City of BRADFORD METROPOLITAN DISTRICT COUNCIL

Report of the Director of Public Health to the meeting of the Health and Social Care Overview and Scrutiny Committee to be held on 14th March 2024

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Subject:

Respiratory health in Bradford District

Summary statement:

This report provides an overview of respiratory health in Bradford District and outlines what partners are doing to improve outcomes for people in the District.

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Portfolio:
Healthy People and Places

Overview & Scrutiny Area:
Health and Social Care

EQUALITY & DIVERSITY:

Equality assessments have been included in development of the LA programmes described in this report eg Clean Air Zone and Living Well. One of the priorities of the Tobacco Control Strategy in development is to reduce inequalities in access to services to support smoking cessation. A specific plan to reduce inequalities in COVID-19/flu vaccination was developed in partnership between LA and NHS officers.

The work described in this report contributes towards the following Council's equality objectives: 1. Visibility, leadership and accountability – through clarifying the Council's responsibilities and what we do to support our partners to improve respiratory health in Bradford district; and 3. Community – through identifying resources and supporting communities to protect from respiratory infections and environmental hazards.

1. SUMMARY

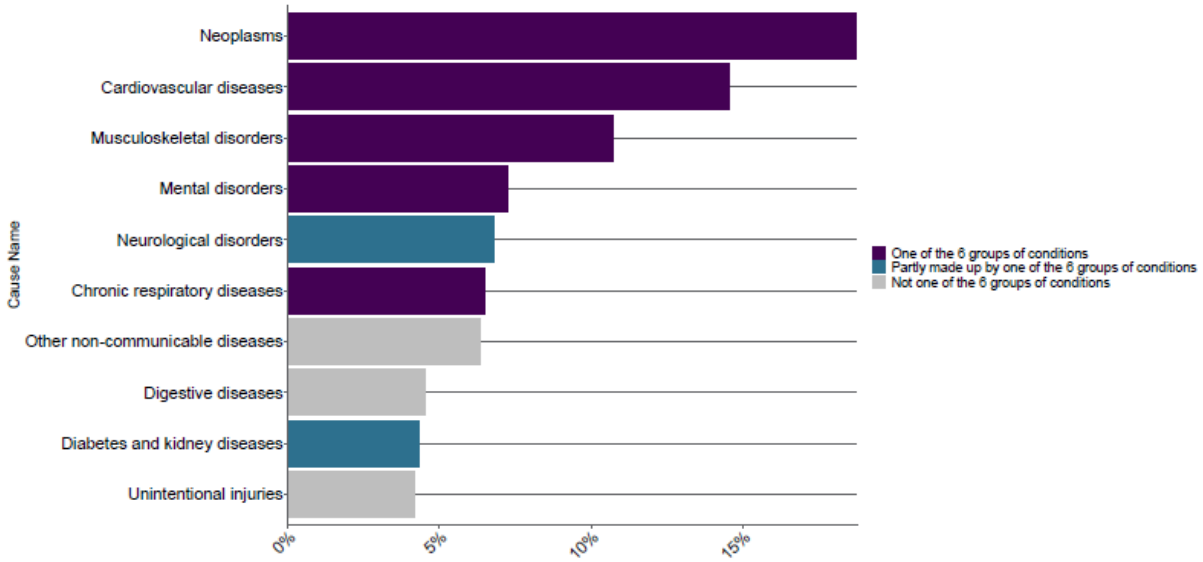
Respiratory disease is an important cause of ill health and early death in Bradford District. The District performs relatively poorly compared to other areas in England. Recognising this, partners across the District, including the local authority and NHS, have prioritised respiratory health with the aim of improving health outcomes and reducing inequalities. This report provides an overview of respiratory health in Bradford District and outlines what partners are doing to improve outcomes for people in the District. The areas covered are air quality, adverse weather, smoking, respiratory infections, and chronic respiratory conditions. This report updates on topics covered by previous reports on respiratory health (Feb 2023) and COVID-19 (Nov 2022).

2. BACKGROUND

Respiratory diseases are a group of conditions that can affect the airways and the lungs and impair breathing. These include acute infections like flu, COVID-19 and pneumonia, and chronic disease like asthma and COPD. Respiratory health can be influenced by genetics and metabolism (eg obesity contributing to asthma), infectious agents (eg viruses like COVID-19), behaviour (eg smoking) and environmental conditions (eg air pollutants).

Chronic respiratory disease is amongst the six groups of conditions that are collectively responsible for 60% of the years lost to early death or lived in ill health (Figure 1). These are the conditions prioritised on the new NHS major conditions strategy.

Figure 1. The proportional contribution of major health conditions to the total disability-adjusted life year burden in England (2019)



Source: Global Burden of Disease study, 2019

Respiratory diseases affect one in five people in the UK and are the third biggest cause of death. Health outcomes for respiratory disease have not improved over the last 10 years to the same extent as other disease areas such as cardiovascular disease and cancer. Hospital admissions due to respiratory conditions are a major factor in the winter pressures faced by the NHS and also impact the wider economy through working days lost.

Mortality from respiratory disease has been historically driven by lung cancer, pneumonia, and COPD with an average 500 people dying from respiratory-related disease each year in Bradford district. Since 2020, COVID-19 has become a significant cause of hospital admissions and death.

Respiratory disease is a major contributor to the overall life expectancy gap between the rich and the poor. Incidence and mortality rates from respiratory diseases are higher in areas of social deprivation. These areas have a higher incidence of smoking, exposure to air pollution, poor housing conditions and exposure to occupational hazards, as well as lower uptake of vaccines against respiratory infections and variation in healthcare quality and access. Specific groups are at significantly higher risk of respiratory illness, such as people with severe mental illness, people with learning disabilities, and the homeless.

The Public Health Outcomes Framework help us understand long term trends in public health at a local level. Many of the PHOF indicators relate to respiratory health, including premature and preventable mortality due to respiratory disease, smoking prevalence, mortality attributable to air pollution, and flu vaccination coverage.

Figure 2 compares Bradford with England, the region and neighbouring LAs in terms of preventable mortality due to respiratory disease. Deaths are considered preventable if all or most deaths from the underlying cause could be avoided through effective public health and primary prevention interventions eg prevention of smoking or improved air quality. Around 1 in 5 deaths due to respiratory disease in Bradford are considerable preventable.

