

Director Of Public Health
Annual Report 2025

HEAT IN THE CITY:

Our Health in a
Warming Leeds.





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Foreword

Welcome to the 2025 Director of Public Health
Annual Report for Leeds.

I am delighted to share this report, which focuses on the impact of rising temperatures in Leeds due to global climate change. It examines how these changes affect our residents and highlights local efforts to mitigate risks and raise community awareness.

The report emphasises that while climate change affects everyone, its impact on health is not distributed equally. Older people, people with pre-existing health conditions, young children and those living in deprived communities are disproportionately at risk from the health impacts of climate change.

This report is a call to action, highlighting the need for both mitigation and adaptation strategies to protect the health and well-being of our communities. These strategies include developing heat action plans, improving housing standards, expanding green spaces, and increasing public awareness.

By working together, we can build a cooler, healthier, and more resilient Leeds. This is a shared responsibility for local government, policymakers, healthcare professionals, community leaders, and every resident of Leeds. Addressing the health impacts of climate change requires a collective effort.

The report is not just about identifying challenges; it's about driving change. Leeds has a proud history of collaboration, innovation, and resilience, and there are already

inspiring examples of climate action taking place across our city. We must continue to build on these strengths to address this urgent issue.

Together, we can create a Leeds that not only adapts to rising temperatures but thrives in spite of them. I encourage everyone to reflect on the findings and recommendations in this report and to join us in building a healthier, more sustainable future.

I am deeply grateful to everyone who has contributed to this report by sharing their stories, experiences, and expertise. I also want to thank my colleagues and partners for providing valuable data and examples of their work.

We must act now to create a city that can withstand the heat and protect those most at risk. This is about more than surviving heatwaves—it's about creating a healthier, fairer, and more sustainable Leeds for future generations.

Victoria Eaton
Director of Public Health
Leeds City Council



“This is a pertinent and timely report highlighting the impact rising temperatures have on the health of the population, especially those most at risk. Climate change may well be a global challenge, but action starts at a local level, and we all have a part to play. UKHSA has a strong history of partnership working with Leeds and will continue to horizon scan and risk assess to inform the actions of our partners. By working together and fostering a culture of research and innovation, we can equip ourselves with the knowledge and tools needed to mitigate the risks and build a healthier and more resilient future.”

Martin Bewley
Public Health consultant, Health Protection
UK Health Security Agency, Leeds

“I welcome this year’s focus of the Leeds DPH report on ‘Our Health in a Warming Climate’. Climate change will be the context within which we will need to protect public health this century. As our 2024 report, ‘Health Effects of Climate Change in the UK’ demonstrated, climate change will continue to emerge as an increasing priority, influencing a range of health outcomes and their determinants. While the greatest impacts are likely to occur in the second half of this century as emissions translate into increasing global temperatures, it is the actions we take today that will determine our vulnerability and the resilience of our public health systems. Targeted adaptation and attention to the health implications and opportunities associated with decarbonisation, driven by collaborative effort, will be vital to reducing the increasingly severe and unequal impacts that will be felt by our populations. The good news is that many impacts are avoidable by limiting warming or can be reduced through adaptation. I share the strong message that ‘we are not powerless’. The report’s key themes align closely with our strategic priorities in the UK Health Security Agency, and we will continue to work closely with partners - including Leeds - to prepare for and adapt to the health effects of climate change, from national guidance like the Adverse Weather and Health Plan through to local partnerships such as in vector control. Based in Leeds myself, I am delighted to support and endorse Leeds DPH’s leadership on climate and health as highlighted in this report.”

Prof. Lea Berrang Ford
Head, Centre for Climate and Health Security (CCHS), UK Health Security Agency
Priestley Chair in Climate and Health, University of Leeds

Introduction

Climate change is one of the biggest public health challenges of our time. Rising temperatures are affecting people’s health, especially those most at risk.

As the planet gets hotter, the risks of heat-related illnesses increase. These changes can make existing health problems worse and create new environmental dangers. Those most at risk face an unequal burden. This is often made worse by social, economic, and geographic inequalities.

We need to meet the needs of people who live in deprivation, as well as people who are more affluent. We also need to consider differences in age and health. This means we need to employ both targeted and broad approaches to support the people of Leeds.

This report explores:

- ▶ How rising temperatures affect people’s health in Leeds.
- ▶ What is being done locally to reduce these risks and help communities become stronger and more prepared.

Whilst the impacts of climate change are broad and far-reaching, this report focuses specifically on increasing temperatures in the context of public health and health protection.

It examines how we can protect people and populations from increasing environmental hazards and infectious diseases.

The public health system plays an important role in:

- ▶ Raising awareness of health risks from heat.
- ▶ Reducing risks.
- ▶ Helping communities prepare for these challenges.

This report draws on evidence from:

- ▶ The UK Health Security Agency (UKHSA).
- ▶ The Intergovernmental Panel on Climate Change (IPCC).
- ▶ Chief Medical Officer’s Annual Report 2024: Health in Cities.
- ▶ The UK Department of Health & Social Care (DHSC). The World Health Organization (WHO).

Alongside insight from:

- ▶ Local academics.
- ▶ Key stakeholders.
- ▶ The people of Leeds.

It also explores:

- ▶ The effects of increasing temperatures in Leeds caused by global climate change on public health.
- ▶ Local efforts to help reduce these risks and increase community awareness.

HEAT
IN THE
CITY

The report focuses on three key themes related to public health and increasing heat:

1. Unequal impacts of rising temperatures in Leeds
2. How rising temperatures affect long-term health conditions
3. Emerging risks: Infections and air quality

Climate change is a health crisis. The choices we make today will shape the health and wellbeing of future generations. We need to act quickly, work together and make decisions to protect our planet and our health.

LEEDS SEES HOTTEST DAY
as UK temperature hits 40C
for first time on record

Yorkshire Evening Post | 18 July 2022

Trees for Streets Programme, Leeds.

Introduction

Over the past decade, Leeds has changed a lot. Our communities have become more diverse, and the city centre has grown. More people now live in inner-city areas and the population is growing faster than the national and regional averages.

However, 24% of residents live in areas ranked among the 10% most deprived nationally (IMD1) according to the Government Index of Multiple Deprivation. These neighbourhoods are also home to many of the city’s youngest and most ethnically diverse communities. Nearly one-quarter of Leeds’ adults and over one-third of its school children live in these deprived areas (IMD1). Residents in the most deprived areas are more likely to experience poor health. Their life expectancy is up to 12 years less than those living in the least deprived areas.

If Alwoodley’s ‘Walk to School Week’ was scaled up to all 227 Leeds primary schools, the estimated annual carbon savings would be 130 Tonnes CO2e/year. The growing urban population is also affecting the environment and contributing to climate change.

When more people live in the city, they produce more greenhouse gases due to their:

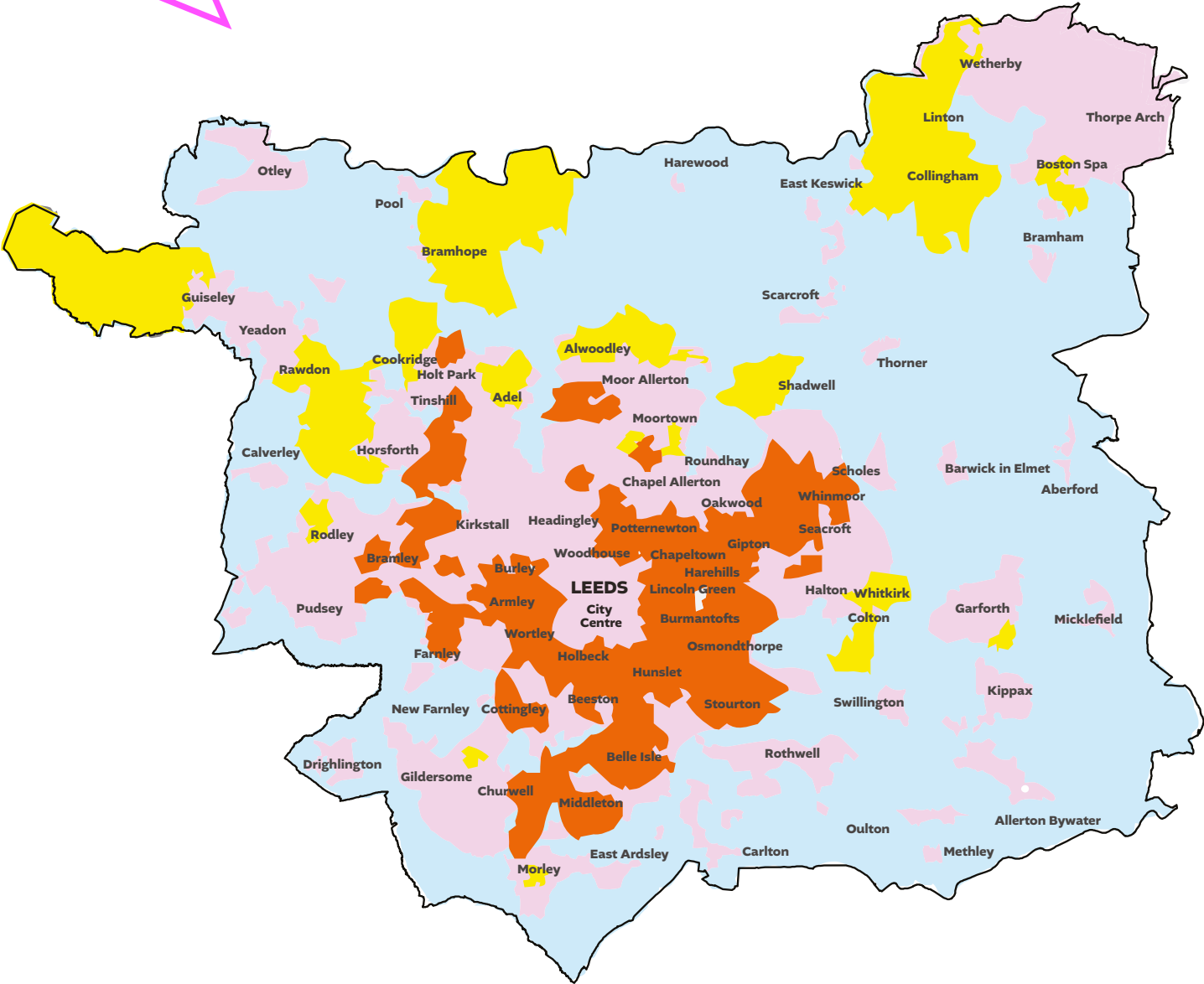
- ▶ Transport.
- ▶ Energy.
- ▶ Waste disposal needs.

Rising urban temperatures also increase the demand for air conditioning. This creates a cycle that contributes to global warming. Urban areas like cities are also warmer because materials like concrete absorb and hold heat.

The 2022 IPCC* report describes that the planet is getting warmer due to human activities such as burning of fossil fuels, which release greenhouse gases like carbon dioxide contributing to global warming.

Walk to School

If all 227 Leeds primary schools did a ‘walk to school week’ an estimated 130 tonnes of carbon dioxide would be saved per year in Leeds. That’s the equivalent of 100 cars driving 10,000 miles a year!



Map of Leeds, showing the most and least deprived areas

- Leeds areas within the 10% most deprived nationally (includes 24% of Leeds population)
- Leeds areas within the 10% least deprived nationally (includes 7% of Leeds population)
- Rural areas and greenspace
- Urban areas


*Intergovernmental Panel on Climate Change.

Climate change globally

In the UK, the average temperature has already risen by around 0.75°C over the last decade. The Met Office reported that 2022 was the warmest year on record in the UK (followed by 2023) since records began in 1884.

Projections suggest we are on track to reach even higher temperatures.

However, climate change is not just about higher temperatures. It affects the balance of our planet. As temperatures rise, the UK weather is becoming more unpredictable. Extreme weather events such as heatwaves, wildfires and flooding are becoming more frequent. These put people’s homes, livelihoods and health at risk. They are also forcing some people to move and putting extra pressure on emergency services and healthcare systems. Groups most at risk, such as older adults, babies, young children, people with long-term health conditions, and those living in deprivation, are unequally affected.



2010-2019 saw the highest levels of greenhouse gases recorded in any decade.

“Climate change really worries me. It’s concerning for my kids and the future. My kids will witness this. It’s coming fast and it is close.”


Judit, Parent.

The health effects of warmer temperatures go beyond these immediate dangers. Over time, rising temperatures are increasing the spread of vector-borne infectious diseases.

Vector-borne diseases like Lyme disease and Malaria are illnesses spread by insects like ticks and mosquitoes, that carry harmful diseases. Warmer temperatures help these vectors to survive and breed.

Alhambra Garden, Roundhay Park. Picture by Simon Hulme, courtesy of Yorkshire Evening Post/National World.





0.75°C

The UK average temperature has already risen by around 0.75°C over the last decade.

