

## North Wales Regional Report







North West Cancer Research was founded more than eight decades ago. Its purpose is to independently fund research, strategies and community-level engagement to understand the causes of cancer and support those living with and beyond cancer in the North West of England and North Wales.

Over this time, we have built up a detailed picture of the prevailing cancer issues within our area. Having this level of awareness is critical, as cancer cannot be effectively tackled without a highly localised approach that recognises the multi-faceted, complicated and evolving nature of the challenges being faced.

As no two villages, towns, cities or even regions are exactly alike, we cannot take a one size fits all approach to cancer around the country.

This is why we have invested over £50 million since 2000 in life-saving research projects as well as preventative awareness campaigns that address cancer inequalities. All of this work is aimed at empowering local care systems with tailored measures that reflect the lived realities of their communities.

"Empowering care systems with measures tailored to their communities."



### Multiple answers to a complex question

The challenges being faced by the population and healthcare infrastructure in the North West of England and North Wales remains stark. With residents in this region being 25% more likely to be diagnosed with cancer than in the rest of the UK\*.

In the latest data, annual cancer diagnoses are being recorded at a 13% higher rate in North Wales compared to the national average with the mortality rate in North Wales recorded at 15% above the rest of Wales. In addition, for the 24 cancer types for which incidence data is available, North Wales over indexes on all but three of them.

As discussed in this report, the role that socioeconomic factors play in the area's health expectations is expressed in the statistics, with 'lifestyle related' cancers showing some of the most alarming regional disparities.

Stomach and oesophageal cancer for example, both of which may result from smoking, drinking or obesity, are respectively tracked at a 32% and 29% higher incidence rate in North Wales compared to the national benchmark.

This alarmingly high number of cases poses a substantial burden for the region's healthcare network, as not only are these diseases present in high numbers, but they can be particularly challenging to treat.

Sadly, these rates have remained largely static over a number of years, which likely reflects

\*National Institute of Health and Care Research North West Coast Clinical Research Network (2023)

entrenched deprivation in our communities, as there is a clear correlation between poverty and increased cancer rates evident in our research.

We can see this in areas such as Flintshire, which is the most deprived county in North Wales and where certain cancers are present at a significantly inflated rate. This is particularly the case for stomach cancer, for which Flintshire exhibits a 51% higher incidence rate than the national average. By contrast, Denbighshire, the least deprived area, reports 34% fewer annual stomach cancer diagnoses compared to the national average.

## These facts mean we must take a two-pronged approach to lower cancer incidence and mortality rates:

- 1. Educating people of all ages and backgrounds on key lifestyle factors to boost prevention by creating cross-society behavioural change.
- 2. Investing in research into early diagnosis and treatment to improve outcomes and support those living with cancer and their families.

**Route one** underscores the critical need for targeted education and outreach programmes that provide people young and old with the information they need to live healthy lives that minimise their risk of being diagnosed with cancer.

At North West Cancer Research, we frequently implement campaigns designed to encourage early diagnosis, spread vital information and raise awareness of the cancers most prevalent in our region.

Getting important messages on cancer prevention and education to all corners of our communities has seen us undertake a wide range of activities, including school engagements to provide young people with healthy lifestyle skills and knowledge. We have also rolled out region-wide awareness campaigns to share vital information with the media, alongside boots-on the-ground work at key North Wales locations to provide information first-hand.

Recently this has involved creative messaging around bowel, skin, and head and neck cancers, which are all present at above average levels in North Wales. Central to these campaigns has been taking the time to understand why people in our area are not taking measures that would help to prevent cancer or facilitate early diagnosis, such as wearing sunscreen or completing bowel cancer screening kits. These insights were then used to create engaging messages that spoke to these perceptions and ways of thinking in order to encourage changes in behaviour and a wider understanding of the cancers that are impacting our communities.