Figure 2. Preventable mortality from respiratory disease – Bradford, Y&H local authorities and England

E07b - Under 75 mortality rate from respiratory disease considered preventable **New data** 2020 - 22 Directly standardised rate - per 100,000

Area	Recent Trend	Count	Value	95% Lower CI	95% Upper CI
England	–	25,058	17.0	16.8	17.2
Yorkshire and the Humber region	–	2,968	20.1	19.4	20.8
Kingston upon Hull	–	212	33.6	29.2	38.4
Rotherham	–	193	25.9	22.4	29.9
North East Lincolnshire	–	119	25.9	21.4	31.0
Wakefield	–	241	24.8	21.7	28.1
Doncaster	–	207	24.0	20.9	27.5
Barnsley	–	160	23.0	19.6	26.8
Bradford	–	275	22.0	19.5	24.8
Leeds	–	402	22.0	19.9	24.3
Kirklees	–	240	21.5	18.8	24.4
Calderdale	–	121	20.8	17.3	24.9
North Lincolnshire	–	99	18.9	15.4	23.1
Sheffield	–	239	18.1	15.9	20.6
York	–	74	14.1	11.0	17.7
East Riding of Yorkshire	–	160	13.2	11.2	15.4
North Yorkshire UA	–	226	10.7	9.4	12.2

Source: https://fingertips.phe.org.uk/

Bradford Council has established relevant initiatives to improve respiratory health, for example the Clean Air Zone and School Streets programmes which target air pollution, and the Bradford District Tobacco Control Alliance which sets out a multi-agency approach to reducing smoking prevalence. We work alongside the UKHSA to manage outbreaks of respiratory infections, and with the NHS to improve uptake of vaccines against respiratory infections and reduce inequalities in access to healthcare for chronic respiratory conditions.

3. REPORT ISSUES

This section presents issues and priority actions in key areas that impact on respiratory health: air quality improvement, adverse weather and health, tobacco control and smoking cessation treatment, prevention of respiratory infections and outbreak management, and management of chronic respiratory conditions.

Air quality

The problem: impact of air pollution on health

Air pollution impacts on lung development in children, cardiovascular disease, exacerbation of asthma, cancer and overall mortality. The mortality burden of air pollution within the UK is equivalent to 28,000 to 36,000 deaths at typical ages. Air pollution affects more people who live in urban, densely populated areas and those who are more susceptible to health problems caused by air pollution. Poorer communities are subject to a clustering of environmental risk factors that include greater air pollution, poor housing conditions and less access to high-quality green spaces.

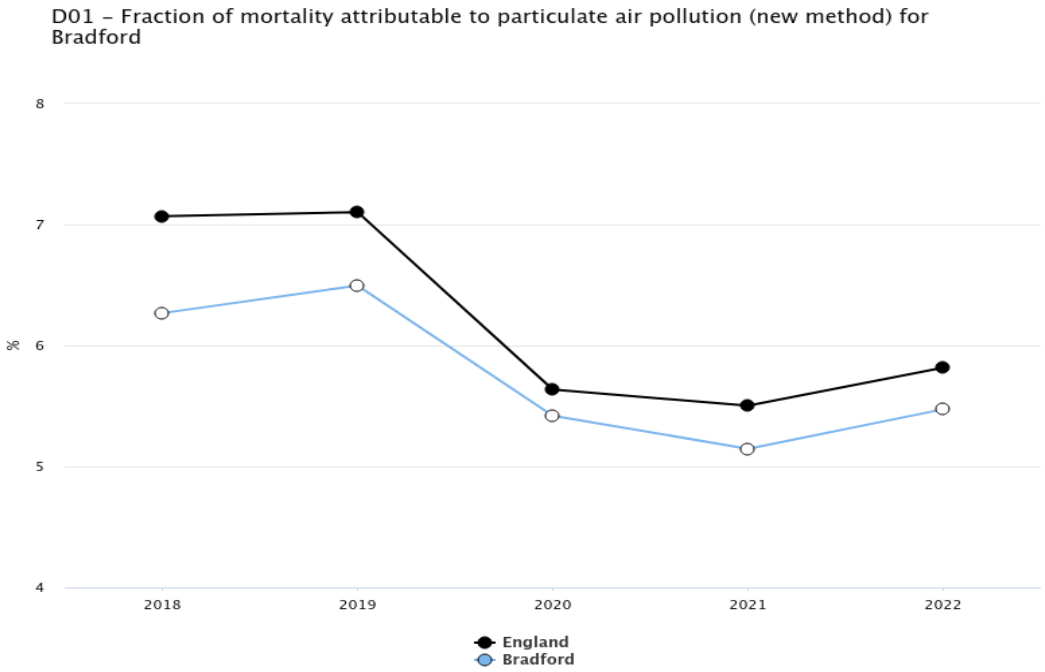
Groups that are more affected by air pollution include:

- older people
- children
- individuals with existing CVD or respiratory disease
- pregnant women
- communities in areas of higher pollution, such as close to busy roads
- low-income communities

Hot weather and air pollution have synergic negative effects on those more vulnerable to respiratory disease. City dwellers are more exposed to extreme heat due to the Urban Heat Island effect (UHI) which is caused by a combination of factors: buildings, narrow roads, reduced vegetation, air pollution, traffic, domestic energy use and industrial processes. It can lead to city temperatures being up to 5 °C warmer than surrounding areas and is most pronounced at night when the impact of heat on health and wellbeing is greatest.

Air pollution is a complex mix of particles and gases of both natural and human origins. There are technical challenges in measuring air pollution and attributing health effects to specific measures. For example, the Clean Air Zone in Bradford was introduced to reduce levels of NO2, which is the main pollutant generated by transport vehicles. The Public Health Outcomes Framework (PHOF) includes an indicator of deaths attributable to fine particulate matter (PM2.5), which is the main pollutant generated by households and small businesses (eg bonfires, barbecues, wood stoves). Figure 3 shows a comparison of trends in mortality attributable to air pollution in Bradford and England.