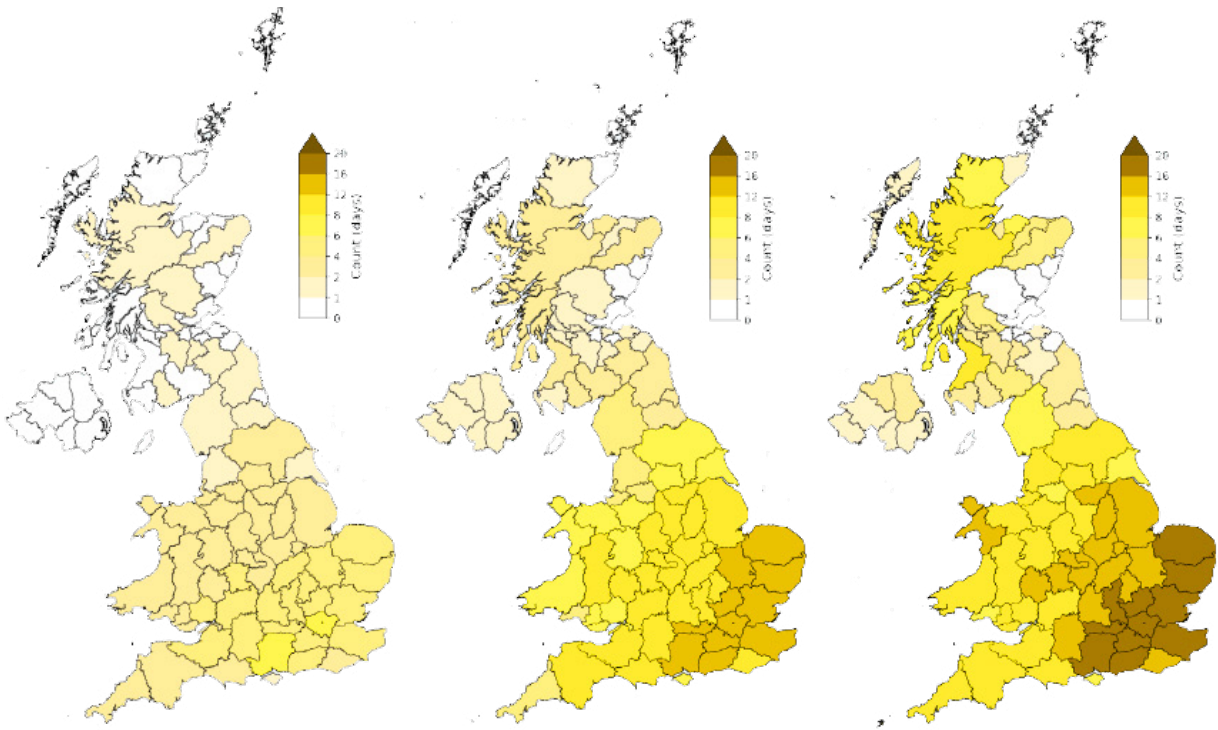
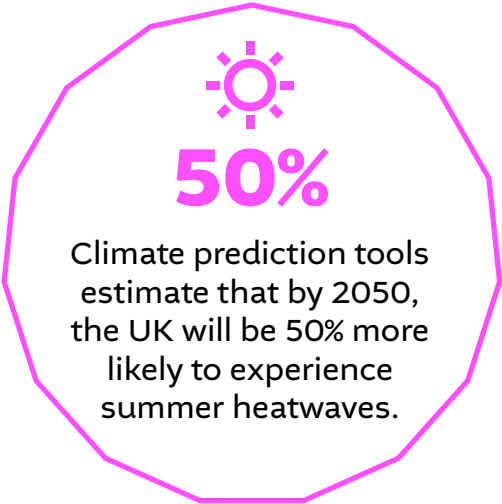
Increasing temperatures nationally

A heatwave means at least three consecutive days with temperatures over 25°C. In the last 10 years, the UK has seen an increase in recorded heatwaves. These have become more frequent, intense and longer.

While many people might welcome warmer weather, it brings significant risks to people’s health and wellbeing.

Evidence suggests that they will become more frequent and last longer. This could potentially lead to an increase in heat-related illnesses and deaths.

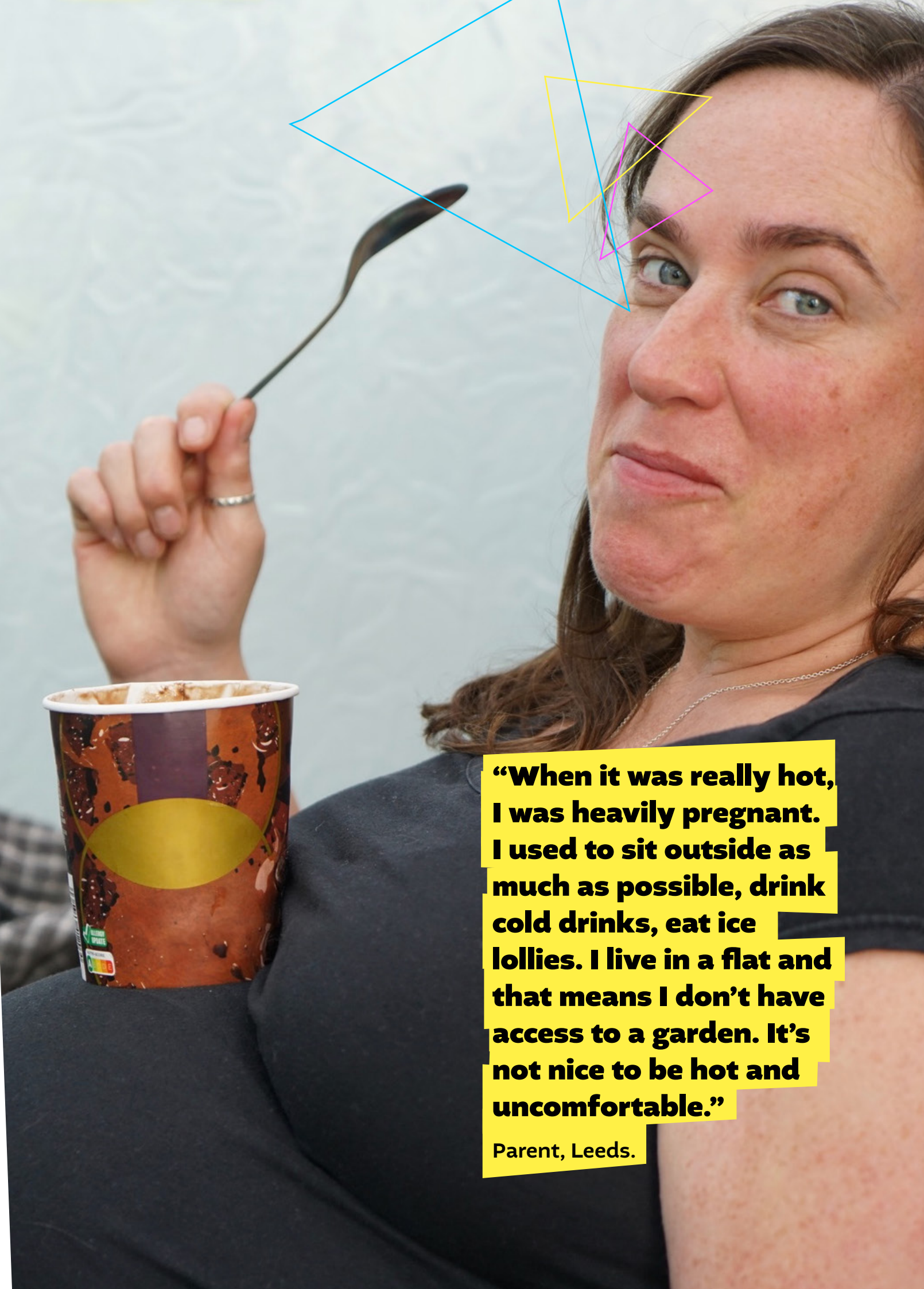
According to the Met Office (the UK’s national weather service), the frequency of “hot summer days,” (days where temperatures reach or exceed 30°C) has tripled over the past few decades. In the summer of 2022, parts of England experienced a “red extreme heat warning” due to record-breaking heat.



These maps show the changes in the UK’s annual mean temperature from 1991-2020 compared to the period of 1961-1990. It highlights how average temperatures have risen in all areas across the UK.

<https://rmets.onlinelibrary.wiley.com/doi/10.1002/joc.8553>

Gledhow, Leeds. Picture courtesy of Shaun Fogarty.



“When it was really hot, I was heavily pregnant. I used to sit outside as much as possible, drink cold drinks, eat ice lollies. I live in a flat and that means I don’t have access to a garden. It’s not nice to be hot and uncomfortable.”
Parent, Leeds.

Increasing
temperatures
in Leeds

In Leeds, we're used to preparing for risks associated with cold weather, but warmer weather can also increase the risk of people becoming unwell.

Rising temperatures can lead to:

- ▶ Dehydration.
- ▶ Heat exhaustion.
- ▶ Heatstroke.
- ▶ Worsening chronic conditions like heart and lung diseases.

Leeds to be hotter than
Turkey as UK braces for
scorching heatwave

Yorkshire Evening Post | 18 July 2022

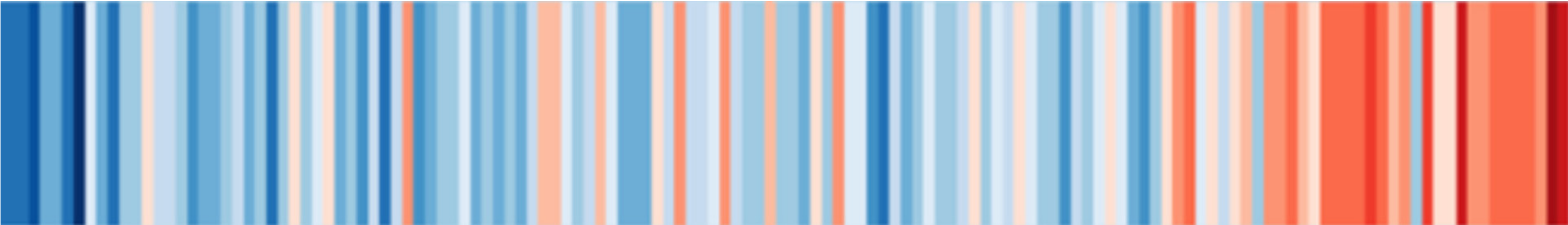
The hottest years on
record for Leeds have
all occurred within
the last decade.

Annual average temperatures for Leeds since 1890.

Met Office data shows that temperatures in Leeds, part of the Northeast Met Office region, have increased significantly since 1884 when records began, with the hottest years occurring since 2002.

1890

2022



Blue shades: Cooler-than-average years
Red shades: Hotter-than-average years

Summer days where temperatures reached 25°C have risen from **8 to 15 since 1981.**

In 2022 the UK had 3 heatwaves in 1 year with temperatures **exceeding 40°C** for the first time on record.



Hot summer days where temperatures **exceed 30°C** have also increased with an average of **2 days a year.**

The Met Office issued its **first red extreme heat warning** during the summer of 2022.

Health impacts

Data suggests that days with temperatures over 25°C can increase hospital admissions for at risk groups. These trends highlight the growing risks posed by heatwaves to public health. The rise in both “summer days” and “hot summer days” in Leeds underscores the urgent need for action to protect communities from heat-related illnesses and the long-term effects of rising temperatures.

The Urban Heat Island effect

The Urban Heat Island effect is common in densely built areas. Concrete and asphalt retain heat better than natural surfaces, so urban areas can be hotter than rural ones. This is because heat becomes trapped amongst a lot of concrete and there is less natural cooling such as wind. Leeds experiences this effect — the Met Office predicts some inner-city areas can be up to 8°C warmer than outer areas during hot-weather periods.

“There’s quite a lot (of houses) that don’t have any gardens or outdoor space; they just go straight onto the street.”

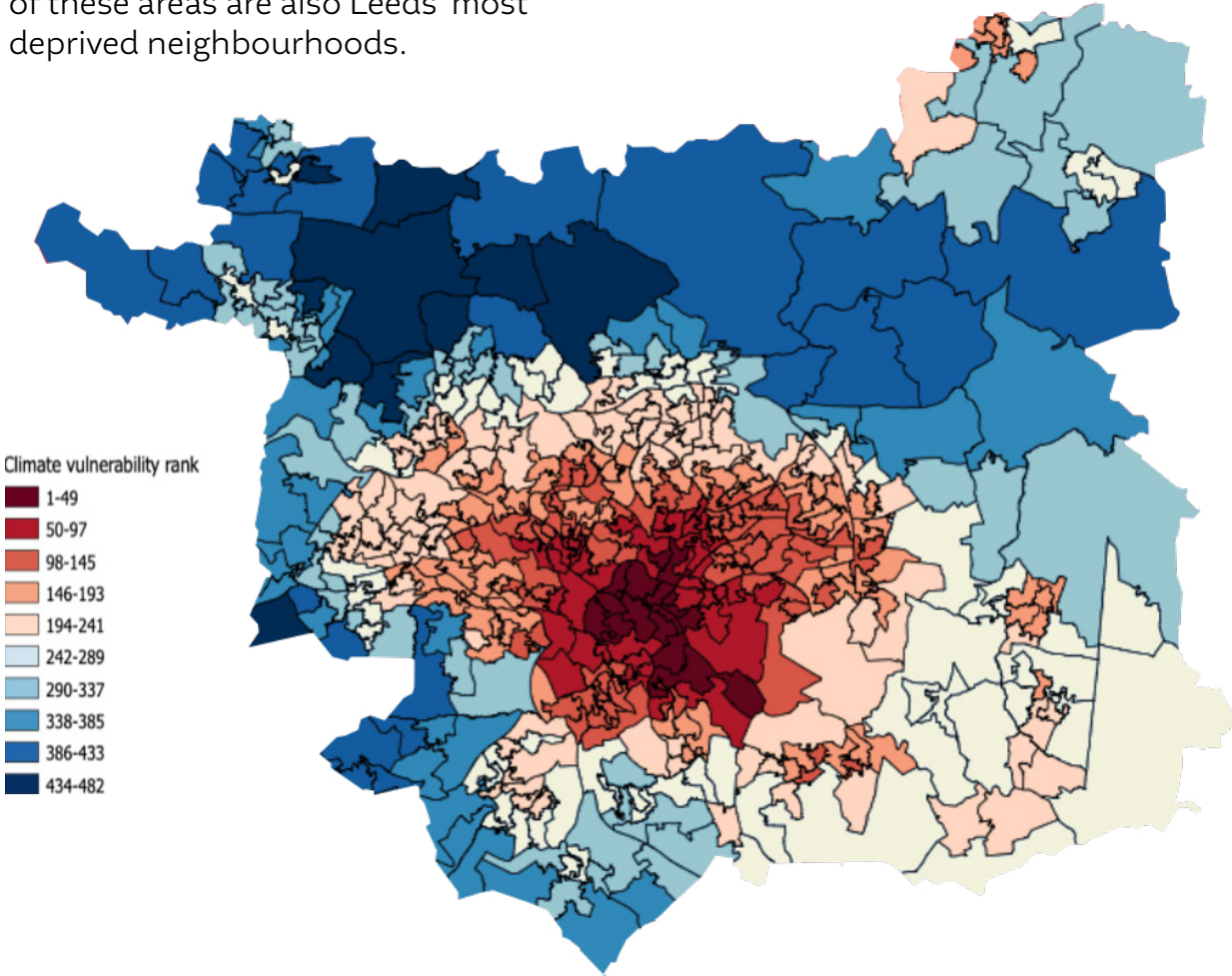
Andrea South,
Housing Manager, Inner City Ward

“I live in a flat and have no access to a garden or green spaces as we live in the city centre. I use the balcony, and we try to have our meals outside when it is hot.”