Education and communication are important watchwords at all levels of society and talking to stakeholders in our communities such as politicians, health directors, NHS clinicians, mayors, councillors, academics, and more is essential to aligning our region's approach to tackling cancer and ensuring that the issues are understood and the priorities addressed.

As mentioned in a recent roundtable on tackling health inequalities, "cancer is the point at which the pressures of society meet medicine". This is highlighted by the expansive network of local government, Welsh Assembly, central government, the NHS, and third sector organisations that have a role to play in tackling high cancer rates in North Wales.

There are essentially three overlapping but distinct levels within society and the medical landscape which governs North Wales' collective ability to prevent and treat cancer and through which we aim to engage. They are the public, the political and medical system, and the research world.

"Cancer is the point at which the pressures of society meet medicine."

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For **route two**, our research portfolio includes a mix of research types focused on common cancers, such as breast and prostate, along with studies on rare and childhood cancers and those that over-index in our region.

The largest weight of our funding however is concentrated on those cancers which have the greatest impact in our region. Such as head and neck cancers, cancers of the digestive system, the lungs and liver. Our funding is spent through academic and health institutions, but its aim and focus is to improve the health of the region.

North West Cancer Research maintains a research pipeline from the earliest discovery science and understanding of the genetic causes of cancer to studies which seek to improve patient care through our hospitals today. We also include studies that aim to improve available treatments using current techniques, as well as those that focus entirely on groundbreaking innovations, to develop new ways to treat cancer.

This is reflected in the wide variety of research activities that are currently underway. Examples of this include a project with the Betsi Cadwaladr University Health Board on immunotherapy and advanced lung cancer. While at Bangor University, we are working with Dr Christopher Staples on a

project looking into DNA and therapeutic responses in head and neck squamous cell carcinoma (HNSCC) and ovarian cancers. And all of this is just the tip of the iceberg, with dozens of other R&D programmes underway or already yielding promising results.

Our focus is on the unique needs of our region and so an increasing amount of our research is on the inequalities which exist across the area. These may be connected to disparities in wealth or the many other diverse factors at play as we live and age, but they are what makes our region unique. We need to understand our inequalities if we are to address them, and this is what our research aims to do.

Boiling the approaches down into two routes is not to trivialise the complexity of the task at hand but provides a useful prism through which to understand the steps we need to take. Indeed, in recent roundtables North West Cancer Research has held across the region, there is much discussion on local differences, political realities and research objectives which ultimately falls into one of these routes – although admittedly often in an overlapping manner.

In essence, the underlying thread that connects all this work is uncovering and addressing why cancer is a more common disease in North Wales compared to the rest of the country.



## This report's purpose and approach

The disparity between the national and regional cancer rates has been a core driver of our work as well as the regional report.

Now in its fifth year, this document plays an important part in our engagement activities, as it maps out the cancer landscape across North Wales. The data we analyse consistently highlights long-term trends that speak to both the scale of the challenge as well as the critical necessity of community-level interventions.

In preparing this, we assess the available data on cancer in North Wales and explore it at a county level, covering Conwy, Gwynedd, Flintshire, Wrexham, Anglesey, and Denbighshire. This provides us with granular insights into how this disease affects our communities and which specific conditions are putting the greatest strain on the people and healthcare infrastructure of North Wales.

To build up this picture, our analysis overlays multiple data points, including socio-economic information with incidence (total and age standardised), prevalence and mortality rates. Over the course of our regional reports, we have repeatedly seen more continuity than change, with the prevalence, incidence, and overall number of deaths from cancer remaining consistently above the national average.



#### **Empowering** communities

From the evidence in this report, it is clear we are facing a long-term issue that is going to require significant investment to understand the problems - and the solutions - at a local level.

Education and awareness of preventative measures should be a priority, as increasing levels of understanding across populations will help North Wales' cancer rate start to achieve parity with the national average.