Figure 3. Mortality attributable to air pollution, Bradford and England



Source: [Public health profiles - OHID (phe.org.uk)]

This PHOF indicator is a measure of the fraction of all cause adult mortality that can be attributable to air pollution. The inclusion of this indicator in the PHOF enables Directors of Public Health to prioritise action on air quality in their local area to help reduce the health burden from air pollution. Bradford has lower levels than the country's average (which is influenced by high levels of pollution in the London area), but higher than other West Yorkshire LA's with the exception of Leeds. These measures do not account for the impact of the Clean Air Zone, that was implemented in September 2022.

Action: Clean Air Zone

One of the five outcomes of Bradford District Plan 2021-25 is to act at all levels to address climate and environmental change. Priorities include investments and programmes to reduce air pollution, in line with the Bradford Clean Air Plan in development since 2018 (Breathe Better Bradford).

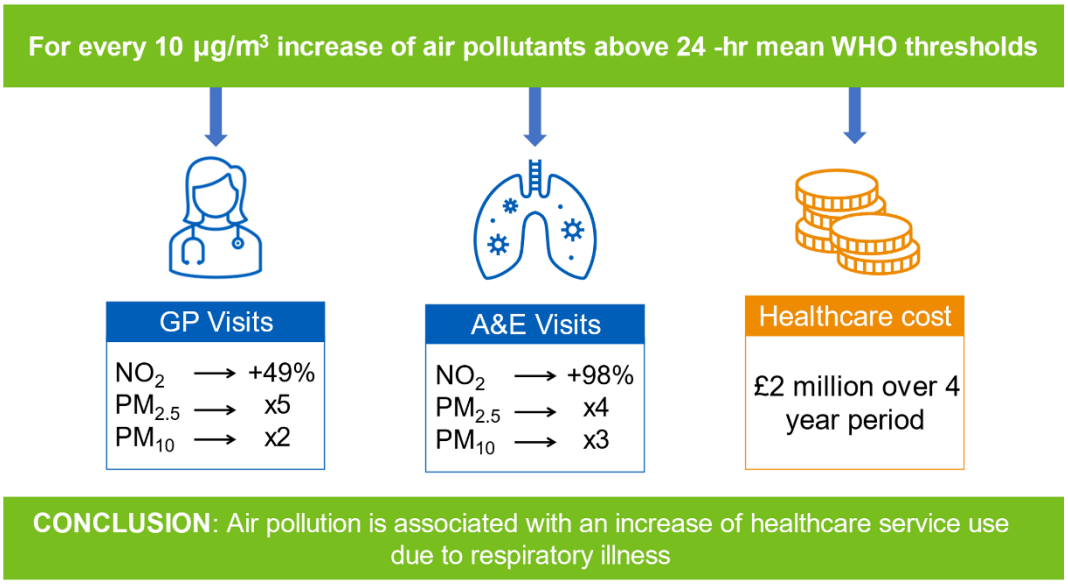
In September 2022, Bradford launched a Clean Air Zone (CAZ), which is a defined area where targeted action is taken to improve air quality. Since September 2022, noncompliant commercial vehicles are charged a daily fee to enter the zone. Around 20% of the Bradford population live within Bradford CAZ, and 40% of the schools are in the area.

The revenue generated by the fines is ring fenced to further improve air quality. The CAZ includes exemptions and support packages for locally registered vehicles, a mitigation to avoid the impact that charging the taxi trade would have on families that were already on low incomes. With support from Council grants, 97% of taxis were upgraded to CAZ standard, and we now have the cleanest fleet in UK. All commercial buses were also upgraded. The revenue generated by the CAZ has enabled public health initiatives like the

school streets and clean air schools.

The CAZ health impact is being evaluated as the subject of a £1m National Institute of Health Research project by the NHS and Born In Bradford (Bradford NHS). New research linking admissions with air pollution has found that up to one-in-two healthcare attendances for breathing difficulties in Bradford could be triggered by breaches in daily air pollution limits. This study analysed data from over 120,000 attendances for respiratory problems between 2018 and 2021 and concluded that the impact of pollutant gases on health care use is far greater than previously reported, affecting people for up to 100 days after exposure. The full paper can be accessed here and is summarised in Figure 4.

Figure 4. Association of air pollution with healthcare utilisation and costs in Bradford



Source: The effects of exposure to NO2, PM2.5 and PM10 on health service attendances with respiratory illnesses: A time-series analysis (sciencedirectassets.com)

We should soon (early 2024) have early data on how the implementation of a clean air zone has reduced pollution and how this has improved health. The research is being carried out at Bradford institute of health research (BIHR) as part of the BiB Breathes - Born In Bradford project. Research is also ongoing to understand the impact of poor housing conditions and indoor air pollution on health and inform policies for reducing indoor pollution, for example by reducing pollution from solid fuel burning in residential areas.

Action: Urban planning, development and guidance

The Chief Medical Officer's 2022 annual report focused on Air Pollution and its' impacts on health. Bradford Plan to reduce air pollution featured as one of three examples of city-wide policies of success in England. The report highlights the Clean Air Zone and the role of the local Planning and Housing teams to ensure that urban planning:

- allows 'adequate air pollution dispersal to reduce people's exposure to poor air quality where they live and travel'

- supports delivery of ‘high-quality and sustainable homes and places of work’
- includes ‘amenities such as parks, green spaces, healthcare facilities, retail and leisure opportunities at the neighbourhood level’
- reduces ‘pollutant exposure risks for vulnerable people such as children, older people, and others with long-term health conditions’, with a focus on key sites such as schools, health and care facilities.

Urban redevelopment can create safe, attractive walking/cycling routes, siting them away from traffic to reduce exposure to traffic emissions. The current transformation programme for parts of the City Centre increases safe walking, cycling and wheeling routes for city centre residents, workers, commuters and visitors, including the large number of young people accessing the sixth form colleges, Bradford College and the University. When people can easily and safely move around their neighbourhoods on foot, by cycle or wheelchair, and have regular, reliable reach bus and train stops and hubs to make for longer journeys they are less likely to make short journeys by car. Over time this widens our travel choices, helping to reduce traffic-related pollution.