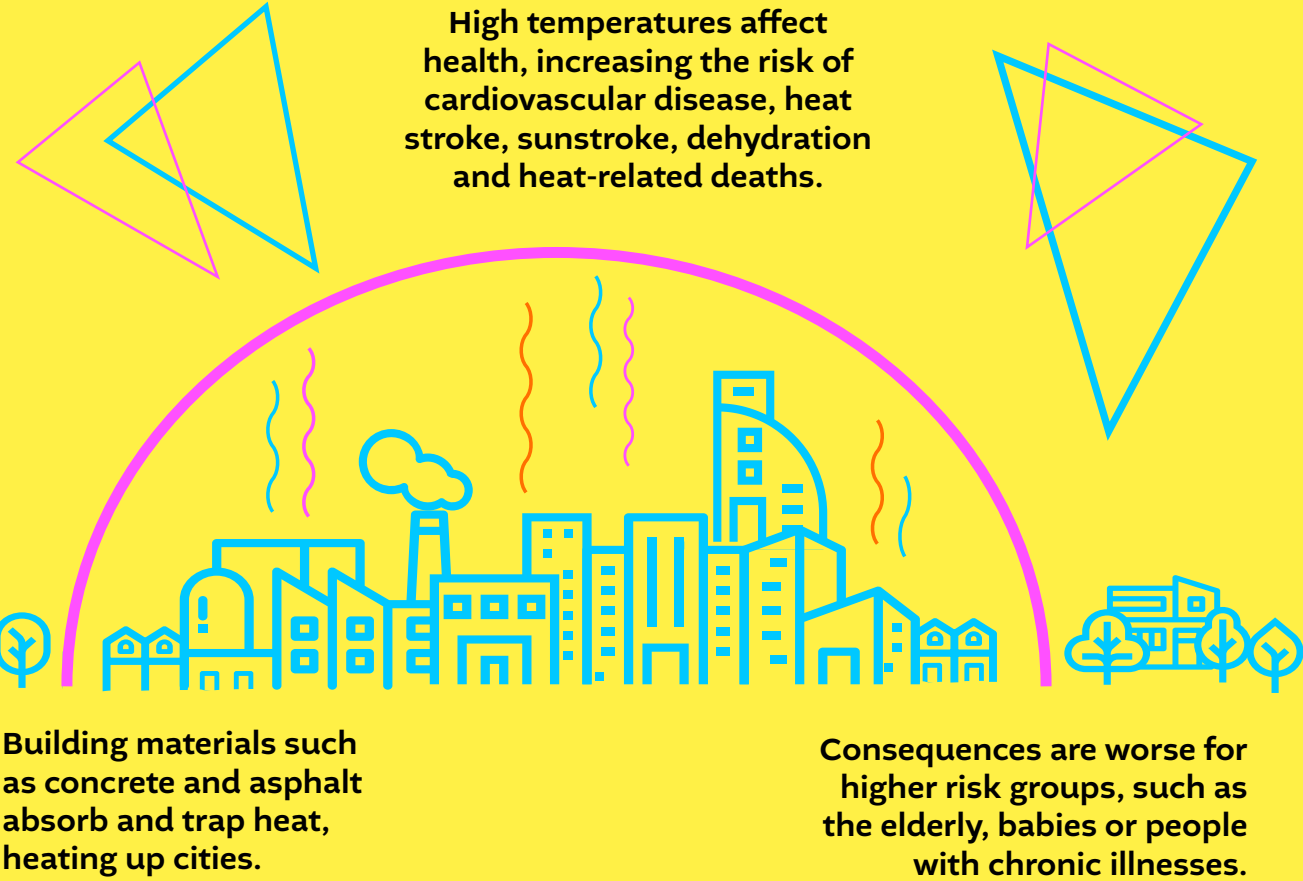
Judit,
Parent of a young child.



The map below from Dr Paola Sakai shows this in practice. The red colours show Urban Heat Island effect. The most densely populated Leeds neighbourhoods experienced the highest temperatures in the past three heatwaves (2010, 2013, 2017). Many of these areas are also Leeds’ most deprived neighbourhoods.



The Urban Heat Island effect



Snapshot

Increasing temperatures and their impacts



0.75°C

The UK's average temperature has risen by this amount over the last decade.



The hottest years on record for Leeds have all occurred within the last decade.



87.5%

Increase in 'Summer Days' (over 25°C) in Leeds since 1981.



50%

According to climate prediction tools, by 2050 there will be a 50% increase in the likelihood of summer heatwaves occurring in the UK.



2,985

Excess deaths were recorded in the summer of 2022 when 5 extreme heat periods occurred (UKHSA).



25°C+

Hospital admissions can significantly increase when temperatures push over this threshold, especially for at-risk groups.



3X

The frequency of "hot summer days" (30°C or above) has tripled in recent decades.



2022

and 2023 were the warmest and second warmest years on record in the UK since 1884.



40°C

Was the highest temperature recorded in West Yorkshire in 2022—the first time on record.



8°C

Inner-city areas can be this much warmer than rural areas during hot weather.

*IMD stands for the 'The Indices of Multiple Deprivation' which is used to measure relative deprivation within small local areas across England. The IMD ranks areas from 1 (most deprived) to 10 (least deprived).

How People live in Leeds



1/4

Of adults in Leeds live in the most deprived areas (IMD1*).



1/3

Of children in Leeds live in the most deprived areas.



45,846

Babies and young children (under 5) live in Leeds.



3rd

Leeds is the third-largest city in the UK and one of the fastest-growing, greenest cities in the country.



Leeds is home to Roundhay Park, one of the largest city parks in Europe.



27%

Of people who live in the most deprived areas of Leeds are in older (pre-1930) housing.



£110m

Has been invested by Leeds City Council in energy efficiency for 6,294 properties over five years.



26%

Of Leeds residents live in terraced homes.



28%

Live in flats.



6%

Of people live in high rise properties.

Snapshot

Most at risk groups



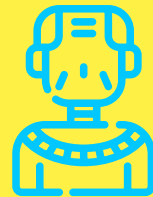
61,956

people in Leeds are listed as vulnerable on the priority services register.



2 in 5

people on a Leeds GP register in 2021 had at least one long-term condition.



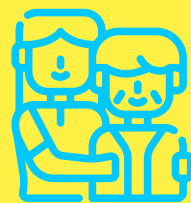
128,600

people aged over 65 are living in Leeds.



150+

care homes in Leeds.



3,500+

receiving home care services.



1/2

More than half the people aged 50 and over in Leeds live with two or more long-term health conditions.



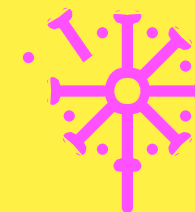
37

people were estimated to be sleeping rough on a single night in Leeds in 2022.

Emerging risks



Climate models predict that warmer temperatures could soon attract non-native mosquito species capable of spreading diseases like dengue, chikungunya, and Zika.



Pollen seasons are starting earlier and becoming longer and more intense, because of warmer temperatures.

Horsforth, Leeds. Picture courtesy of Belen Valle-Metaxas.



Engagement

What we did

In the first stage of creating this report we conducted a review of the available evidence around urban warming and rising temperatures, produced by:

- ▶ The United Kingdom Health Security Agency (UKHSA).
- ▶ The Department of Health.
- ▶ The Local Government Association.
- ▶ The World Health Organization.
- ▶ The Met Office.

We also accessed local policies to identify key themes and support the development of this report. To understand the impact of increased temperatures on Leeds residents, we then held five focus groups. These took place within a range of settings and groups in Leeds including:

- ▶ A high-rise building.
- ▶ A children's centre.
- ▶ A care home.
- ▶ A support group for people with long-term conditions.

We also carried out one-on-one interviews with individuals. We spoke

to people with long-term respiratory conditions and those receiving homecare services. These sessions engaged professionals and residents from varied demographics, locations, ethnicities, and age groups.

Group and individual discussions captured personal experiences of heat and rising temperatures. The data was then processed, coded and analysed for key themes and trends. What people told us has been referenced throughout the report.

We also conducted six one-on-one interviews with professionals and partners, working with populations at risk of rising temperatures. To broaden the scope, we launched an online survey. We analysed the responses to identify recurring themes, which have been explored within this report.

26 Leeds residents were engaged in focus groups.

67 professionals were reached through a survey.



High Rise Residents, Leeds.



Creating the short film

To accompany the written Director of Public Health Annual Report, we produced a short film. The film highlights the individual experiences of people in Leeds.

Filming
Filming occurred across 2 shoot days. Each shoot day involved 6-7 crew members and up to 4 locations in Leeds. Adjustments to the shoot setup were made in order to meet participants' needs.

The voiceovers were shaped by individuals' contributions to community engagement activities. For most, participants voiced their own stories. However, in two cases, alternative approaches were used. In one, with consent, another local person voiced an individual's contributions on their behalf.

“Carmen absolutely loved the filming, she said it reminded her of her teaching days and enjoyed it very much.”

Staff at Wetherby Manor Care Home, Filming Location

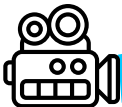
In the other, themes from the report, experiences from across Leeds, and the young person's own experiences were reflected through their narration. We worked with local drama students to bring these stories to life.

A script was prepared in advance based on participants' contributions to community engagement activities. Participants were consulted about the script and changes were made if requested.

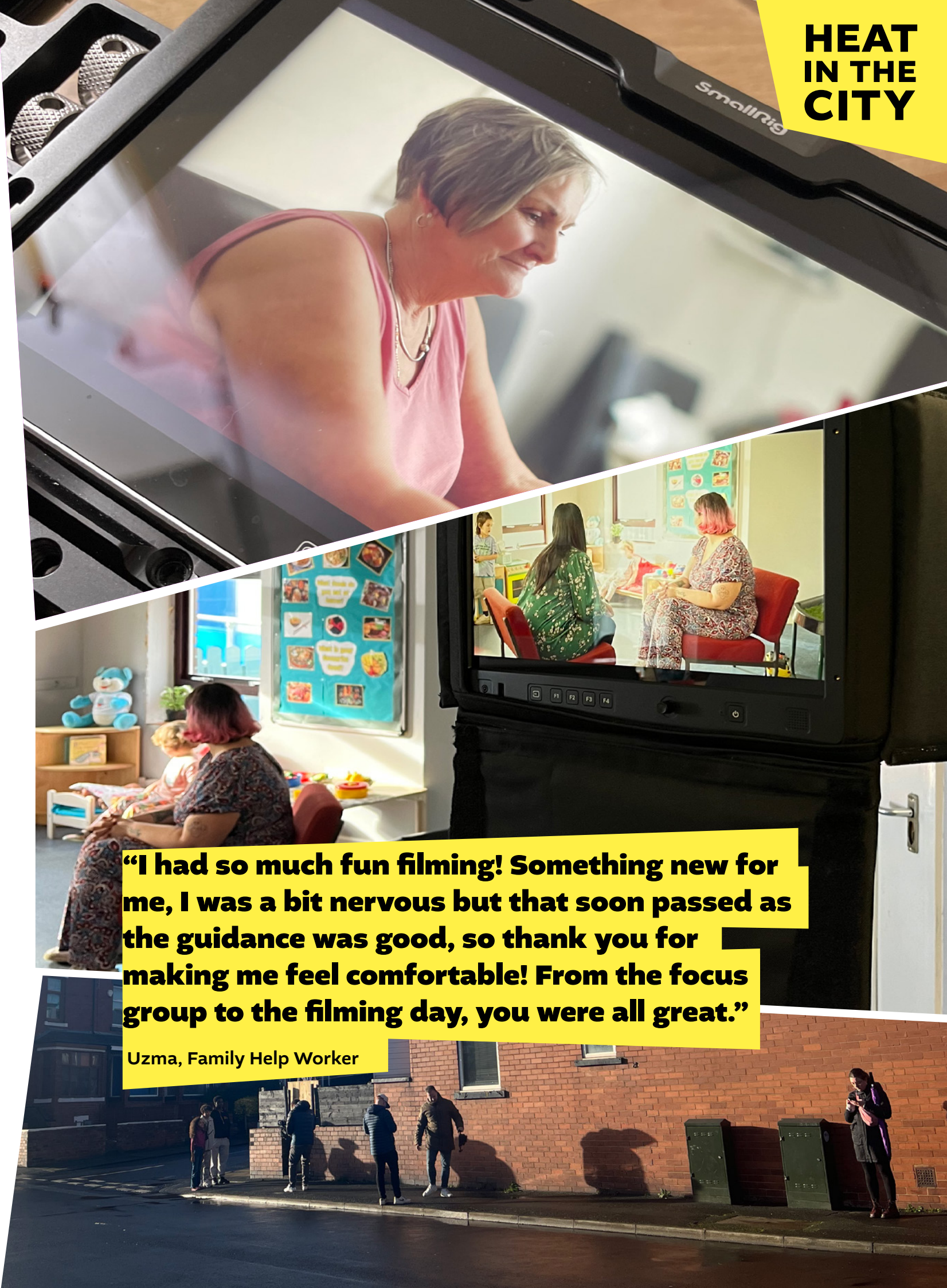
The film features a broad mix of demographics, filming locations, ethnicities, ages, and experiences. It highlights the experiences of six local people and gives us the chance to understand their lives in a warming Leeds.

“I had so much fun filming! Something new for me, I was a bit nervous but that soon passed as the guidance was good, so thank you for making me feel comfortable! From the focus group to the filming day, you were all great.”

