

In South East...

Around 53,500 people are diagnosed with cancer each year

Around 22,600 people die from cancer each year

Cancer deaths have fallen by around a tenth in the last 10 years

Almost 6 in 10 (57%) of cancers with a known stage are diagnosed early

More than a tenth (11.9%) of adults smoke

Almost two-thirds (62.7%) of adults are overweight or obese

A fifth (20.3%) of children are overweight or obese

Almost three-quarters (72.8%) of people aged 60–74 have taken part in bowel screening

In the South East, our scientists at our [Oxford Centre](#) are determined to make a difference for people with cancer in the region and beyond. Our researchers in this region are leaders in the fields of cancer biology, drug development, surgery and radiotherapy.

Oxford also hosts an [Experimental Cancer Medicine Centre](#) (ECMC). Our ECMCs, which we co-fund with the National Institute for Health Research, bring together lab scientists and cancer doctors from local NHS trusts and universities to speed up the flow of ideas and new treatments from the lab to the clinic. Another ECMC can be found in [Southampton](#), which is also home to a [Clinical Trials Unit](#). This unit delivers innovative and practice-changing clinical research that impacts the care and outcomes for cancer patients in the UK and across the world.

The impact of the South East's past research

Our research helped prove the link between smoking and cancer

Bringing to light the dangers of smoking on health, our studies in the 1950s found early evidence that smoking could have a role in causing lung cancer.

In Oxford, Professor Sir Richard Doll published work on 20 men with lung cancer, which strongly suggested a link between smoking and cancer. This study was among the first to document the link.

He also began a 50-year research project, which we helped fund. This research went on to give detailed evidence on the impact of smoking on lung cancer risk.

We found a link between hormone replacement therapy and cancer

Our researchers in Oxford found that hormone replacement therapy (HRT) can increase the risk of developing breast, ovarian and womb cancer.

This discovery allowed doctors to advise on potential risks, helping people to make informed decisions about their treatment.

We discovered the dangers of x-rays during pregnancy

We helped to reduce the number of children affected by leukaemia, after discovering that children of women who were given frequent x-rays during pregnancy had an increased risk of developing the disease.

Because of this work in the 1970s, today's doctors avoid giving x-rays to pregnant women when possible.

We played a crucial role in the development of targeted radiotherapy

From the 1980s, our scientists in Surrey have played a crucial early role in the development of a highly targeted kind of radiotherapy known as intensity modulated radiotherapy (IMRT).

This technique allows doctors to give tumours a powerful dose of radiation while sparing its healthy surroundings.

We've helped develop several new cancer drugs

Early studies by our scientists in Surrey helped the development of the bowel cancer drug raltitrexed (Tomudex) – the first new drug for bowel cancer for 35 years.

Our scientists in Southampton did early research which paved the way for the development of a drug called rituximab, used to treat some types of leukaemia and lymphoma.

Our scientists in Oxford co-ordinated major clinical trials shaping the use of the breast cancer drug tamoxifen, which has saved many thousands of lives in the UK and worldwide.

Research happening right now in the South East

We're researching a new way to treat myeloma

Our body kills normal cells when they are damaged beyond repair, but myeloma cells have ways to escape this destruction, so the cancer can survive.

In Oxford, Dr John Christianson is investigating how myeloma cells act when they are damaged or stressed. By finding out more about how myeloma cells survive in this way, Dr Christianson hopes to identify new targets for drug development.

This could lead to new ways to treat people with myeloma in the future.

We're stopping cancer in its tracks

Many of the cells in our body can grow and divide. This process is highly regulated and any errors can set a healthy cell on the path to cancer. Intervening in this process is a good opportunity to stop tumours from growing.

At the University of Sussex, Dr Helfrid Hochegger is exploring ways to stop cancer cells from dividing. By targeting a key component of the cell division process in cancer cells, Dr Hochegger hopes to develop a new way of treating the disease.

This research could give rise to a new treatment and ultimately improve survival for people with cancer.

We're testing new treatment options for people with bladder cancer

For some people whose bladder cancer is diagnosed late, the cancer would have spread to other parts of the body. Treating this cancer often involves removing the entire bladder, along with radiotherapy and chemotherapy. This intensive treatment can have a big impact on a person's quality of life.

In Southampton, Professor Gareth Griffiths and his team are hoping to improve treatment in a way that helps spare the bladder. They hope that adding a type of therapy that boosts the immune system, could reduce the need for radical surgery, increase the effectiveness of the treatment, and help people to m