Locally, the Council has published guidance for developers wishing to build new developments or convert existing buildings in Bradford District to support the creation of healthy places to live and work. Environmental Health and air quality officers provide specific advice to reduce exposure to dust and other forms of pollution during building works. At a larger scale, urban design and local planning teams can shape and reduce people’s exposure to other sources of air pollution: from decisions about location of food manufacturing, restaurants, industrial processes to the design of new-build homes and retrofit schemes; ensuring that living environments minimise air pollution, are well-insulated and provide ventilation to reduce risk of damp, cold and mould; and designing transport schemes to minimise residents’ exposure to pollution.

Access to green spaces

Actions to improve, maintain and protect the natural environment can protect respiratory health through reducing the impacts of air pollution. As well as time spent in nature in rural areas, provision of urban green and blue space are key to removing and providing respite from key air pollutants.

In urban areas, greenspace and urban planting schemes can be designed to control the flow and distribution of air pollution. The Council’s Landscape and Heritage team deliver well-designed urban greening schemes that address a number of issues – softening the appearance of urban environment, absorbing surface water as well as helping to address air quality. Redesigning road and pavement layouts to take pedestrians further away from traffic emissions and providing active travel routes through greenspace, all help reduce exposure to air pollution and improve health. For example, a searchable directory of park and green spaces in the district can be used to plan a day out or to decide if every day journeys can be adapted to pass through parks and other green spaces.

Action: school streets and clean air schools

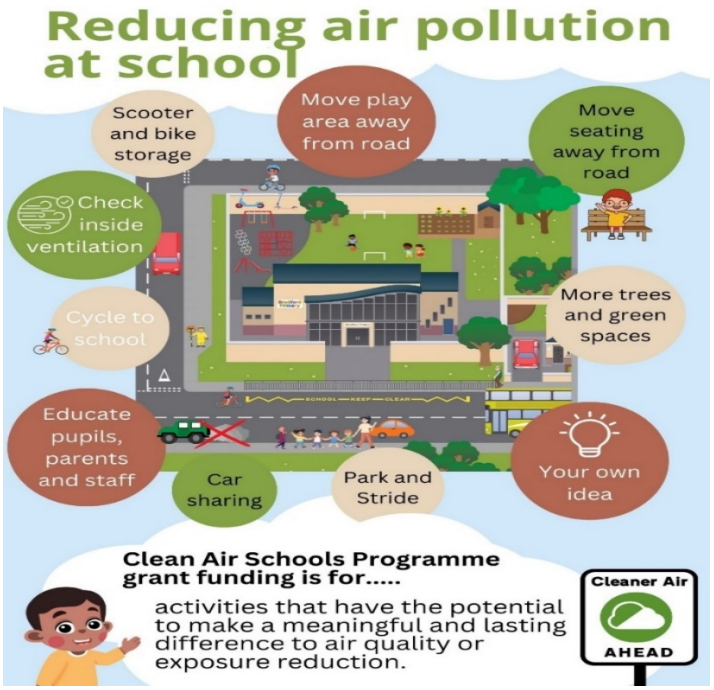
School Streets is a national approach supported by the Dept for Transport (DfT) which restricts vehicle access near to schools during the busy times when children are dropped off and picked up. To implement a School Street, the Council uses its legal powers to restrict access to traffic in a defined area around a school, typically for 30-40 minutes twice a day. The result is that it is easier and safer to walk the last few minutes of the journey to school, encouraging families that live very close to school to walk, and dispersing the remaining school traffic across a wider area around the school.

The scheme offers a proactive solution for school communities to tackle air pollution, safety issues and poor health. The school streets approach aims to support a healthier lifestyle and active travel to school for families and lead to a better environment for everyone. Local authorities can apply for DfT funding to add 2-3 schools per year. By autumn 2024 the District should have 10 such schemes.

Many schools are in locations where roads cannot be closed every day during term-time, even for short periods, and so a wider approach to reducing pollutions risks to children's respiratory health near schools is being developed by the Clean Air Schools Programme (CASP).

The CASP is a Bradford Council initiative that seeks to further improve air quality at schools, it is supported by a £500,000 grant programme for schools in the most polluted areas (£250-£10,000 per school) to implement bespoke emission and exposure reduction measures.

Figure 5. Areas funded by the Clean Air Schools grant scheme



Source: https://www.bradford.gov.uk/breathe-better-bradford/what-help-is-available/clean-air-schools-grant-programme/

Additionally, an engagement package for schools with material and resources will be created to deliver a wide range of activities for pupils to enhance their knowledge of air pollution and allow the school to effectively communicate with parents, visitors, suppliers and the local community.

In June 2023 Executive resolved to develop a district-wide ‘anti-idling’ programme with associated enforcement. This requires people to turn cars and other vehicle engines off whilst parked in the public highway, to reduce pollution. The CASP has provided training to council wardens on the dangers of air-pollution caused by engines being left running, for example whilst waiting to collect children from school. Traffic wardens are now encouraged to **engage** with people to explain anti-idling offences, to **educate** people about the dangers to health, particularly to child health, from avoidable vehicle pollution, and to **enforce** anti-idling powers where necessary.

Adverse weather and health

The problem: health impact of hot weather

Heatwaves increase health-related issues and deaths (excess seasonal deaths). The main causes of illness and death during a heatwave are respiratory and cardiovascular diseases. There is a linear relationship between temperature and weekly mortality, with an estimated 75 extra deaths per week for each degree of increase in temperature. Part of this rise in mortality may be attributable to air pollution, which makes respiratory symptoms worse. There is also a social gradient to these impacts in which they are more severe in the more deprived.

Hot weather can cause respiratory issues to flare up, particularly if the person becomes dehydrated. Hot weather can increase levels of air pollutants that trigger breathing problems. Humidity during hot weather also make breathing problems worse. Increased pollen levels can exacerbate COPD symptoms. Severe summer storms have been linked to an increase in asthma attacks (thunderstorm asthma).

There have been an average 2000 heat-related deaths a year in the UK. In 2022, when there were 5 heat periods including an unprecedented red alert (major incident) for extreme hot weather with temperatures reaching 40C, 3,271 summer deaths were reported for England and Wales.

UK Climate Projections note we will have warmer and wetter winters, alongside hotter and drier summers. Climate change will hit harder low-income areas and the most vulnerable people, whose housing may be poorer quality, uninsulated, and unsuitable for extremes of temperature. We will continue to take action to mitigate Winter Excess Deaths, however from 2080 we will expect numbers to reduce, whereas the impact of Heat Waves will increase in both frequency and severity.