Uzma, Family Help Worker

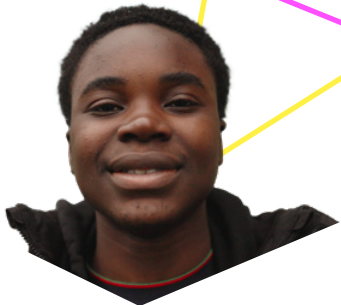


Watch the film



HEAT
IN THE
CITY

Key findings
from
engagement



“The heat makes my depression so much worse.”
High-rise resident, Seacroft

“It makes you lethargic when you’re in your flats.”
Anonymous, Seacroft

Heat can be isolating because it makes going outside difficult.

“It’s isolating not having anywhere to go outside. There’s a few in here who have depression. Being here can get you down.”
Anonymous, Seacroft



“We are not used to this weather. I have to remind my son (toddler) to drink more water. He has less energy. I try to remind him to drink more, try to find a breeze, and go near trees for shelter.”
Judit, Leeds

“We’re well able to cope with these things. It can slow you down a bit, but I suppose it just depends on the nature of the things that you normally do. I spend quite a bit of time at my computer desk. And we’ve got Roundhay Park on our doorstep.”
Ted, Roundhay

“In this block of flats, you’re stuck in it when it’s hot. We’ve got outside furniture, but we have to take it in and out because people will pinch it.”
Jackie, Seacroft



“There’s red hot sun in the summertime, and it’s depressing when you’re in your flat. On the other side of the building, it stays shady and cold—you don’t even know it’s summer.”
Anonymous



Hot weather also affects people’s mental health, wellbeing, routines and mood.

“I have asthma and a heart condition. When it is hot I have to try and keep cool. I close the curtains and open the windows. I tend not to go out. I plan ahead and get shopping in advance.”
Anonymous

Heat affects people’s health and can make long-term conditions worse.

“Some days shade is not enough. I feel like I have to pour cold water on me. I find that sleeping can be difficult, and I get a bit lethargic.”
Brian, Wetherby

“With me having chronic obstructive pulmonary disease, I do get more breathless in the hot weather. I can’t walk as far; I don’t want to go outside.”
Carol, Armley



For people living in high-rise buildings, the effect of the heat depends on the location and condition of their flats.

People would like to be able to access outside spaces to combat isolation and seek shade. However, not everyone can get to outdoor spaces that are accessible for them.

“Armley’s pretty good for green spaces, there’s quite a lot, but they all have massive hills, so if you’ve got a long-term health condition, the last thing you want is to go up a great big hill.”
Tom, Armley



“My blood pressure is high anyway, so when it’s hot I feel quite unwell.”
Anonymous, Seacroft

What
professionals
told us

There is a need to improve information made available for the public about how to stay safe during increased temperatures. People also don't always understand how heat affects them, so there should be information about this available to those at risk.

There can be a lack of cool spaces available for people to easily access shelter from the heat. Professionals called for more spaces being available similar to warm spaces during winter months.

Hydration was a key concern that affects people of all ages. At risk people such as children, pregnant women and older adults are at risk of dehydration. Some of the measures professionals put in place to make sure people get enough water are:

- ▶ Fluid tracker charts used by home care and care home service users and staff.
- ▶ Ongoing discussions about hydration levels at ante-natal appointments.
- ▶ Increasing children's access to water in children's settings.
- ▶ Providing bottled water to rough sleepers.

Professionals often see people and families unable to cool their homes. The people who are most affected are people who live in high rise flats or terraced housing with limited access to outdoor space.

Themes highlighted from the interviews and survey included:

- ▶ Rough sleepers in the city are more at risk to the effects of heat than people who may be rough sleeping in more rural areas, which are more likely to be wooded or shaded. It can also be difficult to manage the temperatures of temporary accommodation for rough sleepers due to the age of the properties and the resources available to cool down the spaces.
- ▶ Staying cool can increase costs. Professionals see people raising concerns about how much cooling costs are (for example, the cost of fans).
- ▶ Professionals working with people who have long-term conditions noticed that hot weather made these worse, increasing the need for support.
- ▶ Poor air quality caused by higher temperatures also affects people with respiratory conditions more severely.

“Simple messages are needed – ‘are you staying cool.’ I think it’s hard, we really need accessible information”.

Bushra,
Project Development
Worker



Training

Professionals were asked if they had accessed training to support people with heat related challenges



- 49% had some level of training
- 9% had extensive training
- 51% had no training

Those reporting no training were more likely to be in children and families' services or allied health professions (physios / occupational therapists). Whereas the large majority of those who have had training or guidance were from care settings.

The impact on staff delivering services

Many professionals found their working environment to be the hardest – whether this be the ability for their office / building's temperatures to be managed but also those delivering care in the community were particularly affected due to being exposed to the temperatures when moving from place to place.

“What might help? - Any recommendations for dealing with heat need to take specific medical conditions into account and be tailored to different audiences.”

Long Term conditions focus group participant.

Uniform policies should be managed during increased temperatures – given that uniforms may not be made of breathable materials. Many professionals found their working environment and dress code challenging during the heat, especially those delivering care in the community.

The impact on maintaining high levels of service delivery



24%

of professionals experienced an impact in service delivery due to increased demand as a result of increased temperatures.

Hayley, Beeston
Team Midwife



Unequal impacts of rising temperatures in Leeds

Everyone will be exposed to the impacts of climate change and increasing temperatures. However, not everyone is affected equally. Some people are more at risk because of their personal or social circumstances.

These factors can affect how well people can cope with, adjust to, and recover from extreme weather events like heat waves. People facing multiple challenges are at an even greater risk.

Climate vulnerability

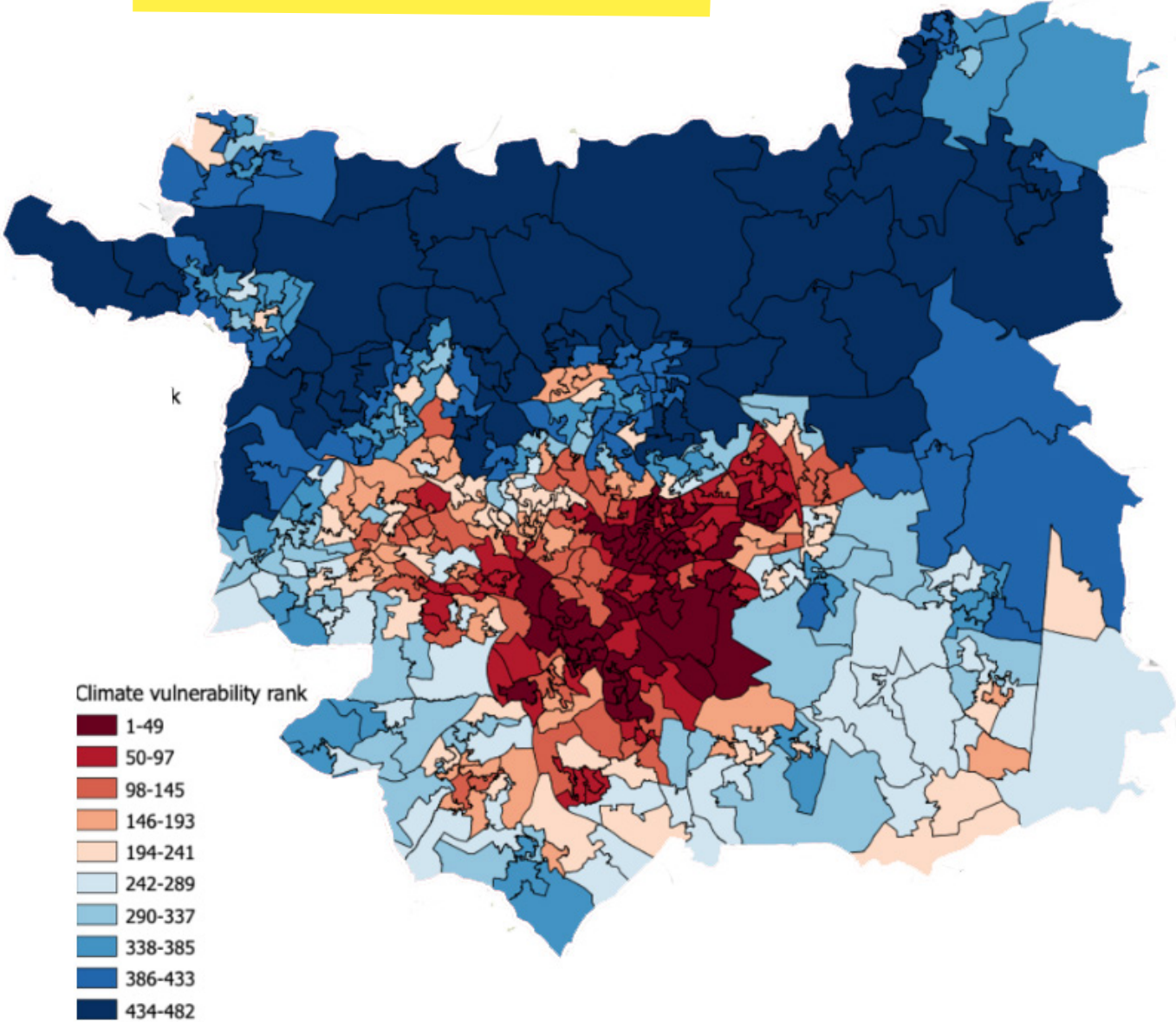
Dr Paola Sakai (from the Sustainability Research Institute of Leeds) has created a tool that helps decision-makers assess opportunities to reduce climate change vulnerability in Leeds. It gives a vulnerability rating for 482 Lower Super Output Areas (LSOAs) and 33 wards in the city. The tool is designed to guide communities and planners in making investments that reduce risks and improve community resilience.

The climate vulnerability index assesses Sensitivity, Capacities, and Exposure. These factors are combined to calculate a climate vulnerability score for each area. The findings show a clear pattern:

- Those most at risk (often in more deprived areas) have the greatest challenge of adapting to rising temperatures .
- In contrast, people in more affluent areas, which are better equipped to adapt, face lower risks.

The map shows that the inner-city areas are the most at risk. We know that many people in these areas are living in deprivation, with densely populated housing, and higher levels of long-term health conditions.

Climate Vulnerability Map of Leeds



Leeds is divided into 482 Lower Super Output Areas (LSOAs), these are nationally defined geographic areas unaffected by changes in political or organisational boundaries used to provide robust geographic statistics. [Typically an LSOA contain 400 to 1,200 households and a population of 1,000 to 3,000 people.] [Census 2021 geographies - Office for National Statistics](#)



Housing in Leeds

Leeds has a densely populated city centre. Between 2011 and 2021, the amount of people living in inner-city areas increased by over 2,000 people.

There are now more high-rise buildings to accommodate more students:



34,800 in 2022/23 compared to **27,200** in 2014/15.

Knowing what kind of housing people live in is important. People's built environments contribute to how resilient they are to the impacts of increasing temperatures and climate change.

“I live on a main road, a bus route, in a flat. I don’t have my own garden. I can’t have the door open when it’s hot, because my flat leads on to a car park.”