This is why we are committed to implementing outreach projects at a grassroots level. Our presence in the region's communities and our research tells us that creating a cancerfree future is going to take innovation, investment, time and collaboration to address specific localised concerns and allow people across North Wales to be empowered to take control of their own health.



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## **NORTH WALES**

Regional Overview

## NORTH WALES Regional Overview

Health outcomes for people living in North Wales are distinctly different to those in the rest of the country. Statistics show that the region over-indexes on the total number of cancer cases diagnosed per year as well as the total number of deaths occurring from the disease compared to the national average.

Specific health challenges can be seen by the fact that 21 of the 24 cancers for which new incidence data is available recorded higher rates than the national average. The mortality statistics paint a similar picture, with 15 of the 17 cancer types for which data is available indexing at a rate above the Welsh average. This means that people living in the region's communities are facing a higher chance of both developing and dying from cancer than those living in the rest of the country.

For the fifth report in a row, incidence rates for a long list of cancer types have remained starkly above the national average. This includes cervical, oesophagus, head and neck, prostate, and pancreatic cancers, which all recorded a disparity of between 9% and 24% when compared to the national average.

Some cancer types have seen significant jumps in the disparity between the Welsh norm and the incidence rate in North Wales, with ovarian cancer for example increasing to 33% above average. This is an increase from 13% above average in our last report and makes it the cancer type with the most significant incidence rate difference between North Wales and the rest of the country.

When analysing the mortality rates for North Wales, several concerning trends are evident. This includes the fact that total deaths from stomach, oesophagus, and breast cancers are respectively 32%, 29% and 24% worse than the Welsh benchmark. A long list of cancer types, including trachea, bronchus, lung, colon, lymphoid, haematopoietic and related tissue, bladder, kidney, brain, ovary, skin and gallbladder all indexed mortality rates 10% or more higher than the national norm.

The discrepancy between North Wales and the rest of the nation when it comes to cancer mortality is starkly illustrated in the graph below. It shows that for nearly a decade, this region has been a notable outlier.

#### Cancer Mortality Crude Rate 2014-2022



#### Regional inequality

Localised factors such as population demographics, lifestyles, the environment and deprivation levels have a notable impact on the pervasiveness, mortality levels and types of cancer that specific communities experience. This is important, as communities in North Wales often face higher levels of inequality than elsewhere in the country and the healthcare infrastructure is typically managing an older than average population.

The inequality data for North Wales highlights this, as some areas are experiencing deprivation levels that are up to 25% higher than most of the country. Pockets of significant deprivation are often sitting very close to areas of comparative affluence. With communities in Flintshire and Gwynedd recording high levels of income deprivation despite being close to relatively high-income areas in Denbighshire.

The overlaying of income data with cancer rates paints a mixed picture across North Wales. The region exhibits higher than average levels for both cancer incidence and deprivation, being 13% (a 3% increase on our previous report) and 8% higher than the Welsh average respectively.

Cancer rates across the region fluctuate considerably, however they are rarely better or even in line with the national average. For example, Conwy has the worst mortality and incidence rates in North Wales, indexing respectively 30% and 28% higher than the national average. This compares to Flintshire, which has the smallest discrepancy in mortality rates compared to the Welsh benchmark at 2% higher than the average and Gwynedd, which is the only county with a cancer incidence rate that aligns with the rest of the country.

Certain cancer types can be seen to be having an outsized impact on populations and healthcare infrastructure within specific areas. This is illustrated in Conwy, where breast cancer is being diagnosed at a rate 71% higher than the rest of Wales and 50% higher than Wales overall. This correlates to a 29% higher than average mortality rate for this disease in Conwy, which is second only to Anglesey where the breast cancer mortality rate has been recorded at 66% above average. Other areas facing particularly acute challenges

include Denbighshire, which is managing a lung cancer incidence rate 46% higher than the rest of Wales. While Wrexham recorded a mortality rate for bladder cancer 74% above the average and Gwynedd has a kidney cancer mortality rate 58% higher than the national norm.