The problem: health impact of cold weather

Cold weather can increase the risk of respiratory infections and exacerbate chronic conditions like COPD, asthma, and cardiovascular disease. Effects of the exposure to cold in the human body include suppression of the immune system, reduced capacity of the lungs to fight off infection, airway constriction and production of mucus in the lungs.

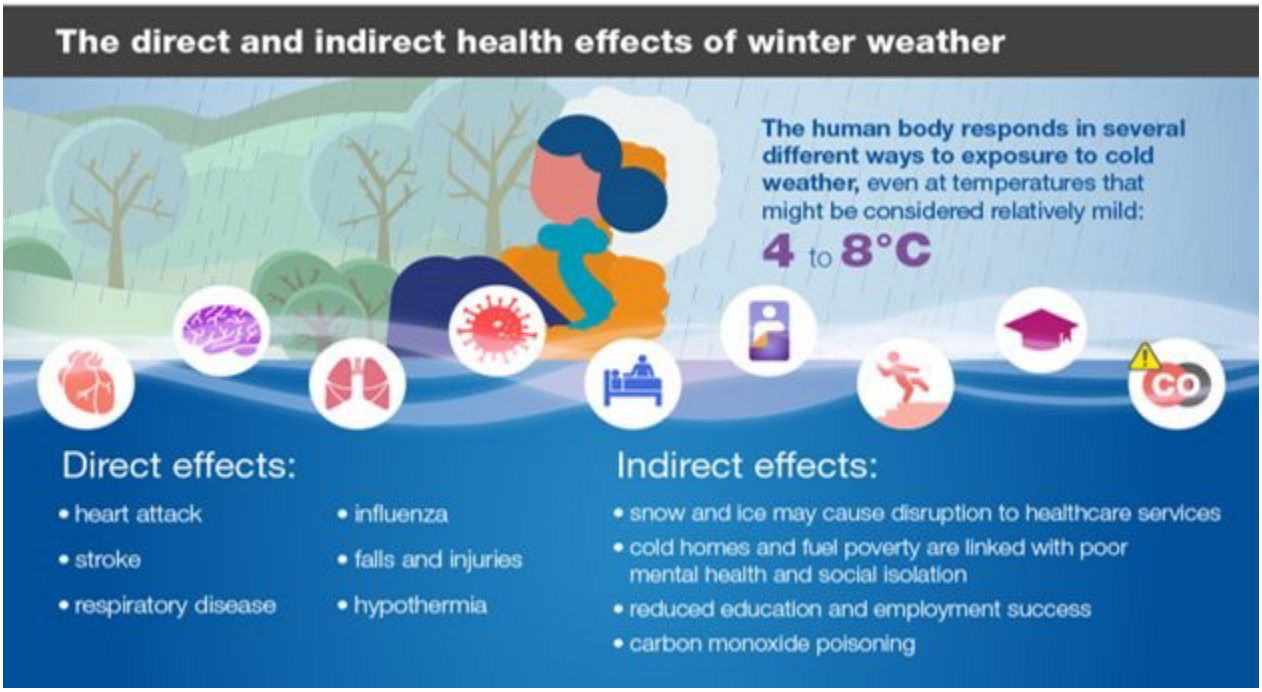
This risk is higher for people who are older, very young, or those who suffer from chronic conditions. As we age, our immune systems become weaker and less able to fight off viruses. We lose the muscle mass that helps us keep warm and moving about. The cold also makes chronic health conditions, which are more prevalent in older people, harder to manage and increase the risk of heart attacks, strokes, depression, and accidents at home.

Factors that impact on people's ability to adapt to the cold may also impact their ability to reduce exposure to respiratory infections, for example through reduced ability to maintain good respiratory and hand hygiene. Particular groups at risk include:

- severe mental illness
- dementia and other causes of cognitive impairment

- disabilities
- being bed-bound
- being very young
- drug and alcohol dependencies

Figure 6. Health effects of cold weather



Source: Adverse Weather and Health Plan - Supporting evidence 2023 to 2024

Although lower temperatures have a more significant effect on health, the ill effects from cold homes are already seen when outdoor temperatures drop to around 6°C. Because temperatures in this range are much more common, this is when the greatest number of health problems caused by the cold occur.

There is a seasonal increase in the number of deaths during the cold months. This reflects temperature, people spending more time together indoors, increase or worsening of respiratory diseases and other health conditions, and pressure on services. The PHOF has an indicator to measure this increased mortality. The winter mortality index (previously defined as excess winter deaths) is an important measure to assess whether policies are having an impact on mortality risks during the winter period. This indicator compares the number of deaths that occurred in the winter period (December to March) with the average of the non-winter periods (August to November and April to July).

Bradford has the third highest winter mortality index in Yorkshire and the Humber and is well above the national and regional averages (Figure 7). This is a complex indicator also influenced by wider health determinants like deprivation (fuel poverty, access to services) and it has been hugely impacted by COVID-19. The difference between Bradford and neighbour LA's has exacerbated in 2021-22, probably reflecting the highest number of

deaths related to COVID-19 and deprivation in Bradford compared with neighbour LA's.

Figure 7. Winter mortality index (PHOF) – England and Yorkshire and the Humber local authorities

Winter mortality index **New data** Aug 2021 - Jul 2022 Ratio - %

Area	Recent Trend	Count	Value	95% Lower CI	95% Upper CI
England	–	13,980	8.1	7.5	8.7
Yorkshire and the Humber region	–	1,260	6.9	5.0	8.7
Doncaster	–	200	18.1	10.3	26.5
Sheffield	–	220	12.9	6.8	19.4
Bradford	–	190	12.1	5.7	18.9
York	–	50	8.0	-1.6	18.6
East Riding of Yorkshire	–	110	8.0	1.4	15.0
Calderdale	–	40	6.1	-3.1	16.2
North Yorkshire UA	–	140	5.9	0.9	11.2
North East Lincolnshire	–	30	4.9	-4.7	15.4
Rotherham	–	50	4.8	-2.8	13.0
Leeds	–	110	4.6	-0.4	9.9
Kirklees	–	50	3.8	-2.6	10.6
Wakefield	–	40	3.5	-3.2	10.8
Barnsley	–	20	1.9	-5.8	10.1
Kingston upon Hull	–	20	1.8	-6.1	10.3
North Lincolnshire	–	0	0.0	-9.0	9.9

Source: https://fingertips.phe.org.uk/

Action: Addressing Fuel Poverty

There is evidence of strong links between cold temperatures, fuel poverty, and respiratory problems. Cold weather affects more severely those in fuel poverty, and fuel poverty is at very high levels due to the general cost-of-living crisis and high energy prices. A household is said to be in fuel poverty when its members cannot afford to keep adequately warm at a reasonable cost, given their income. Estimates of the End Fuel Poverty Coalition project that up to 1 in 3 houses in West Yorkshire were in fuel poverty at some point of 2023.