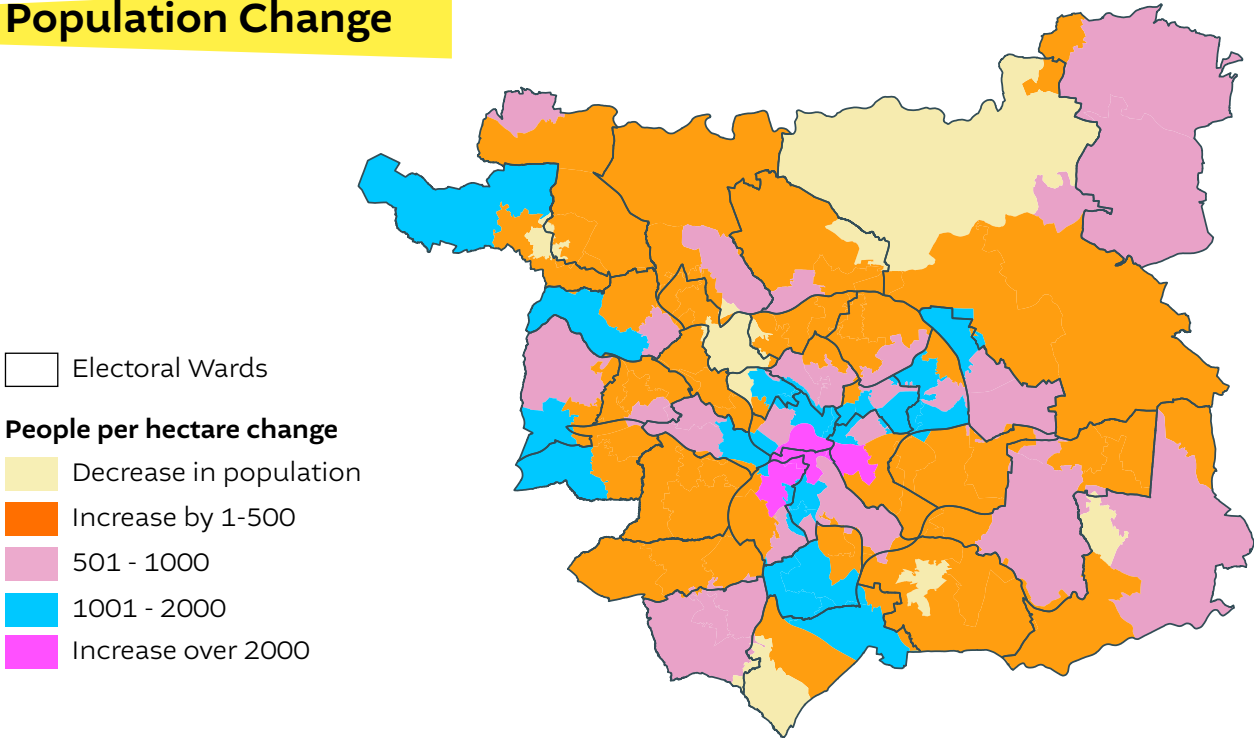
Carol, Armley



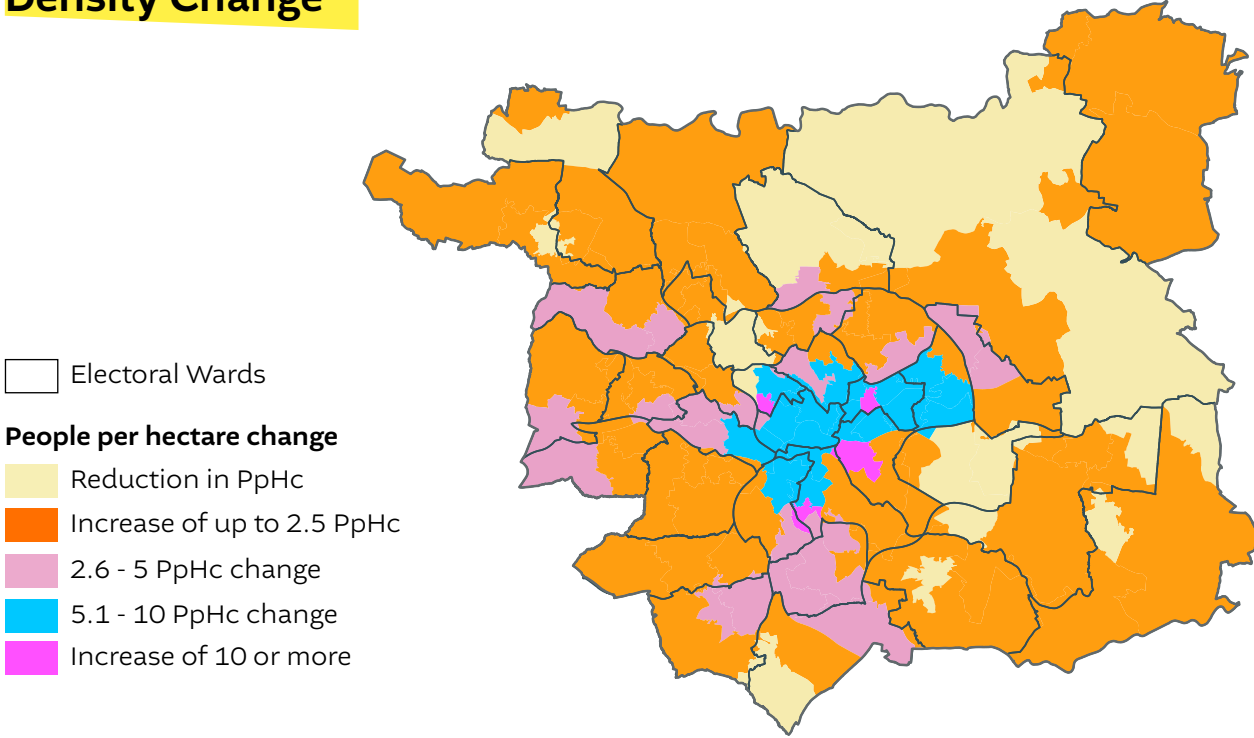
“We don’t have an air conditioning unit, but we would use a fan, but our circumstances are fairly good. [There is] two of us in the house and we’re pensioners, but we’re well able to cope with these things. [Hot weather] can slow you down a bit, we’ve got Roundhay Park on our doorstep. Yeah, it clearly will depend on living circumstances, won’t it? And I mean, we’re blessed in living at a street level, for example, in a regular house, bungalow, whatever, rather than in a high-rise block, that’ll make a difference.”

Ted, Roundhay

Population Change



Density Change



Some building types overheat more easily than others and may lack the facility for residents to cool down. Others struggle to retain heat during the wintertime. Some parts of Leeds have more houses of multiple occupancy (HMOs) than others. Hotter temperatures can be more difficult in this type of housing.

“If you’re in a shared house, and you’re in the attic room as an adult, then you’ve got nowhere to go. If it was a four-bed family house and your kids were really hot, you might put the kids in the living room for the night. But if you’re an adult in a shared house, you can’t escape.”

Andrea South, Housing Manager

The Housing Act 2004 requires councils to consider excessive heat in homes, especially for those over 65. Smaller houses with multiple occupants and attic flats are particularly at risk of overheating.

High-rise flats built in the 1960s are more likely to overheat. This is because they often have poor insulation and rely on natural ventilation (opening the windows).

“It (heat) makes you lethargic when you’re in your flats.”

Anonymous, Seacroft

Between **2019-2024**, Leeds City Council has overseen investment of **£110 million** to implement energy efficiency measures in **6,294** Leeds properties. This includes:



Installation of low carbon heating in **1,350** council owned flats in Lincoln Green.



Energy efficiency improvements to **143** Victorian back-to-back terraces in Holbeck.



Installation of thermal efficiency measures in **630** flats in high-rise blocks.

Like most large cities, a lot of houses in Leeds are older, especially in poorer neighbourhoods. In the most deprived areas in Leeds:

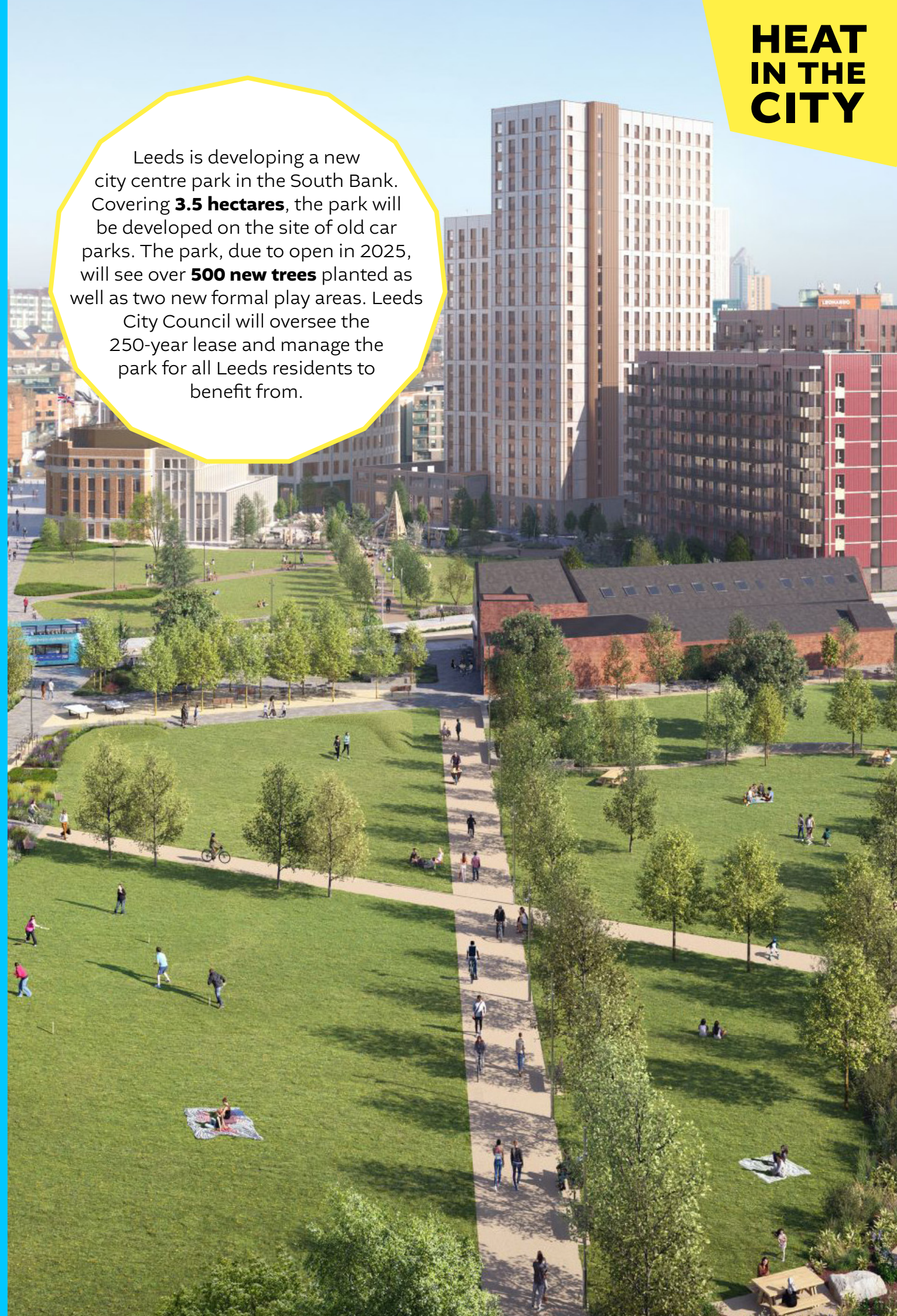
27% of people live in older housing (pre-1930)

24% compared with 24% for Leeds overall.

A lot of people in Leeds still live in **pre-1919 back-to-back houses**. According to the Health Foundation, older houses are less likely to be energy efficient and meet the decent homes standard.

Leeds is developing a new city centre park in the South Bank. Covering **3.5 hectares**, the park will be developed on the site of old car parks. The park, due to open in 2025, will see over **500 new trees** planted as well as two new formal play areas. Leeds City Council will oversee the 250-year lease and manage the park for all Leeds residents to benefit from.

Aire Park City Centre Development, Leeds. Picture courtesy of Aire Park by Vastint UK.



1. How people in Leeds live

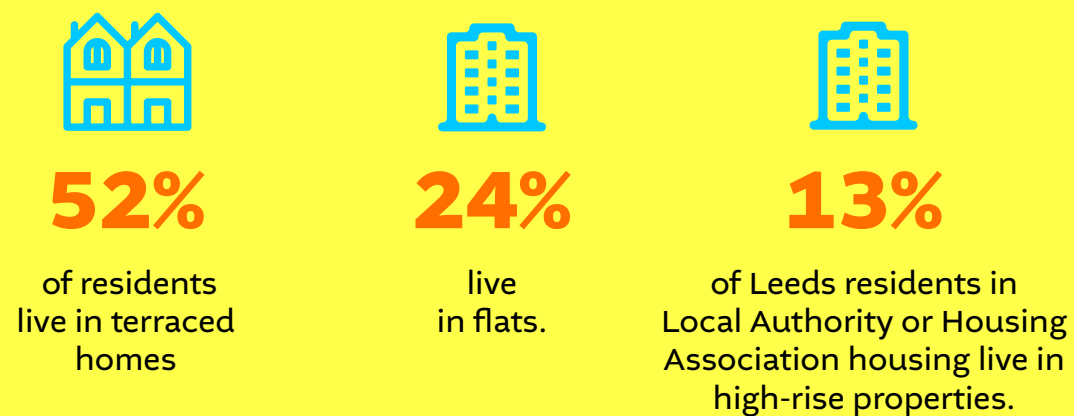
Across the whole of Leeds:



In Leeds most deprived wards this increases:



For those living in Local Authority or Housing Association Owned properties:



Leeds Town Hall, Leeds City Centre.

HEAT
IN THE
CITY

“There’s red hot sun in the summertime, and it’s depressing when you’re in your flat. On the other side of the building, it stays shady and cold — you don’t even know it’s summer.”

Anonymous

Most at-risk groups

The impact of increasing temperatures on health is a risk for everyone, however evidence shows that risks can increase dependent on certain factors.

If someone lives in an area of deprivation, they have an increased risk of experiencing heat related ill health. This risk increases further if they live in a densely populated, urban area or live with a long-term health condition. These layers of risk increase an individual's vulnerability to the harmful effects of heat on health.

Low income households

It may be difficult for people in low-income households to afford the necessary adaptations to:

- ▶ Cool their homes in the summer.
- ▶ Make their homes more energy efficient.

This makes them particularly at risk due to rising temperatures. Personal, environmental, and social factors also affect how people in Leeds cope with heatwaves. These factors influence whether they can follow advice. For example, age, health, or mobility issues might prevent some residents from

opening windows. They may need help from carers, neighbours, or trusted members of the community.

Personal vulnerability

Increasing temperatures are not just about hotter summers. Heat can be harmful to people with health conditions, pregnant women, older adults, and young children. Their bodies have a harder time staying cool in high temperatures. This can put extra strain on their health and lead to serious problems.

Older people

There are 128,600 people aged over 65 living in Leeds, and over 34,000 of them are aged 80 or older. 19% of people aged 50+ are living in the most deprived areas of the city. By 2044, the number of people aged 80 and over is expected to reach over 51,000.

Over half of people aged 50+ are living with 2 or more long-term conditions.

As people age, they may become more sensitive to warm weather. People in later life may struggle to regulate their body temperature during extreme heat.

“I have asthma and a heart condition. When it is hot I have to try and keep cool. I close the curtains and open the windows. I tend not to go out. I plan ahead and get shopping in advance.”

Leeds resident



61,956

people in Leeds are listed as vulnerable on the priority services register. (the number is dependent on people registering themselves on the scheme, the actual number is probably much higher).

In addition, other physical and social challenges may make it more difficult for people in later life to adapt to heat because of:

- ▶ Ill health.
- ▶ Low mobility.
- ▶ Social isolation.
- ▶ Living in energy-inefficient homes.

Some older people, such as those who are housebound, rely on caregivers or have illnesses like dementia, may be unable to adapt to changes in climate or extreme weather.

Housing also affects how people in later life manage changes in heat. Leeds has over 150 care homes and more than 3,500 people receiving home care services. Residents of care homes or multi-occupancy flats may be more at risk of the effects of heat.

Pregnant women

Pregnant women may be more sensitive to temperature changes and at higher risk of heat stress, as their bodies find it harder to regulate heat. Extreme heat has been linked to a higher risk of stillbirth, preterm birth, and other complications.



Judit - Parent

“I have to remind my son (toddler) to drink more water. He has less energy. I try to remind him to drink more, try to find a breeze, and go near trees for shelter.”

Young children and babies

Young children and babies are especially at risk of heat-related illnesses. Their bodies are still learning to regulate temperature. This makes them more likely to suffer from dehydration or heatstroke. They also rely on caregivers to help them stay safe and adapt to changes in temperature.