"North Wales exhibits higher than average levels for both cancer incidence and deprivation."

Just over a quarter (27%) of the population in North Wales are employed in routine or manual roles, while roughly one quarter (24%) have managerial, administrative, or professional occupations. Students make up 5% of the population, while 6% of people living in the region are long term unemployed or have never worked.

The gender breakdown in North Wales aligns with the national population, with men making up 49% and women making up 51% of the population.

The age demographics of a population play a significant role in the frequency and type of cancers experienced by communities. In North Wales, the population tracks as slightly older than Wales as a whole, with 46% of its adult residents being aged 55 or over, which compares to 42% for the country as a whole. This large proportion of elderly people could indicate a causative link to the higher rates of cancer found in the research. Communities across North Wales with higher levels of elderly residents are likely to report increased rates of certain cancers that predominantly impact older people, such as myeloma.

"Areas of North Wales are experiencing deprivation levels that are up to 25% higher than the majority of the country."

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#### Cancer impacting women

The incidence and mortality rates of several cancers which impact women continue to be recorded at markedly higher rates in North Wales compared to the rest of the country.

This is especially notable for ovarian cancer, which across North Wales as a whole is being diagnosed at a 33% higher rate than the rest of Wales, which is an increase from 13% in our previous report. This disease also has a 21% above average mortality rate, which is also a 12% increase from earlier data.

Four out of the six counties in North Wales experienced higher mortality rates of ovarian cancer than the rest of the country, with Anglesey tracking at a staggering 145% above the national norm for this disease. This was followed by Flintshire at 38%, Conwy at 21% and Denbighshire at 11%.

Incidence rates for cancer of the uterus in North Wales remain above the national average, with this disease recording a 19% disparity increase compared to our previous report, indexing at 23% above the Welsh benchmark. Anglesey is the notable outlier in our analysis, with an incidence rate for uterine cancer 101% above the national



average. Denbighshire and Wrexham also recorded higher than average incidence rates at respectively 34% and 19% above the national norm.

The incidence rate of cervical cancer has come down from our previous report but is still 13% higher than the national average.

Communities in Wrexham are the most acutely affected, with recorded rates of cervical cancer significantly above the national average (83%). Denbighshire also recorded a substantial disparity in the diagnosis of this disease, recording a 51% above average incidence rate.

#### Cancer impacting men

North Wales records higher than average incidence and mortality rates for several male specific cancers compared to the rest of the country.

Prostate cancer is a key challenge for the region's health infrastructure, with an incidence rate 14% higher in North Wales than it is nationwide and a mortality rate 6% above average.

Four of the six counties recorded incidence rates for prostate cancer in excess of the national average.

Communities in Anglesey reported the highest burden of this disease, with an incidence rate 35% above the national benchmark. Denbighshire, Conwy and Gwynedd all tracked incidence rates much higher than the Welsh average, with this disease being respectively 29%, 22%, and 10% above average in these counties.

Mortality rates for prostate cancer averaged at 6% above the national benchmark for North Wales, Conwy recorded a total 38% higher than the rest of the country.



While not male specific, men are more likely to be diagnosed with head and neck cancer than women. Across the region, the incidence rate for this disease is 9% above the national average, with some areas facing particularly acute annual diagnosis numbers. Anglesey, Denbighshire, and Conwy record the most above average incidence rates, tracking respectively at 43%, 29% and 10% higher than the rest of Wales.



Mortality rates for oesophageal cancer in North Wales is 29% higher than the national average.

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#### Key challenges for North Wales

The data analysed for this report reveals that North Wales has a defined cancer landscape that presents unique and highly localised challenges.

The region is evidently impacted at both a regional and county level by specific cancers at a scale not seen elsewhere in the country. These key variances in the communities of North Wales means that the area's healthcare network is facing multiple specific burdens.