A national mapping of fuel poverty hot spot areas shows areas that are highly likely to be experiencing fuel poverty, with large numbers of households with higher than average fuel bills and lower than average income. Bradford District is 2nd highest in England & Wales by number of areas (124) and 6th highest by percentage of areas (40% of the District).

The Council and the local NHS co-commission a Warm Homes Healthy People service for residents. The service is targeted at people and households who are most vulnerable to or at risk of the impacts of fuel poverty on their health and wellbeing. People may be referred by health, care or community workers, or self-refer via the website or by freephone. Referrals are triaged by need - prioritising people who have health conditions, or a household member who is vulnerable to excess heat or cold due to age or other factors, or those living in poor housing conditions.

Households receive 1-2 home visits to assess risk, provide free advice, support to manage fuel debt, make best use of heating and are provided with energy-saving measures that help people reduce bills and retain heat, reducing risk of excess cold, damp and mould.

Households are also supported to apply for national energy-saving schemes and grants, and households who will be vulnerable during power cuts and no-heat situations are supported to register with their energy and water providers' Priority Service Register. The War Homes service provides free online training for front-line health and care professionals, particularly those who visit residents at home, enabling them to identify the signs and impacts of fuel poverty and refer residents into the service.

Since 2022 the service has operated at an enhanced level through additional investments from various sources – DHSC, DWP, Public Health and Adult Social Care. The service supported 2,008 households in 2022-23 and 1,386 households as of Feb 2024 in 2023-24.

A Cost of Living Support booklet produced in partnership with CABAD and Bradford District and Craven HCP contains advice on how to protect from cold, prevent respiratory infections, keep healthy, and access financial support. Additional sources of support are the Warm Spaces directory (giving details of safe places to spend time for free and avoid isolation, these stay open ins summer as Welcoming Spaces) and the Weather Ready campaign with advice to prepare for extreme cold spells.

Action: improving housing standards

A number of housing-related hazards, such as damp, mould, excess heat or cold and poor indoor air quality can exacerbate or trigger respiratory illness. The Council's Housing Standards team provides advice and support to landlords and agents so that they know what is expected of them, and support tenants with getting repairs done and making sure that their landlords deal with hazards properly, including enforcement action if necessary. The team also facilitates access to loans for housing repairs or adaptations for low-income tenants who are not eligible for commercial loans or equity release.

The team has produced advice to help tenants and homeowners to understand what they can to reduce the risk of damp and mould, and to understand when it is caused by a structural problem that must be addressed by the homeowner or the landlord or housing provider. The Council has also made available a very simple but effective video explaining the issues of condensation and how this can be avoided.

Damp can be controlled with the use of heating and ventilation, however, increases in fuel and household costs have made heating a home and reducing humidity unaffordable for many. A pilot project has provided tenants with humidistats to control humidity through the use of cross ventilation, ventilation fans and simple moisture reduction measures. The Housing Standards Team have targeted properties within certain areas of the district with EPC scores F or G to improve heating and insulation measures.

As one of the largest providers of social housing within Bradford, the team also has a close relationship with Incommunities to ensure that problem properties with ongoing damp and

mould issues are referred directly into Incommunities, reducing the turnaround time for necessary repairs.

The Housing Operations Service also provides financial assistance to support low-income homeowners to access equity loans for housing repairs (removing hazards) or adaptations if they are not eligible for commercial loans. Should homeowners not be eligible for loan there is a small grant which can be provided to address the more serious hazards.

Action: adverse weather and health plan

The UKHSA Adverse Weather and Health Plan (AWHP) published in 2023 is part of the government's response to ensure that the UK is resilient to climate change. The plan brings together and builds on the previous Heatwave Plan for England and the Cold Weather Plan for England and it aims to promote a change of focus from response and recovery to resilience and preparedness. A set of action cards for different settings was developed alongside the plan.

Alongside the launch of this plan, UKHSA and the Met Office developed action cards for specific settings and a new platform for Weather-Health Alerts including both Heat-Health Alert (HHA) and Cold Health Alerts. During an adverse weather event with a high impact on health and medium or high likelihood, they will issue an alert with information on the expected impact. UKHSA has also produced toolkits and action cards to raise awareness of risks of adverse weather to health, suggest preventive actions and mobilise individuals and communities to protect the most vulnerable individuals and groups.

In Bradford, Emergency Planning distributes alerts to the Broadcast 1 list. The local adverse weather plan is activated when am amber alert is received (level 2).

Because most mortality from adverse weather happens out of the hotter or colder days of the year, earlier activation of weather health alerts could prompt more preventive action and have the greatest impact on excess seasonal morbidity and mortality and pressures in the NHS. The same rationale applies to cold and hot weather.

Therefore, public health is developing a **local weather-health alert system** to allow earlier delivery of messages (eg when a level 1 - yellow alert - is triggered) to those settings where individuals are more likely to suffer negative health impacts from adverse weather, for example:

- Adult social care centres
- Residential homes and children's homes
- Winter warmth advice services
- Providers and voluntary organisations that work with vulnerable groups e.g., older people, people with substance misuse problems, rough sleepers

The local weather health alert system is in development and should be piloted in Summer 2024.

Tobacco

The problem: impact of tobacco in health

Smoking is the most important cause of COPD and lung cancer and a risk factor for asthma development and attacks. Exposure to second-hand smoke (passive smoking) also causes significant harm to both adults and children. Smoking or exposure to second hand smoke during pregnancy is responsible for an increased rate of stillbirths, complications during labour, premature birth, miscarriages, birth defects and sudden infant death syndrome (SIDS). It also increases the risk of developing asthma and middle-ear infections after birth.