Feedback from professionals and residents highlighted the challenges in keeping babies and children cool during hot weather

“ Increase in stress and anxiety around safe sleep in the heat, overheating of babies and young children out and about”

Katie Coultas,
Family Help Worker

Rough Sleepers

In 2022 the number of people estimated to be sleeping rough on a single night was 3,069 in England, and 37 in Leeds. (Department for Levelling Up, Housing and Communities). People sleeping rough are more at risk from hot weather.

The ability for rough sleepers to adapt to increasing temperatures may be more difficult because of:

- ▶ Low financial and material resources.
- ▶ Reduced access to cool spaces.
- ▶ The ability to access cool and drinkable water.

“The increase in rough sleeper numbers will continue to be impacted by increasing temperatures.”

Paul Mitchell,
Operational Delivery Manager

Albion Place, Leeds. Picture courtesy of Bevan Healthcare.



Leeds has been issued a red warning for extreme heat

Daily Motion | 18 July 2022

2. How rising temperatures affect long-term health conditions

People with long-term health conditions such as:

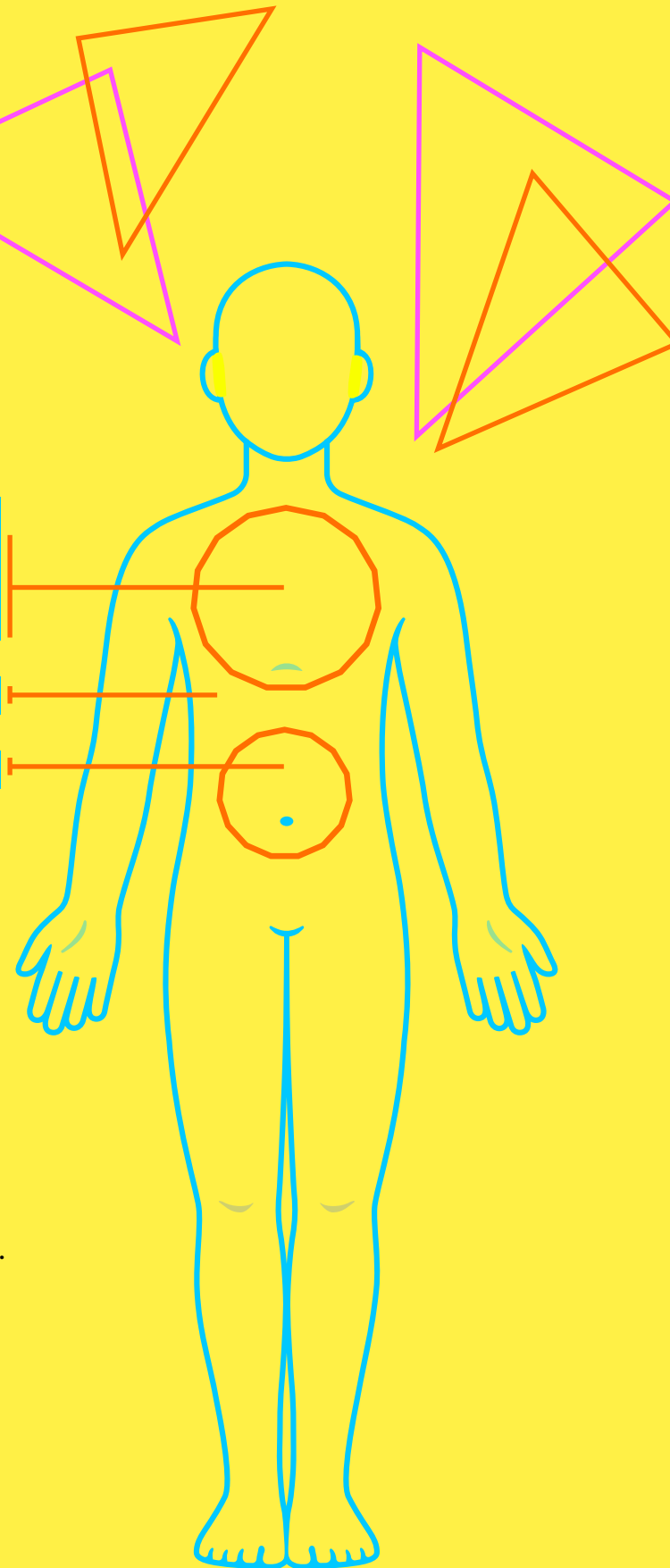
Chronic Obstructive Pulmonary Disease (COPD)
Cardiovascular Disease
Asthma
Diabetes
Kidney Disease

are often at greater risk of ill health in periods of hot weather.

Hot, humid weather can make breathing harder and put extra strain on the heart, circulatory system, and kidneys as they work to cool the body. People with diabetes may face complications like nerve damage, which can reduce sweating and make it harder to tolerate heat. Some medications for long-term health conditions can also affect the body's ability to stay cool in hot weather.

“My blood pressure is high anyway, so when it's hot I feel quite unwell.”

Anonymous,
Seacroft



2/5

people on a Leeds GP register in 2021 had at least one long-term condition.

Long-term conditions and health inequalities

Data shows that people living in the most deprived areas of Leeds are more likely to:

- ▶ Have multiple long-term health conditions.
- ▶ Develop a long-term health condition 10 years earlier than residents living in the least deprived areas.
- ▶ Have a 10% higher mortality rate than the city average (for people aged 75 and under).

This means that the effects of progressive warming on people with long-term conditions may unfairly affect the poorest and most at risk communities.

“With me having COPD, I do get more breathless in the hot weather. I can't walk as far; I don't want to go outside. I do like the warm weather, but I don't want to be as active. I don't want to be bothered as much. Cold and hot weather both have an impact on my COPD, but hot weather has more of an impact. I'm a keen gardener but I don't go out until after 6pm when it's hot.”

Carol - focus group participant

Kirkstall Abbey Grounds.



Heat impact on
hospital admissions
and mortality

Top five diagnoses contributing to change in the number of
hospital admissions affected by temperature



8,000

National data shows that warmer weather may lead to 8,000 more hospital admissions per year.

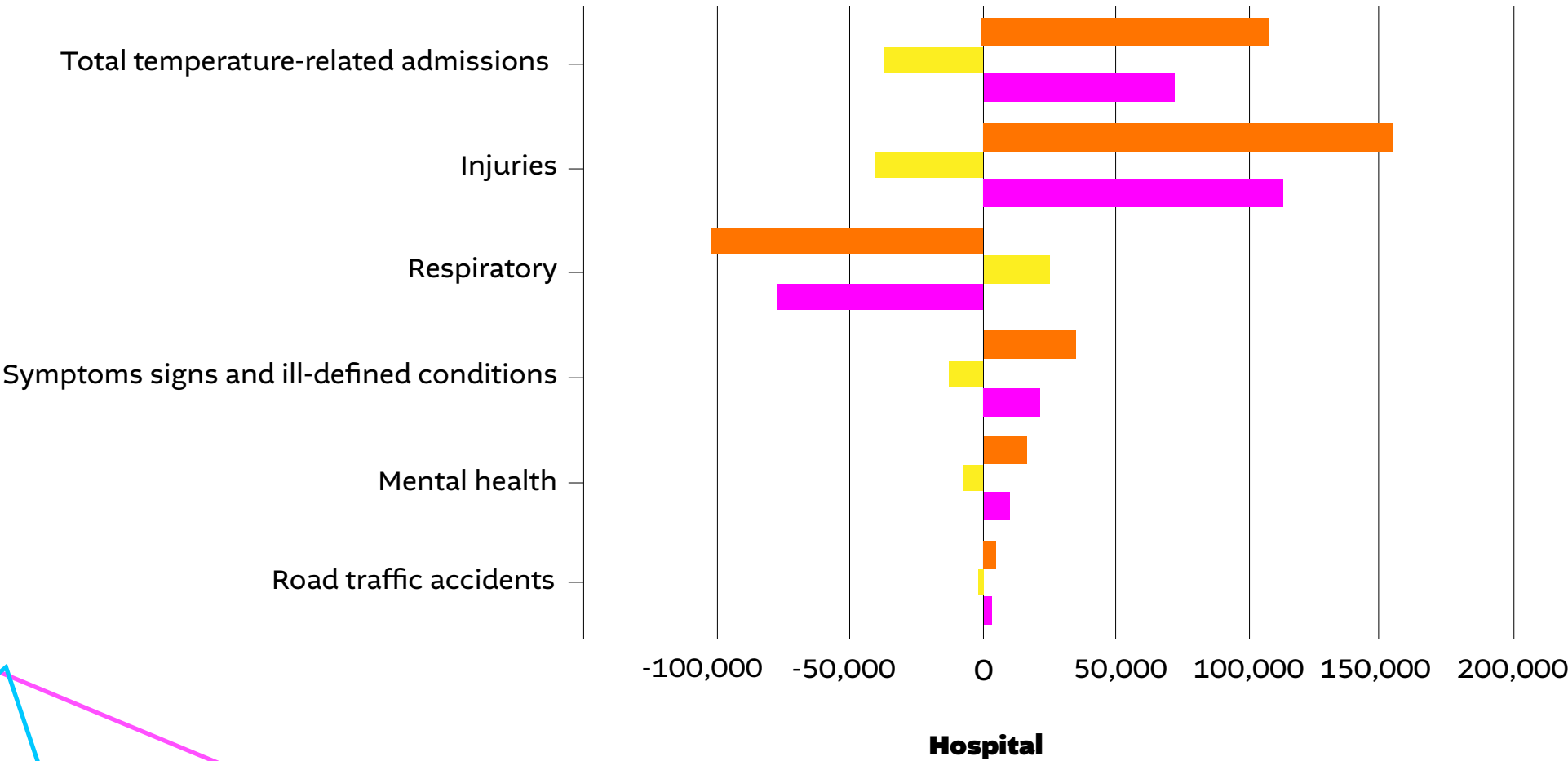


Data gathered during previous heatwaves in England show an increased demand on GPs and emergency departments for heat related illness. GP demand was highest for children aged 4-14 and people aged 75 and over. Data from the heatwave of July 2022 indicates a large increase in reported symptoms of heat stroke and heat exhaustion.

Direct harm from extreme heat is still less common, but this is likely to change over time. As average temperatures increase, we can expect more heatwaves and extreme weather events. This is likely to cause greater harm to people's health.

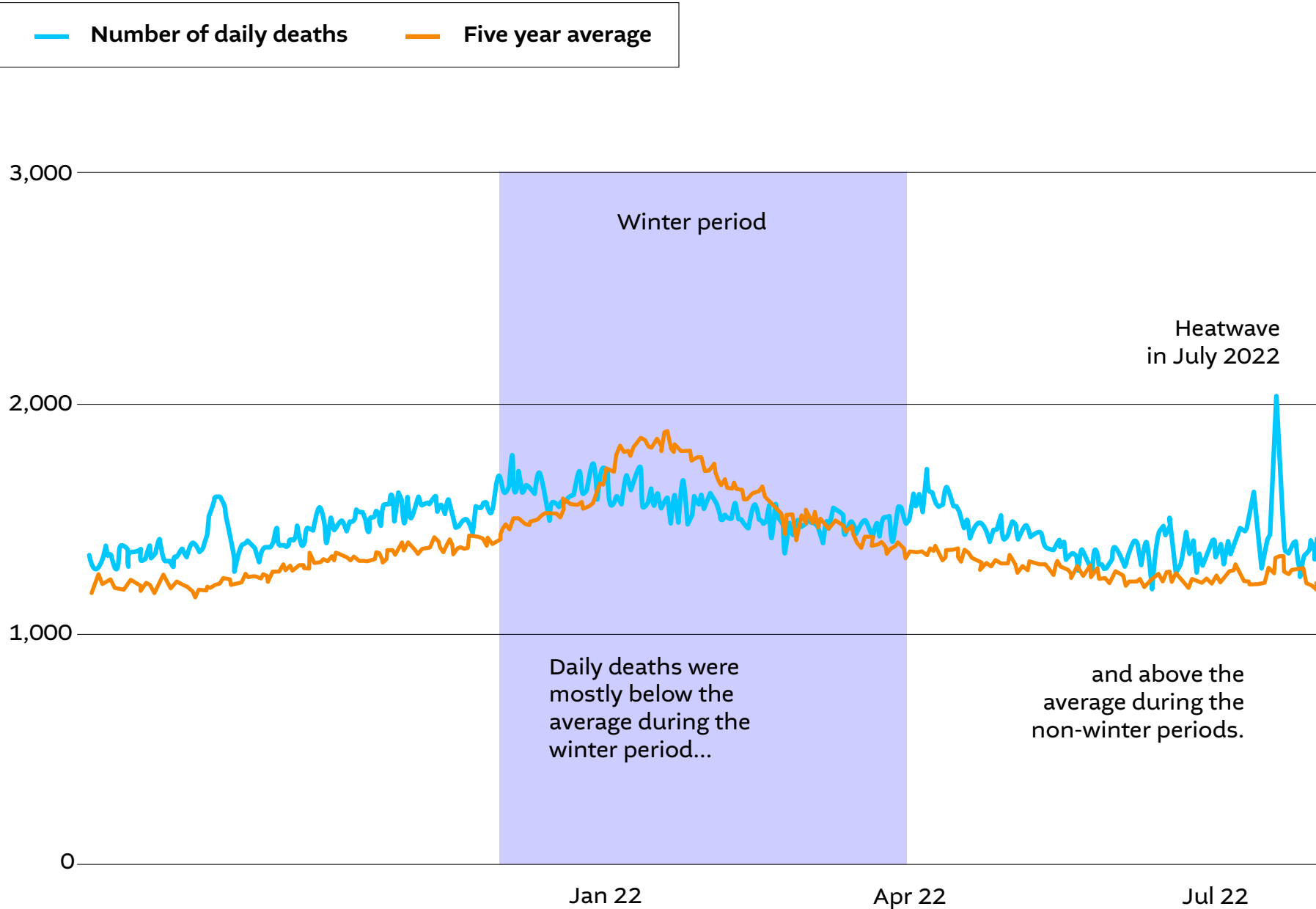


England 2010 to 2018



Source: Office for National Statistics – Daily admissions and first episodes in hospital episode data

Number of daily deaths and five-year average daily deaths, England, occurring between August 2021 to July 2022



Source: Office for National Statistics

People are more likely to be admitted to hospital for heat-related conditions than cold-related ones. The data also shows more injury-related cases and mental health admissions on warm days. However, it only includes hospital admissions, not visits to A&E, walk-in services, or GPs.