High rates of lifestyle related cancers continues to be a trend across North Wales and are impacting certain communities to an extent far exceeding what would be expected for Wales as a whole. The mortality rate for stomach cancer illustrates this, as it is 32% above the national average and in Gwynedd the total death statistic for this disease is exceptionally high, at 101% above the Welsh benchmark. Annual diagnoses of stomach cancer are also particularly severe in certain counties such as Flintshire and Gwynedd, which respectively record incidence rates 51% and 31% above the national average.

Oesophageal cancer continues to have a significant impact on communities in North Wales, with an incidence rate 10% higher than the rest of the country and a mortality rate 29% above average. This disease is proving to be especially challenging in counties such as Anglesey, Denbighshire and Gwynedd, which respectively recorded incidence rates 42%, 40% and 31% higher than the rest of the country. The mortality rate for this disease was also found to be substantially above the norm in Conwy and Anglesey, which recorded total deaths for oesophageal cancer 89% and 41% higher than the Welsh norm.

The women only incidence rate for breast cancer continues to increase in North Wales, rising from 18% to 19% above the national average. Healthcare infrastructure in Conwy is being especially affected, as the incidence rate in the county is 71% higher than the rest of Wales and the mortality rate for breast cancer among women is 24% above average. Anglesey is likewise recording a very high total death rate, with the county's mortality statistic for breast cancer being 66% above the rest of Wales.

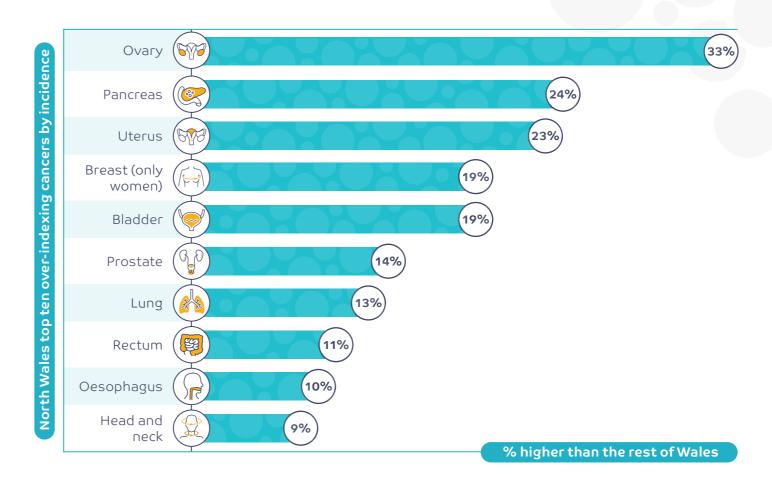
The incidence rate for pancreatic cancer in North Wales has increased from our last report, rising from 10% to 24% above average. While the mortality rate for pancreatic cancer in North Wales is 8% higher than the rest of the country. No county indexed an incidence rate in line with or lower than the national average, with annual diagnoses being especially high in Conwy, Denbighshire and Flintshire, which respectively recorded incidence rates of 47%, 36% and 22%.

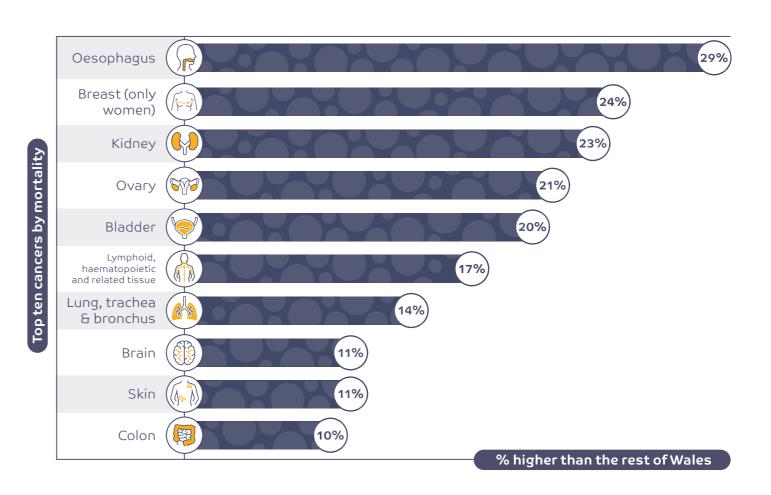
"Stomach cancer remains a key challenge for North Wales, particularly for Gwynedd where the incidence rate is double the national average."

