for spina bifida. He also has hydrocephalus, which is an abnormal build-up of fluid around the brain.

cure kids

big research
for little lives ●

Why Cure Kids?

An introduction to Cure Kids and our mission

Professor Sir Bob Elliott and Dr Ron Caughey founded our organisation in 1971 because New Zealand's child health was deteriorating.



Failing our youngest citizens

While our country had once claimed one of the lowest infant mortality rates in the world, by the early 1970s New Zealand had regressed to sixth place. Even worse, for children aged from one month to one year World Health Organization statistics placed New Zealand 14th on the global mortality scale – one of the highest mortality figures for that age group in the developed world.

New Zealand's hospitals were battling to keep seriously ill children off the mortality tables. At the same time, they were trying to investigate and treat numerous ailments and disorders that were still mysteries to medical science.

Paediatricians were also increasingly worried about the large number of children permanently crippled with muscular, brain, bone, heart, lung, bowel, kidney, intellectual, emotional and other problems. Alongside these problems was the challenge of congenital abnormalities and inherited diseases that caused death or prolonged ill-health.

Funding the road to prevention

Influencers from New Zealand's medical world agreed that research was the best way to reverse the slide of child health. In the words of Dr Caughey:

“There is just no room for complacency about child health in New Zealand any longer. We have a definite need for research specifically directed to the needs of children, and for the subsequent development of a hospital designed for children.”

With the help of Rotary, a National Children's Health Research Foundation was formed to establish a research chair in Child Health (Paediatrics) at the Auckland University School of Medicine. Today the foundation is known as Cure Kids. We are the only organisation in New Zealand dedicated solely to funding child health research. Every piece of research we pay for has been expertly identified as valuable for the ongoing enhancement of child health in this country.

While our founders are no longer with us, their legacy will continue to shine through the breakthroughs that emerge from the research we fund.

Since 1971, Cure Kids has invested more than \$60 million into world-class New Zealand research that has helped improve and save the lives of millions of children, both here and around the world.

Will you help us?

We are proud to be making a difference to the lives of those most vulnerable, but it is still not enough. UNICEF recently ranked the health and wellbeing of New Zealand children 38th out of 41 developed countries. This puts us behind countries like Bulgaria, Chile and Mexico. Clearly, there is still much for Cure Kids to do.

We hope you'll help us to keep New Zealand's child health researchers at home in New Zealand, so their discoveries can solve local child health problems and drive a healthier future for our country.

Frances Benge, Cure Kids CEO

P.S.

The back pocket of this brochure contains a summary sheet of research projects that are looking for funding.

Which one would you pick?



Dr Andy Wood

Dr Andy Wood is a paediatric haematologist/oncologist. With funding from Cure Kids supporters, he's leading the Precision Paediatric Cancer Project (PPCP), a ground-breaking study that's looking for better ways to match cancer mutations to specific medicines.

These matches are known as 'targeted therapies'.



Lucca

Lucca was diagnosed with cancer at just 16 months of age. Surgery removed 90% of her tumour, but her cancer was identified as resistant to traditional chemotherapy and radiation. Dr Andy Wood knew that patients with a similar type of cancer carried a gene marker that had been responsive to the chemotherapy drug crizotinib. Andy tested Lucca's DNA to identify if she had a specific marker. She did, so he prescribed the drug.

Lucca is alive and thriving, thanks to her targeted therapy.



Sir Bob Elliott

The late Sir Bob Elliott, Cure Kids co-founder, was an outstanding paediatrician, researcher and advocate for children. One of his early research triumphs was extending the newborn heel prick test to identify cystic fibrosis at birth.

The test has been adopted internationally, contributing to the increased life expectancy of children with cystic fibrosis. By treating the disease early, life expectancy improved dramatically from 7-10 years to 40+ years.



Isabella

When Isabella's mum was 27 weeks pregnant, she discovered her daughter would be born with cystic fibrosis, a life-threatening illness damaging the lungs and digestive system. Early diagnosis was possible due to Sir Bob Elliott's work.

After she was born, Isabella endured a 12-hour operation to remove two thirds of her short bowel, the first of many procedures to manage her condition.



Professor Simon Malpas

Professor Simon Malpas and his team at the University of Auckland are developing a much-needed tool for parents of children who have hydrocephalus, an abnormal build up of fluid around the brain that requires a ventriculoperitoneal (VP) drainage shunt for management. It's a remote sensor that's placed alongside the drainage tube to detect a tube blockage.

This tool has the potential to reduce hospitalisations and radiation exposure from CT scans. It will also greatly relieve the anxiety of parents around the care of their children.



Ben

Ben was diagnosed with spina bifida myelomeningocele and hydrocephalus at his mum's 20-week antenatal anatomy scan. At just 24 weeks, still unborn, he had surgery to close up his spine. Following birth, when he was just a week old, Ben had an additional surgery in New Zealand to insert a VP shunt to prevent fluid build-up in his brain.

Ben's family is hopeful Professor Malpas remote sensor will ease the concern of tube blockages.

Our biggest

breakthroughs



BRAIN INJURY

In 1987, Professor Alistair Gunn developed an innovative cap to prevent secondary brain injury for babies.