In 2021/22

The highest number of daily deaths were recorded during the summer - reversing historical trends. This peaked on 19th July alongside a Met Office 'Red Extreme' weather warning and a UKHSA Level 4 heat health alert.



2,985

UKHSA estimated number of excess deaths in 2021/22 associated with extreme heat. This is projected to increase due to climate change and ageing population.

3. Emerging risks: Infections and air quality

Mosquitoes and Ticks

Rising temperatures don't only make existing problems worse. They could create new ones.

As global temperatures rise, so does the threat of diseases spread by mosquitoes and ticks. Warmer conditions speed up insect life cycles, increase their populations, and help them thrive. Climate change is clearly linked to the spread of diseases they carry. As these insects expand their range, the risk of vector-borne diseases like Lyme disease, malaria, dengue fever, and West Nile virus grows.

A growing threat

This also means mosquitoes and ticks can now breed and survive in regions where they couldn't before. This introduces diseases to populations that may have little or no immunity. In the UK, for instance, climate models predict that warmer

temperatures could soon attract non-native mosquito species capable of spreading diseases like dengue, chikungunya, and Zika.



A BBC headline recently sounded the alarm: “Mosquitoes Could Bring Exotic Diseases to the UK”

Addressing the rise of vector-borne diseases needs a combined effort. Research, monitoring, prevention, and community engagement must work together to safeguard public health. The battle against mosquitoes, ticks, and the diseases they carry highlights the deep and widespread effects of climate change.

Rising aeroallergens

Pollen seasons are starting earlier and becoming longer and more intense, because of warmer temperatures. This means that people with seasonal allergies suffer all year long and more people develop new allergies.

The UK is already experiencing earlier allergy seasons and longer fungal spore seasons, worsening hay fever for many. Climate change is also shifting the spread of allergenic plants. Invasive species like common ragweed, which can produce a billion pollen grains per season and trigger severe allergic reactions, are a growing concern.



The increase in aeroallergens presents a significant public health challenge.

Key factors include:

- ▶ Longer allergy seasons and stronger allergens.
- ▶ The spread of allergenic plants, which could lead to more people experiencing allergies.

More research is needed to:

- ▶ Understand how climate change affects allergen levels and distribution.
- ▶ Develop strategies to adapt to these changes effectively.

Thunderstorm asthma

Over the summer months, warm and humid weather can result in relatively high pollen levels. Thunderstorms can lead to more of this pollen being carried on strong winds. This is thought to be the reason why more pollen is in the atmosphere during a thunderstorm.

Thunderstorms have been linked to an increase in people experiencing asthma symptoms and seeking medical attention for breathing problems, a phenomenon known as “thunderstorm asthma.” Data from the UK Health Security Agency (UKHSA) shows that thunderstorms have coincided with spikes in hospital admissions for asthma across the country.

“Because of the heat there is deterioration in air quality or increased air pollution. Possibly more allergens and things. People are more symptomatic. For someone who’s struggling to breathe, that stifling feeling with the heat can be really very, very distressing”.

Jane Slough,
Respiratory Nurse



Tower Works, Globe Road, Leeds.

How is Leeds beating the heat?

We're supporting communities to stay cool and well in a warming world.

As climate change fuels rising temperatures and increases the frequency of heatwaves, mitigating the risks of extreme heat has become a shared responsibility. From personal precautions to nationwide policies, tackling this requires individual and collective action.

Extreme heat isn't just uncomfortable, —it's dangerous. Protecting ourselves starts with simple steps, like staying hydrated, seeking shade, and checking on at risk neighbours. But individual actions alone won't cool the planet.

In short, to manage heat and become more resilient to it, we need to make some changes together, as a society.

There is already a nationwide system designed to help the UK respond to heat. It is called The Adverse Weather and Health Plan (AWHP), and it recommends ways to prevent illness and death during extreme heat.

The Public Health Weather Health Impact Group ensure that recommendations within the AWHP are delivered through:

- ▶ Bulletins to frontline services and care services.
- ▶ Children's centres' posters.
- ▶ Resources on beating the heat and tips for staying well.



Alwoodley, Leeds. Picture courtesy of Michael Harvey.

Support for at risk populations

Hot weather packs
Hot weather packs aimed at older vulnerable people have been produced by the Leeds City Council Public Health to be distributed by home care providers. The packs include resources and information for keeping cool and well during hotter weather.

Webinars on the impact of heat on health and wellbeing.
In spring 2024, Leeds City Council teams from Adults and Health, Public Health team, and Emergency Planning hosted two webinars for care homes and homecare providers. These sessions focused on the impact of heat on the health and well-being of service users and care staff. The workshops aimed to encourage early planning and provide practical tips to minimise the effects of extreme heat. Feedback from a professional survey showed the sessions were highly valued, with attendees reporting they felt “very well prepared” to manage heat-related health risks in their services.

Reminders to stay safe
During the summer, the Public Health children and families team sends reminders to practitioners and professionals working with families about staying safe in hot weather.

These include tips like wearing hats and using sunscreen, especially for those supporting at risk groups such as babies and young children. However, it can be challenging to ensure families provide the necessary equipment due to financial constraints.

Cool Spaces Toolkit
Voluntary Action Leeds, on behalf of Leeds City Council, created a Cool Spaces Toolkit to help organisations support people during hot weather. The toolkit offered practical tips on staying cool and ensuring venues were accessible for at risk groups.

“We talk to families about sun cream. Sun cream is expensive. We can't provide sun cream due to funding and allergies.”

Uzma,
Children's Centre worker



Urban Green Spaces

In November 2023, Leeds City Council was recognised by the Carbon Disclosure Project (CDP) as one of 119 global cities leading climate action. Leeds secured a spot on the CDP’s prestigious ‘A List’ for the second year running.

Leeds is enhancing biodiversity through the Biodiversity Net Gain (BNG) regulation. This requires new developments to create or improve natural habitats with long-term maintenance. If on-site improvements are not feasible, developers must fund off-site projects. This means that Leeds can improve public green spaces with external resources.

In 2024, developer-funded BNG projects will enhance green spaces in Armley, Gipton, Harehills, Roundhay, and Seacroft. There will be a focus on grassland and woodland habitats and providing public information on the initiatives.


Housing

Leeds City Council’s Housing service incorporates maintenance and management of the council’s:

- ▶ Social housing stock.
- ▶ Health and Housing.
- ▶ Homelessness prevention service.
- ▶ Private rented sector housing.

Housing Leeds is on track to invest over £100 million between 2020 and 2025 on energy efficiency improvements, including:

- ▶ Insulation.
- ▶ Green energy heating.
- ▶ Low carbon initiatives.



£54m

A bid has been submitted to fund £54 million energy efficiency improvements in over 4,000 homes.

While these programmes aim to reduce energy consumption for heating, they also improve cooling during hot weather. Ventilation upgrades are included in all improvements.

Housing Leeds supports people at risk during severe weather, including heatwaves. They provide increased accommodation and outreach services.

Crown Point Bridge, Leeds.



**HEAT
IN THE
CITY**



Harold Grove, Hyde Park, Leeds.

Picture courtesy of [Chemical Engineer](#)



**Temperatures are set to
climb to 27°C on Tuesday.**

Daily Motion | 18 July 2022

Beeston, Leeds

Planning

The UK planning system is all about making sure that land is used in a way that benefits public health and well-being. The Leeds Local Plan is a great example of this!

Here are some ways the plan helps create a healthier Leeds:

- ▶ Encourages sustainable development by focusing on urban areas and brownfield sites close to existing infrastructure, reducing the need for cars and improving air quality.
- ▶ Promotes active travel like walking and cycling.
- ▶ Makes sure there are accessible green spaces where people can exercise and socialise.
- ▶ Sets standards for how much space people need in their homes for a good quality of life.
- ▶ Requires buildings to be energy efficient so they are cheaper to heat and better for the environment.

Collaboration between planners, designers, and public health professionals is key to making sure that new developments are healthy and sustainable.

Developers are required to consider 'overheating' in national planning policy, but they often use average city temperature data that doesn't reflect the higher temperatures in city centres caused by the urban heat island effect. Current policies also give developers flexibility, allowing them to meet only the minimum standards for addressing rising temperatures and overheating.

Policymakers should ensure developers use temperature data that accurately reflects the specific areas they are working in. Leeds Beckett University and the Priestley International Centre for Climate at the University of Leeds are creating detailed heat maps of the city, which could be used more effectively to guide planning decisions.

To ensure sustainable and comfortable living for future residents, overheating should be addressed early in the planning process. Planners should consider a range of interventions to cool buildings which should not solely rely on mechanical cooling methods such as air conditioning. This can help avoid situations where people must choose between cooling their homes with open windows at night and being disturbed by noise.



Health, Housing and Fuel Poverty insight tool

The Localities and Primary Care Team within the Public Health Directorate have mapped long term health condition data alongside fuel poverty and housing stock data. This has enabled them to identify where health issues are most likely to be made worse by fuel poverty and inform the targeting of energy efficiency schemes and funding. Making houses more thermally efficient will benefit people in both cold and hot weather.

Fairer, Healthier Leeds (Marmot City)

Fairer, Healthier Leeds (Marmot City) is a citywide programme which aims to reduce health inequalities by bringing key partners together to work together on tackling and reducing health inequalities. [The Fairer, Healthier Leeds: Reducing Health Inequalities - IHE report](#) sets out 15 recommendations which focus on embedding health equity across the system. Currently the Marmot City programme is influencing a multi-million-pound regeneration project in a deprived area of Leeds to ensure that improvements to local housing stock and green spaces are considered both of which are likely to have an impact on heat.

Community Climate Grants

The West Yorkshire Combined Authority (WYCA) has also awarded £596,000 in Community Climate Grants to 23 third-sector projects in Leeds.

Key initiatives include:

- ▶ Creating a wetland in Gledhow Valley Woods.
- ▶ Community gardening for asylum seekers in Lincoln Green.
- ▶ Revitalising Killingbeck Community Orchard.
- ▶ Installing solar panels in Otley.
- ▶ Improving energy efficiency at St Gemma's Hospice.

Latch: Transforming empty properties into homes

Latch transforms long-term empty properties into high-quality homes for homeless individuals while offering unemployed people opportunities to gain valuable skills through property refurbishment projects. Their approach addresses housing and fuel poverty while improving resilience to heatwaves and urban heating. By installing insulation, ventilation, and upgraded windows and doors, Latch enhances the thermal comfort of older properties, reducing the need for mechanical cooling systems during extreme heat.

Climate Action Leeds

Climate Action Leeds is a five-year program funded by the National Lottery to support climate action in diverse neighbourhoods. The program has supported the development of eight climate action groups in different neighbourhoods across Leeds. These groups have initiated various activities,

including community gardens, seed libraries, and repair cafes, resulting in direct improvements to the local environment and climate.

Climate Action Leeds also established a central climate action hub called "Imagine Leeds". This hub serves as a space for collaboration and planning on climate and nature issues in the city.

"Climate Action Leeds shows how communities across the city can take positive action on climate change that can respond to real concerns and make real change to people's everyday lives here and now"

Paul Chatterton:

Climate Action Leeds and Professor of Urban Futures, University of Leeds


www.climateactionleeds.org.uk



Keeping watch on
Vector Borne Diseases

To stay ahead of the threat of Vector Borne Diseases, it's important to keep track of vector populations. Public health agencies like the UK Health Security Agency (UKHSA) are on high alert. They have set traps to catch invasive species like Asian tiger mosquitoes (a tropical pest now common in southern France) at motorway service stations, wetlands, and airports. Although no invasive mosquitoes have been detected in the UK so far, experts warn that rising temperatures could make the country increasingly vulnerable.

Leeds City Council (LCC) pest control is part of the UKHSA national surveillance programme, monitoring the spread of non-native mosquitos. There are:

- 

5

monitoring pots and polystyrene blocks at Leeds/Bradford Airport.

6

monitoring pots at Skelton Lake Services, Cross Green.

The pots are checked every 3 weeks and water samples are taken from each pot and blocked to check for mosquito eggs. LCC pest control posts the samples to UKHSA for analysis.

The UKHSA's Medical Entomology and Zoonoses Ecology (MEZE) team has taken a proactive approach to tracking tick populations.

This research helps monitor trends, identify invasive species, and detect dangerous pathogens.

Raising awareness

On top of monitoring ticks and mosquitoes, it is important that people know how to protect themselves. This will be crucial as temperatures rise and the risk of diseases from insects grows with them.

Some simple but effective ways to reduce risk are:



Wearing protective clothing.



Using insect repellent.



Conducting regular tick checks

Leeds' Plan for a
Zero-Carbon future

Leeds aims to be the UK's first net-zero city by 2030. To achieve this, the city is working to cut emissions, protect nature, and promote sustainable living.

Leeds has set aside £100 million to make homes more energy-efficient, directly helping thousands of residents while supporting health and wellbeing.

Leeds is also preparing for climate challenges like heatwaves, floods, and droughts. The city's plan focuses on clean energy, eco-friendly transport, healthier food choices, and more green spaces, making Leeds stronger and improving life for its residents.



£100m

Leeds has set aside £100 million to make homes more energy-efficient, directly helping thousands of residents.

HEAT
IN THE
CITY

Bridgewater Place, Water Lane, Leeds.

Important
findings from
the report

Rising temperatures in Leeds

Leeds has experienced significant increases in temperature, with the hottest years on record occurring since 2002. The number of summer and hot summer days has also risen.

National data suggests on days when temperatures reach and exceed 25°C the risk of hospital admissions especially for at risk groups can increase as well as a recorded increase in deaths during heatwaves.