The entrenched nature of this problem is illustrated by the fact that almost all the indices used to benchmark cancer incidence, prevalence, and total death rates are largely static across multiple years of data gathering – and in some instances the difference between the regional and national picture has been increasing.

The cancer mortality crude rate data illustrates the static reality of North Wales' cancer statistics. Showing that since 2014 the region has remained on average 33.1 cases per 100,000 above the rest of the country. This highlights the urgent need for immediate evidence-led interventions at a local level across all six counties of North Wales.

"Cancer incidence, prevalence and total death rates have been largely static for several years. This indicates an entrenched problem that requires urgent interventions at a local level."





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#### • INNOVATIVE CANCER TREATMENT RESEARCH: Our work

Ovarian, and head and neck cancers are among the top ten cancers that occur disproportionately in the region. Incidences of patients with head and neck cancers are 9% above the national average, and incidence rates of ovarian cancer in Anglesey and Denbigshire are respectively 118% and 80% higher than the rest of Wales.

A team of researchers working at Bangor University have identified a new protein in cancer cells which could lead to improved treatments for patients. The project was inspired by previous research which found that some ovarian cancer patients with the BRCA gene responded well to medicines called PARP inhibitors. These inhibitors suppress the PARP protein found in the BRCA cancer cells, stopping the protein from repairing the cancer cells which allows them to die.

The newly identified protein, named MRNIP, is found only in cancer cells and not in healthy tissue. Much like the BRCA gene in ovarian cancers, MRNIP stops DNA gaps occurring in tumour cells and helps the cancer to thrive. This means that cancer cells lacking the MRNIP are more likely to respond to chemotherapy and radiotherapy.

The team are now targeting the MRNIP protein with chemotherapy, radiotherapy, PARP inhibitors and novel drugs and will monitor the responsiveness to the cells and link the findings with the level of DNA gaps occurring to provide a route forward for new, more effective treatments for patients that will hopefully improve survival rates of cancer patients in the region.



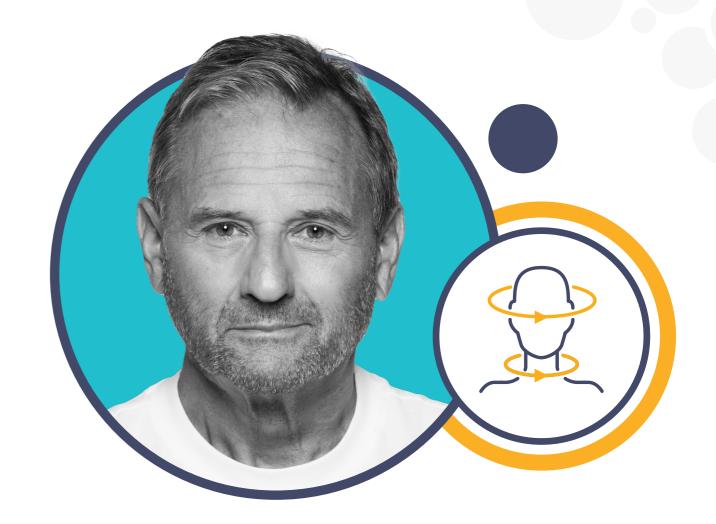


## Communicating with Communities

Education is a central aspect of our activity.

As this is one of the most powerful tools available to help individuals minimise their risk of being diagnosed with cancer and increase their chance of an early diagnosis should they contract the disease.