BURNS

In 2012, Professor Rod Dunbar engineered full-thickness human skin in the laboratory using the patient's own skin cells to enable skin repair after burns.



CHILDHOOD CANCER

In 2020, Dr Andy Wood began the Precision Paediatric Cancer Project, an innovative clinical trial using advanced genetic testing and drug screening.



CAR SAFETY

In 2008, research by Professor Alistair Gunn, Dr Christine McIntosh and Dr Shirley Tonkin led to the invention of a foam insert to prevent babies from getting short of oxygen in their car seats.



CEREBRAL PALSY

In 2017, Dr Andrew McDaid developed a robotic gait trainer to help children with cerebral palsy learn to walk.



CYSTIC FIBROSIS

In 1976, Sir Bob Elliott discovered a blood test (newborn heel prick) to diagnose cystic fibrosis at birth, enabling earlier treatment that increased life expectancy for CF babies around the world.

In 2002, Professor Tony Kettle discovered that cystic fibrosis patients produce bleach in their lungs, which led to the development of new drugs to stop bleach formation.



DENTAL DECAY

In 2019, Dr Ali Leversha's study of disadvantaged children led to routine use of fluoride varnish by dental clinics to prevent dental decay.

Over our 50-year history, Cure Kids' visionary donors have funded research projects that have resulted in significant and life-changing breakthroughs in child health.

Every project we approve for funding is reviewed for ethical and scientific merit by our medical and scientific advisory committee (MSAC). The recommendations provided to our board by MSAC are based on each project's ability to improve diagnosis, prevention and treatment of conditions affecting children in New Zealand.

Here are some of the most significant outcomes from research partly or fully-funded by Cure Kids supporters.



EPILEPSY

In 2010, Professor Lynette Sadleir discovered genes that cause epilepsy in children, leading to more accurate diagnoses and targeted treatments.



MENTAL HEALTH CONDITIONS

In 2018, Professor Sally Merry developed a new online tool to combat depression and anxiety in young people.



NEWBORN HYPOGLYCAEMIA

In 2014, Professor Jane Harding conducted a world-first trial that showed how dextrose gel massaged into the inside of a baby's cheek can treat hypoglycaemia and reduce the need for admission to intensive care.



PRETERM BIRTH

In 2018, Dr Max Berry proved that babies born at just 23 or 24 weeks can survive and thrive.



RESPIRATORY PROBLEMS

In 1982, Professor Innes Asher developed tests to assess lung function, which are now standard clinical practice in New Zealand.

In 2015, Professor Cameron Grant proved that vitamin D supplementation during pregnancy and infancy prevents doctor visits for acute respiratory infections in early childhood.



SUDI AND STILLBIRTH

Professor Ed Mitchell's 1990 research led to advice on safe sleep environments that has prevented around 200 NZ deaths every year since, and many more around the world.

In 2017, Lesley McCowan's study on maternal sleep position led to advice for mothers that could reduce the risk of stillbirth by 50%.

Where child health research needs to go next

Tackling the big challenges affecting the health of Kiwi kids means funding innovative, blue-sky research that focuses on unanswered questions. These challenges are usually related to diagnosing, preventing and treating diseases, as well as how to improve care for children.

To find answers, we need to invest in the careers of researchers who devote their lives to discovering preventions, treatments and cures. We also need a dedicated focus on addressing child health issues that result from social inequities and deprivation.

Our goals are only achievable with your help. By investing in research through Cure Kids, you have the power to transform the lives of countless children – not just in New Zealand, but globally as well.

Cure Kids' \$10m

Elliott-Caughey fund

To mark 50 years of funding child health research, Cure Kids created the Elliott-Caughey Fund, a \$10m financial resource dedicated entirely to research that addresses illnesses linked to deprivation.

We want this money to make the biggest possible impact, so we draw from our annual State of Child Health report. This report benchmarks the health of New Zealand children in key areas to identify prime opportunities for change. Here are just a few of those areas:

Rheumatic fever

A disease eradicated in most OECD nations, New Zealand's rates remain stubbornly high. Māori and Pasifika children make up 95% of new cases every year.



Dental disease

Less than 60% of children brush their teeth at least twice daily with fluoride toothpaste. 40% of five-year-olds have evidence of tooth decay, with higher rates for Māori and Pasifika children. Hospitalisation for tooth decay is particularly high for children living in areas of high deprivation.



Respiratory conditions

Respiratory conditions are the leading cause of acute admissions to hospital for children, with 'asthma and wheeze' the most frequent diagnosis. Māori and Pasifika children, and children living in areas of high deprivation, have the highest hospitalisation rates for respiratory conditions.



Skin infections

Skin infections, cellulitis, cutaneous abscesses, furuncles and carbuncles are the most likely causes of hospitalisation for children. Rates of hospitalisation for serious skin infections are highest in Pasifika, Māori, children younger than five years and children living in areas with high socioeconomic deprivation.







“My best achievement lies in founding with Ron Caughey and Rotary the charity now known as Cure Kids, which is a vibrant organisation, bringing health and vitality to children both in New Zealand and around the world, and I’m very, very proud of that.”

Sir Bob Elliott