The ‘Urban Heat Island Effect’ is common in densely populated, built-up urban areas. Urban building materials such as concrete and asphalt retain heat better than natural surfaces, so urban areas can be up to 8°C hotter than rural areas. This is because heat becomes trapped amongst a lot of concrete and there is less natural cooling via wind circulation.

Unequal impacts of Heat

The report highlights that at risk groups, such as older adults, people with long term health conditions, young children, and those living in deprived communities, are disproportionately at risk from the impacts of rising temperatures.

People in low-income households often face additional challenges, such



The report highlights the unequal impact of rising temperatures, with certain groups facing greater risks.

as an increased likelihood of having a long-term health condition and/or disability.

Personal, environmental, and social factors also affect how resilient people in Leeds are during heatwaves.

Housing vulnerability

Housing conditions contribute significantly to the risks people face in extreme heat. Some building types overheat more easily than others and may lack the facility for residents to cool down. Others struggle to retain heat during the wintertime. Hotter temperatures can be more difficult in this type of housing.

Residents of these homes, especially in deprived areas, often have less access to green spaces and cooling facilities which increases their risk of ill health.

Emerging risks

The report outlines other emerging risks associated with climate change including the spread of vector-borne diseases from mosquitoes and ticks and worsening allergies due to longer and more intense pollen seasons.

Millennium Square, Leeds. Picture courtesy of Graham Fotherby.



Recommendations

To address the health impact of rising temperatures, the recommendations of this report require a holistic approach, integrating public health, housing, city development, and community engagement:

- 1. Leeds City Council, Leeds Health and Care Partnership, anchor organisations and third sector to work collaboratively to promote and implement the advice and actions in the UK Health Security Agency Adverse Weather & Health Plan.
- 2. Leeds City Council, Leeds Health and Care Partnership, anchor organisations and third sector partners to work collaboratively to further improve access to cool spaces across the city by:
 - ▶ Building on and promoting Leeds cool spaces guidance with partners.
 - ▶ Ensuring there is a fair spread of cool spaces according to need across the city including community venues and seating in shaded areas.
 - ▶ Increasing public awareness of cool spaces.

- 3. Leeds City Council, Leeds Health and Care Partnership, and third sector partners to work together to review and increase opportunities for community engagement around the health impacts of increasing heat through the development of a city-wide action plan.
- 4. Academic partners to support citywide work to strengthen local research, evidence and evaluation in relation to urban-heat mapping and climate vulnerability tools.
- 5. Leeds City Council will ensure that heat and health is considered in planning, particularly within densely populated inner city areas by ensuring:
 - ▶ That planning applications are informed by ward specific heat data.
 - ▶ Health impact of heat is included in health needs assessments.
 - ▶ Continued development of design guidelines for green spaces that are adaptable to the changing climate.

- 6. West Yorkshire Combined Authority and Leeds City Council will continue to work together to:
 - ▶ Identify opportunities for funding and investment in energy efficiency measures within Leeds housing stock.
 - ▶ Lobby for improvement in national policy around rental housing to ensure landlords are responsible for making improvements that protect against heat as well as cold.
- 7. Leeds City Council, Leeds Health and Care Partnership, anchor organisations, third sector and local businesses to work collaboratively to consider increased risk of vector borne diseases and heat for outdoor workers/workers at risk.

- 8. Health and Wellbeing Board to continue to address health inequalities via the Fairer, Healthier Leeds (Marmot City) and other health inequalities work.
- 9. Leeds City Council, Leeds Health and Care Partnership, anchor organisations, and third sector partners to develop skills and knowledge amongst frontline workforce in protecting people at increased risk from the adverse health impacts of heat.

Roundhay Park, Leeds.

Water Lane Boathouse, Leeds. Picture courtesy of Elouisa Georgiou.

Conclusions

The changing climate in Leeds is not just about hotter summers: increased temperatures harm the most at risk amongst us. Older adults, young children, people with long term health conditions, and those living in the most deprived areas are all at increased risk. The situation is particularly dangerous in densely populated urban areas that trap heat, with limited access to cool spaces.

This report is a reminder that we all need to find ways to do something about the heat: as individuals and as a society.

The City of Leeds will continue to work hard to help residents cope with the heat and empower them to be part of the solution. Our goal is to help Leeds become resilient and support the most at risk who feel the heat the most.

The choices we make today will shape the health and well-being of generations to come. Let's work together to create a Leeds that is not just resilient to climate change but thrives in the face of it.

Update on
recommendations
from 2023

1. **Leeds City Council, Leeds Health and Care Partnership, Anchor Organisations, third sector and local businesses to work collaboratively to further develop Leeds as an Age Friendly City. This should include actively engaging with Age Friendly Leeds (through Age Friendly Board and Partnership, Action Plan and becoming Age Friendly Businesses/Organisations) and embedding ageing well into all policies and services.**

[The Age Friendly Leeds Strategy 2025-2030 review](#) was informed by findings in the DPH Annual Report, alongside identified strengths and opportunities to embed ageing well into all policies and services. We have more [than 240 Age Friendly organisations](#) and [400 individual Age Friendly Ambassadors](#) across a range of sectors/organisations.

Work has also strengthened Ageing Well and Age Friendly in services and projects funded by Public Health and through Age Friendly Leeds Board consultation for several citywide policies. This has helped to acknowledge the contribution of existing services, projects and policies to ageing well.



2. **Leeds City Council to review and further develop ways for citizens to keep active and stay healthy (primary prevention) throughout their later lives, with a particular focus on supporting people to age well in more deprived areas (i.e. IMD* 1 and 2) and ethnically diverse communities.**

Our work has raised awareness that people in later life want to age well and independently, including:

- ▶ Embedding ageing well in the Leeds Drug & Alcohol strategy and plan.
- ▶ Developing an Active Ageing plan to promote a coordinated and diverse offer and reduce barriers to moving more.
- ▶ Public Health funded work including the [Food Insecurity and Older People report](#) and [Creative Healthy Ageing grant](#).
- ▶ Securing funding for 2025-26 [Falls Strength & Balance programme](#).
- ▶ Tailored Motivational Interviewing training around quality conversations for [NHS Health Checks](#), focusing on healthy ageing and healthy living.
- ▶ Developing a smoking cessation campaign targeting people aged 40+.
- ▶ Developing an Ageing Well data dashboard, locality health needs assessments and further understanding inclusion groups' needs to support future targeting/monitoring.

3. **Leeds City Council, Leeds Health and Care Partnership, third sector partners and Leeds Age Friendly Board to work together to review and increase opportunities for people to be socially connected and ensure reducing social isolation in later life is central to all policies and services.**

The [Age Friendly Leeds Strategy](#) review includes a theme around embedding social connections into all policies and services. Work has taken place to strengthen social connections in:

- ▶ The new Community Health & Wellbeing Service (formerly Home Care).
- ▶ Proposals to reduce falls in two [Local Care Partnerships](#) by addressing social isolation, building confidence, and connecting to wider community activity.
- ▶ Developing and embedding Age Friendly principles into healthy places work to ensure the built environment enables people in later life to be connected.
- ▶ Preparatory work to inform the refresh of the [Mental Health Strategy](#).

4. **Leeds NHS organisations to increase early identification and management of risk factors and long-term conditions to reduce preventable poor health in later life (secondary prevention). This should take a targeted approach working with communities with historically reduced access to and low uptake of prevention services, screening and vaccination.**

Data reviewed for the Healthy Leeds Plan 2023-28 goal 2 identified conditions with the highest impact on quality and length of life. Mental health and hypertension were agreed as a priority with key areas for transformation, scaling up and focussed work within target populations (e.g. males, 45-60, deprivation, ethnically diverse).

Proposals developed for targeted work in two Local Care Partnerships using data to identify, target and support people at risk of falling.

Continued work with the University of Leeds to establish an innovation hub for managing complex multiple long-term conditions supported by a cross-sector networked team.

Other workstreams include:

- ▶ Cancer Prevention, Awareness and Screening Steering Group identifying gaps and opportunities to prevent cancer in later life.
- ▶ NHS Health Checks pilot in community settings to increase uptake.
- ▶ Diabetes Strategy review with key priorities and actions focussed on prevention, early identification and management.
- ▶ Equity audit of access to Long Term Conditions Reviews and reviewing training to enable better conversations.
- ▶ Targeted funding to support access to, and raise awareness of, vaccines for older people within [13 Neighbourhood Networks](#).

**Update on
recommendations
from 2023**

5. **Leeds City Council and Leeds NHS organisations to ensure the voices of people in later life are central to all ageing well work, taking into account insight developed through this report, State of Ageing in Leeds and people’s voices from voluntary and community sector organisations.**

Insight from the report was key to the [Age Friendly Leeds Strategy review](#), specifically ‘what matters’ and ‘engagement and co-production’ as a crosscutting theme. There is lots going on because of the strength of our voluntary and community sector partners, including:

- ▶ The [Age Friendly Steering Group](#) are key members of the Age Friendly Board.
- ▶ [Leeds Older People’s Hub](#) ensures that older people’s voices are heard and facilitates #TeamLeeds to meet older people, discuss consultations, service changes, and co-production of initiatives.
- ▶ Plans to gather further insights around barriers in transport e.g. active travel and concessionary pass uptake.

6. **All partners, individuals and communities to challenge negative stereotypes relating to ageing, including loss of value, discrimination and ageism.**

There have been many opportunities to challenge negative

stereotypes, including:

- ▶ Scoping for a Leeds based [‘Age Friendly image library’](#).
- ▶ 150 people trained in [Wise Up to Ageism](#) since July 2024.
- ▶ Age Friendly communications focused on a range of topics using insights from the report.
- ▶ Events celebrating ageing such as [International Day of Older People \(IDOP\)](#) and [Ageing Without Limits](#), building on successes and learning from 2023 and 2024.
- ▶ Strengthening intergenerational work with Child Friendly Leeds.

7. **Anchor institutions, businesses and employment and skills organisations to review and further develop positive practices to support more people in later life to age well in work.**

Employment and skills included in the [Age Friendly Leeds Strategy](#) review. Some examples of actions include:

- ▶ Work with the [Leeds Anchors](#) on the commitment to sign up to the [Age Friendly Employer pledge](#).
- ▶ [Leeds Health and Care One Workforce Strategy](#) plans to improve workforce health, wellbeing and health equity.
- ▶ Scoping a 50+ employment fair.
- ▶ Promoting awareness of the [Age Friendly Employer pledge](#), linking with other inclusive / healthy workplace initiatives.

8. **West Yorkshire Combined Authority and Leeds City Council to work together to increase accessible and safe travel for people in later life to support independence and healthy ageing.**

[West Yorkshire Combined Authority](#) and Leeds City Council Transport Officers sit on the Age Friendly Leeds Board and have been involved in the [Age Friendly Leeds Strategy](#) review, which includes actions around:

- ▶ Reviewing strengths and opportunities for embedding age friendly principles into Leeds and West Yorkshire policies / plans e.g. Mass Transit and bus service reforms.
- ▶ Working with Cycle North to deliver bike training to adults and bike libraries.
- ▶ Delivering the Department for Transport funded project of social prescribing of walking, cycling and wheeling.
- ▶ Developing actions to address barriers identified through insight gathered on active travel and concessionary pass uptake.



9. **Academic partners to support citywide work to strengthen local research, evidence and evaluation in relation to ageing well, with a focus on local implementation and delivery.**

Several actions have taken place, including:

- ▶ Showcasing the report at a Leeds universities [Reimagine Ageing Network](#) event.
- ▶ Three PhD students looking at green spaces, physical activity, and later life.
- ▶ Developing work around indoor temperatures and links to falls risk.
- ▶ [LOPF](#) is working to develop its research capacity, to become a broker between older people, communities and academia, to involve more older people in research.
- ▶ Research to understand how [Neighbourhood Networks](#) tackle loneliness and social isolation.
- ▶ The [Older People - ARC](#) and exploration of healthy ageing priorities for research.
- ▶ Strong working relationships built in the area of multi-morbidity research.
- ▶ Collaboration between experts on a [centre of excellence for social care research](#), including [focussed work between care home and academia](#).

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- ▶ Wortley Recreation Ground, Meadow Lane Park
- ▶ Barncroft Grange Highrise, Seacroft
- ▶ LS14 Trust (Community Café), Seacroft
- ▶ Richmond Hill Children’s Centre, Burmantofts & Richmond Hill
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- ▶ LCC Public Health (Ageing Well Team)
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- ▶ Leeds Climate Action
- ▶ Leeds University
- ▶ UK Met Office
- ▶ UK Health Security Agency (UKHSA)
- ▶ University of Leeds
- ▶ Leeds Beckett University

References and further reading

[Adverse Weather and Health Plan | Local Government Association](#)

[Climate and Health - Faculty of Public Health](#)

[Climate change Leeds Plan Climate change](#)

[Climate change: health effects in the UK - GOV.UK](#)

[Climate Action Leeds](#)

[Evidence & Causes of Climate Change | Royal Society](#)

[Health Effects of Climate Change \(HECC\) in the UK State of the evidence 2023](#)

[Health in a changing climate – UK Health Security Agency](#)

[How we protect the UK from vector-borne diseases – UK Health Security Agency](#)

[LGA responds to UKHSA climate change warnings | Local Government Assoc](#)

[The MET Office: Explore the Climate of your Local Authority](#)

[Dr Paola Sakai - Tool to Assess Climate Opportunities](#)

[Where does your city rank for green space in 2023? National #GetOutsideDay | OS](#)

[Proportion of properties built before 1919 by local authority | The Health Foundation](#)

[Rough sleeping snapshot in England: autumn 2022 - GOV.UK](#)

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[Excess mortality during heat-periods - Office for National Statistics](#)

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[Public health impacts of heat POST-PN-0723.pdf](#)

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[Climate Action- United Nations](#)

[Chief Medical Officer’s Annual Report 2024 Health in Cities](#)

[Joint-Strategic-Assessment-2024-FINAL.pdf](#)

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[PublicHealthAnnualReport25](#)

Further information on health statistics for Leeds and past reports are available online at:

<https://observatory.leeds.gov.uk/dph-report/>

We welcome feedback about our annual report.

If you have any comments, please email:

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