The importance of this approach is underlined by the fact that lifestyle related cancer types are much more prevalent in North Wales than elsewhere. Therefore, if we can support our communities to adjust key behaviours then it will help to significantly address the disparities in cancer incidence, prevalence and mortality between this region and the rest of the country.



#### • HEAD & NECK CANCER AWARENESS - 'Don't Be Silent. Speak Out.'

The incidence rate for head and neck cancer in North Wales is 9% higher than the national average. Some communities face a particularly acute risk from this disease, with Anglesey, Denbighshire and Conwy all recording incidence rates significantly above the Welsh norm, at 43%, 29% and 10% respectively.

Affecting more than 30 different parts of the head and neck, including the throat, tongue and mouth, the condition is more common in men, especially those aged 50 and above.

To raise awareness of this disease and encourage men to get checked as soon as symptoms appear, we initiated the 'Don't Be Silent. Speak Out' campaign.

A series of media and digital activities put key information regarding head and neck cancer prevention into the eyelines of those most at risk. The campaign was centred around the facts about the regional disparity in head and neck cancer rates and the personal stories of five men from

across the region, who are currently or have recently lived with this disease. In a series of videos, they spoke about the symptoms they noticed, how they felt, and why it is important that men speak out if they notice something.

Eye-catching and informative creative was used to spread this message to the target demographic in North Wales across online channels including Facebook, Instagram and YouTube, and directed people to a dedicated 'Speak Out' landing page. The campaign also included media outreach, in which BBC Radio Presenter Mark Radcliffe shared his own head and neck cancer diagnosis and treatment story.

Mark's powerful story and passion for encouraging men to recognise symptoms and seek medical advice, combined with stark regional statistics, garnered significant attention from numerous media outlets. Including several ITV and BBC shows.

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Across North Wales in a move to better prevent and treat bowel cancer, the age of receiving screening kits has lowered to encompass those aged 51-74.

However, there is a notable correlation between uptake of bowel screening and deprivation, which is a critical factor in North Wales given its many low-income areas.

These facts led us to implement a campaign focused on the importance of returning bowel cancer testing kits.

To inform this campaign, we conducted research to discover why people avoid returning their kits. Fear, disgust and denial were identified as the primary reasons behind this behaviour. Our messaging was therefore designed to act as a positive reminder to return these kits and make people feel good about the process.

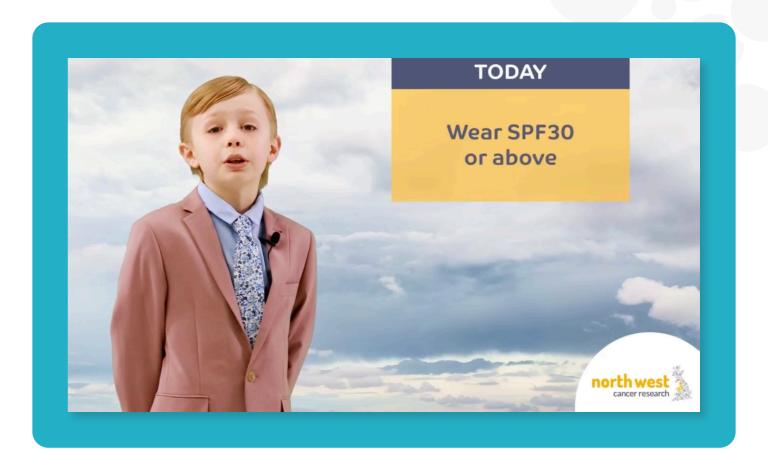
The campaign used nostalgia to connect with the audience, suggesting that if they remember a particular item or moment in an advert, such as a chopper bicycle, CRT TVs, or cassette players,

then it was time to return their bowel screening kit. To further resonate with audiences, much of the messaging was regionalised and case studies with people who had been diagnosed and treated for bowel cancer were highlighted.