The impact of smoking on health goes well beyond respiratory disease. Smoking is the leading cause of preventable disease, disability and premature death, with over 74,000 people dying from smoking in the UK each year. Smokers loose on average 10 years of life, or around 1 year for every 4 years of smoking after the age of 30. Smoking contributes to the six major health conditions that are responsible for 60% of deaths and disability in England (Figure 8), and to the five clinical areas of the CORE20PLUS5 approach to inequalities.

Figure 8. Contribution of smoking to the six major health conditions in the UK

	% of years of healthy life (DALYs) lost attributable to tobacco (2019)					
	Dementia	CVD	COPD	Diabetes	MSK	Cancer
Bradford	20%	23%	62%	18%	12%	30%
N Yorks	19%	19%	60%	16%	12%	27%

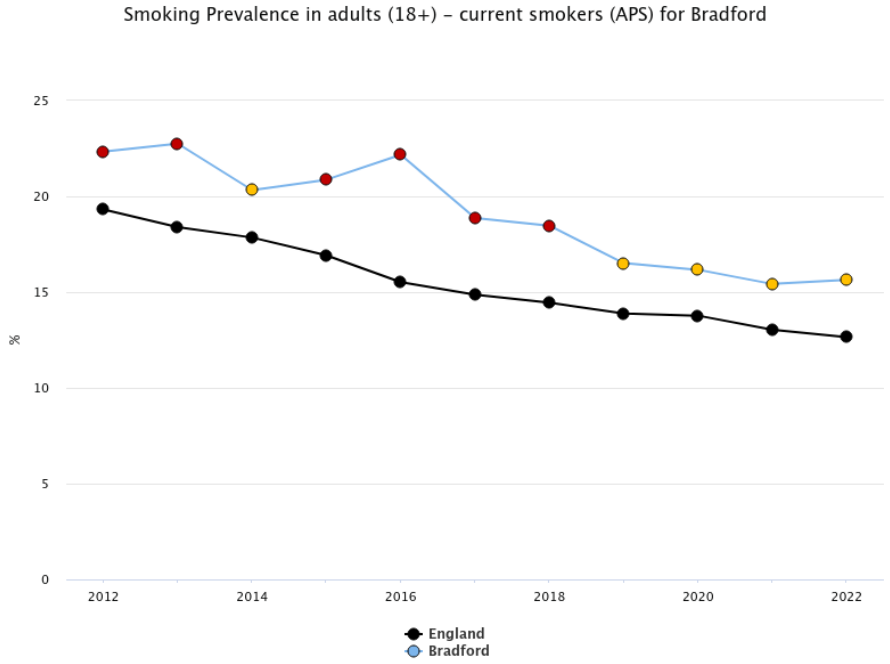
Source: Adapted from Major conditions strategy: case for change and our strategic framework, 2023.

Smoking is the principal driver of health inequalities and the leading cause for the gap in life expectancy between rich and poor. Smoking helps to sustain deprivation, just as deprivation sustains smoking: directly causing ill health, and causing poverty, which leads to further ill health. Long-term smokers are 7.5% less likely to be employed than non-smokers. Around a third of households with a smoker fall below the poverty line. Current smokers are 2.5 times more likely to require social care support.

Between 2011 and 2021, the national prevalence of smoking (measured by the Annual Population Survey) has reduced from almost 20% of adults to 13%. Hospital admissions attributable to smoking have also been falling over time in England.

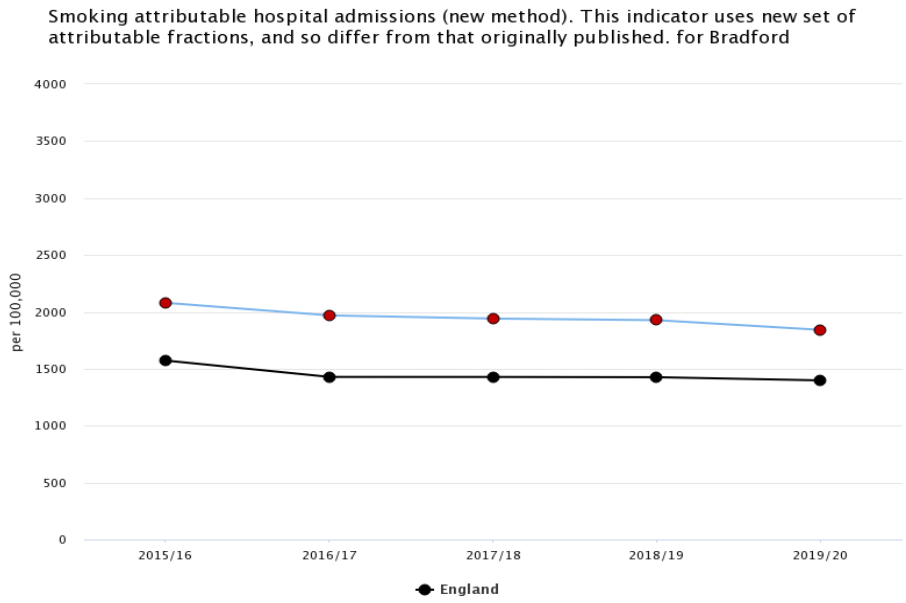
The prevalence of current smokers aged 18+ in Bradford District is 15.4% equating to 62,602 individuals. A general downward trend continues to be observed in Bradford since 2011 (when it was 21.7%), however the district continues to have higher smoking prevalence (Figure 9), smoking attributable admissions (Figure 10), and smoking related deaths than England.

