CANCER RESEARCH UK

WORKING TOWARDS CURES

Cancer in childhood is not very common, but each year around 1,600 children are diagnosed with the disease in the UK, and it claims around 250 lives. Research is the key to changing this. That’s why we spent over £6 million last year to help beat these cancers sooner.

WHAT PROGRESS HAVE WE MADE?
Thanks to major advances in treatment, three-quarters of children with cancer are now cured, compared with around a quarter in the late 1960s. We have been at the heart of this progress. For some types of children’s cancer survival is even higher – around eight out of 10 children with leukaemia are now cured, compared to less than one in 10 in the late 1960s.

WHAT HAPPENS TO SURVIVORS?
Most young patients with cancer have intensive treatments, which will seriously affect some children’s future health. For more than a decade we funded the British Childhood Cancer Survivors Study, which helped inform doctors how best to tackle or avoid the problems survivors may face. Encouragingly, the evidence shows many survivors grow up to lead perfectly normal lives. However, it also highlights the urgent need for kinder treatments.

WHAT ARE THE TYPES OF CHILDREN’S CANCERS?
Children tend to develop different types of cancer to adults, and we still don’t know what causes most childhood cancers. Leukaemia is the most common childhood cancer, accounting for around a third of all cases. Brain tumours account for another quarter and lymphomas (a type of blood cancer) a tenth. The other types of children’s cancer are less common.

WHAT COULD AFFECT A CHILD’S RISK?
Certain rare genetic syndromes can increase the risk. Down’s syndrome can increase the risk of leukaemia.
Certain infections can affect the risk. Epstein-Barr virus can increase the risk of Hodgkin lymphoma.
Some cases can be caused by inheriting faulty genes from a parent, but this is very rare.
Children of smokers may have an increased risk of some types of cancer.

More children than ever before are surviving cancer

OUR SCIENCE CHANGES LIVES
Thanks to our research, survival rates have dramatically improved for children with hepatoblastoma, a type of liver cancer. Now more than eight out of 10 children survive this disease for at least five years, compared to two out of 10 in the late 1970s.

TIA’S FAMILY FROM SHROPSHIRE KNOWS THE IMPORTANCE OF RESEARCH
Every year our Little Star Awards celebrate the courage of children like Tia who have been diagnosed with cancer. At 18 months old Tia started being sick and losing weight. Following some tests her parents were told she had liver cancer.

It was a terrible shock to go from thinking Tia had a stomach upset to finding out she had cancer. And it wasn’t much fun being in hospital over Christmas while she was treated, even though Tia was spoilt rotten. Now Tia’s been given the all clear and has started nursery school, which she loves. We’re looking forward to a ‘normal’ Christmas this year!

For information on children’s cancer research, stats, signs & symptoms and treatment, go to cru.org
MAKING A DIFFERENCE

Our scientists are exploring the causes of children’s cancers to find out how to tackle these diseases more effectively and save even more lives.

PROFESSOR JOSEF VORMOOR IN NEWCASTLE TELLS US HIS STORY

Despite our great success in treating childhood leukaemia, treatment still lasts two to three years and has many side effects that impact upon the lives of our young patients. As a paediatrician treating children with leukaemia, I see them struggle with the side effects and sometimes even see their leukaemia come back after treatment. We need better therapies. Together with a team of scientists, I’m trying to understand how leukaemia cells grow and survive, to help guide the development of new drugs that are more effective and have fewer side effects.

TACKLING BRAIN AND NERVE TUMOURS

We were involved in a 10-year study that improved survival rates for children with neuroblastoma, a type of childhood nerve cancer. And our work led to a new standard of treatment for a type of brain tumour called medulloblastoma.

CHILNDREN’S CANCER TRIALS TEAM

We play a unique and pivotal role in children’s cancer trials in the UK. Our Children’s Cancer Trials Team co-ordinates groundbreaking trials in 21 centres across the UK and Ireland, bringing innovative new treatments to our young patients.

KINDER TREATMENTS

We are developing better and kinder treatments to avoid problems for children in later life. Our work improved the way children are treated for Wilms’ tumour - a type of kidney cancer that affects children - and reduced the side effects of treatment.

IMPROVING SURVIVAL

Our pioneering research into childhood leukaemia has helped save the lives of thousands of children. And almost every child with the eye cancer retinoblastoma is now cured – our research has been a vital part of this success.

OUR PROGRESS IS YOUR PROGRESS

Research has done brilliantly developing new treatments for children’s cancers, but there’s still much more we need to do. Here’s what some of our scientists are doing to beat these cancers sooner.

Birmingham: Professor Pamela Kearns is the Director of our Clinical Trials Unit in Birmingham, where the majority of our children’s cancer trials take place. The unit aims to improve treatments for young patients all over the UK.

Leeds: Dr Martin Elliott is carrying out a clinical trial into neuroblastoma, a nerve cancer affecting young children, to try and save more lives.

Newcastle: Professor Steven Clifford is hoping to discover tests that could be used to make sure children with medulloblastoma, the most common form of childhood brain tumour, are getting the most effective treatment.

Nottingham: Professor Richard Grundy is doing research to figure out how best to manage and treat children with ependymoma, a type of brain tumour, to improve the outcome for these patients.

London: Professor Kathy Pritchard-Jones’ research will help make sure patients with Wilms’ tumour (the commonest childhood kidney cancer) get the right level of treatment – balancing side effects with the risk of the cancer coming back.

Newcastle: Dr Mark Pearce is carrying out a long term study to see if having CT scans during childhood has an impact on cancer risk later in life, to help manage the risk for children.

Find out more: download other research leaflets in this series at cruk.org/researchleaflets