As the research showed men were particularly reluctant to return screening kits, elements of the campaign were specifically tailored to this demographic.

This included working with football clubs to develop adverts in match day programmes featuring key moments from the club's history. In addition, Ex-Everton and Republic of Ireland footballer Kevin Sheedy was a prominent case study during the campaign, which shared his story of being diagnosed with bowel cancer at 52 and the importance of early diagnosis.

The media outreach resulted in an interview on ITV Granada Reports with Kevin Sheedy alongside coverage in multiple online and broadcast outlets as well as significant engagement with social media activity and campaign videos.



#### • SKIN CANCER AWARENESS - 'Block the Sun, Not the Fun'

With North Wales' skin cancer mortality rate being 11% higher than the rest of Wales, and some areas facing mortality rates from this disease up to 21% above the national average, it is vital to raise awareness of sun safety measures across the region.

In 2024, we carried out research which showed that parents can often spend so much time reapplying sunscreen to their children that they forget about themselves. We therefore designed a campaign to act as a gentle reminder to make sure parents remember to wear sun protection themselves.

This messaging needed to educate people that the sun's UV rays can still increase their chance of getting skin cancer even in North Wales and when it's cloudy.

To reinforce this point, the campaign included a news team consisting of a roving reporter, weatherman and news anchor reminding adults of the importance of sunscreen. To underline the message, roles were reversed, and the news team was made up entirely of children acting as the experts and encouraging adults to "block the sun, not the fun".

This strategy incorporated engaging video content published across meta and YouTube with multiple case studies from people who had been diagnosed and treated for skin cancer shared across the region's broadcast, print and online media.

The outreach included BBC Radio Manchester attending the campaign's launch at Acacias Primary School and interviewing schoolchildren after sun safety sessions were delivered by North West Cancer Research. A roadshow with a pop-up ice cream stand handing out free suncream samples at sites such as GreenWood Family Park in Y Felinheli, Tatton Park, Cheshire Ice Cream Farm and Hoghton Tower was also a great way to spread important information among communities first-hand.

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# DATA The statistics behind the report



We assessed the key cancers across North Wales for which NHS data is available, which accounts for 24 cancer types for incidence and 17 for mortality.

The data used in this report was sourced for Wales and England from official sources. Principally National Cancer Registration and Analysis Service (NCRAS) Cancer Data for England (www.cancerdata.nhs.uk), the Office for National Statistics (https://www.nomisweb.co.uk/), and Public Health Wales (https://phw.nhs.wales) for Wales.

Population, employment, household religion and ethnicity data was obtained from the UK Office for National Statistics via Nomis (www.nomisweb. co.uk) and from 2021 Census data.

The latest mortality data is from 2022 (Office for National Statistics), and the latest cancer incidence, prevalence and age-standardised mortality data sets are for 2020. Age standardised total cancer deaths data came from the Office of National Statistics Leading Causes of Mortality 2020 report.

Where data has not been directly reported for local authority areas, tables of data were aggregated according

to their type (counts versus rates), allowing for other features such as cancer type, gender and age.

The latest full set of incidence and prevalence data used in this report cover the 2020 calendar year, the first year of the COVID-19 pandemic. There is significant research to suggest that the pandemic affected cancer diagnoses and treatment rates. For example, The Lancet article 'COVID-19 and cancer: 1 year on' published in April 2021 cited a study which estimated that "45% of those with potential cancer symptoms did not contact their doctor during the UK's first wave of the pandemic (March-August, 2020)". This is worth highlighting as it means that the true state of cancer diagnosis and prevalence in North Wales may be higher than that factored into this report.

However, as the main metric used is the difference between the national and regional diagnosis and prevalence, rather than overall totals, this is still the best indication for the disparity between the likelihood of contracting and living with cancer in North Wales compared to elsewhere.

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## Get in touch

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