Figure 9. Smoking prevalence in adults - Bradford and England



Source: https://fingertips.phe.org.uk/

Figure 10. Hospital admissions due to smoking – Bradford and England

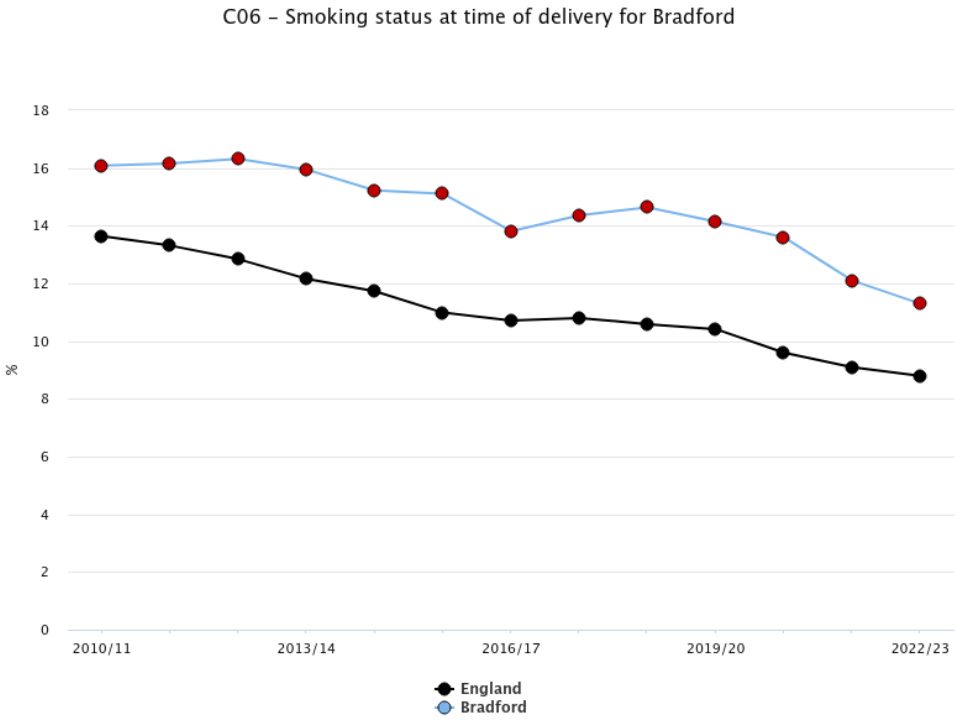


Source: https://fingertips.phe.org.uk/

Some groups have particularly high smoking rates, eg 24% of routine and manual workers in Bradford were smokers in 2022. The prevalence of smoking during pregnancy for

Bradford district (Figure 11) has reduced from 16% in 2010/11 to 11.3% in 2022/23. This percentage is higher than the average of 9% for England and still means around 700 babies each year being exposed to tobacco in utero.

Figure 11. Smoking status at time of delivery – Bradford and England



Source: https://fingertips.phe.org.uk/

As an example of inequalities, the prevalence of smoking in pregnancy is influenced by place of residence, age (higher among younger women) and ethnicity (higher among white women) and can be as high as 25% among women residents in Keighley West.

Action: Smokefree England 2030

In December 2023, the government announced bold plans to tackle the harms of smoking and stop children getting hooked on nicotine addiction. The Council answered the public consultation launched in December 2023 about new legislation that is to be presented to parliament this year. The components of the national plan are set out below:

1. Create the first smoke-free generation by raising the age of sale for cigarettes by one year every year from 2027. [Command paper p. 20 -22]
2. Strengthen support for people to quit smoking [Command paper p. 23-26]
    - £5m this year and £15m pa from next year for awareness campaigns
    - £70 m from next year for LA Stop Smoking Services.

- In addition to previous commitments of £45 m over two years for 1 million free ‘swap to stop’ vapes; and vouchers up to £400 for every pregnant smoker who quits.

3. Curb the rise in youth vaping by consulting on measures to reduce the appeal and availability of vapes to children while ensuring they remain available to help adult smokers quit. [Command paper pages 27-33]
4. Strengthen enforcement activity, with £30 m new funding in addition to the £3 m on illicit vapes enforcement, additional powers, and an updated anti-illicit strategy. [Command paper p. 34-37]

From 2024, new DHSC funding will be available to all local authorities to support expansion of stop smoking services in Bradford and engagement with groups at higher risk of tobacco related harm. This is the best opportunity in a generation for improving health outcomes and reducing health inequalities in the country and in the district. Funding will be distributed according to smoking prevalence rates, what means that support will be proportionate to local need. Bradford Council is working on a plan to improve service capacity, referrals to the service and engagement with groups who are more affected by smoking and other exposure to tobacco and nicotine products. This funding will also support public communications and targeted work around smoking and vaping in young people.

Action: Bradford tobacco control strategy

Bradford Council is a signatory of the Local Government Declaration on Tobacco Control which is a public statement of a council’s commitment to ensure tobacco control is part of mainstream public health work. The Council is a member of the Smokefree Action Coalition (SFAC), a group of over 300 organisations across the UK committed to ending smoking.

The Bradford Tobacco Control Alliance, led by the Council, was launched in 2022 to facilitate a comprehensive multi-agency strategy to reduce the harm of tobacco in our communities. The Alliance meets every two months and is chaired by Cllr Sue Duffy and co-chaired by Dr Leanne Riley, respiratory consultant at BTHFT.

The vision for the Bradford tobacco control strategy is to achieve a smoke free generation by 2030, in line with the national ambition for England, while narrowing the gap in health inequalities related to tobacco. We are developing a document for public consultation setting up the vision and priorities of the Bradford Tobacco Control Strategy and how the Tobacco Control Alliance members and signing organisations will deliver those priorities.

The strategy will concentrate efforts on reducing the harm associated with tobacco and smoked cigarettes, which is where evidence shows are the more important harms. We will be flexible to include actions to reduce the harm caused by other forms of tobacco consumption eg, chewing and other forms of nicotine use eg, vaping (particularly among young people). We will also collaborate with the NHS smoking treatment programmes and the WY tobacco control alliance to ensure consistency of messages and access to services, and with West Yorkshire Trade Standards to reduce availability of illegal tobacco in the most deprived communities.

The six priorities of the Tobacco Control Strategy (in development) are

- System Engagement - Making tobacco control everyone's business and de-normalise smoking across all ages.
- Young People - Prevent the uptake of smoking among children and young people.
- Inequalities – Reduce variations in smoking rates ensuring support to quit is available to those at higher risk of tobacco harm.
- Regulations - Promote and enforce smoke free environments and regulation of tobacco and nicotine products including illegal tobacco.
- Research & engagement – Intelligence to respond to local patterns of tobacco use and engagement with services.
- Communications and public engagement – Including coproduction of targeted messages with affected groups.

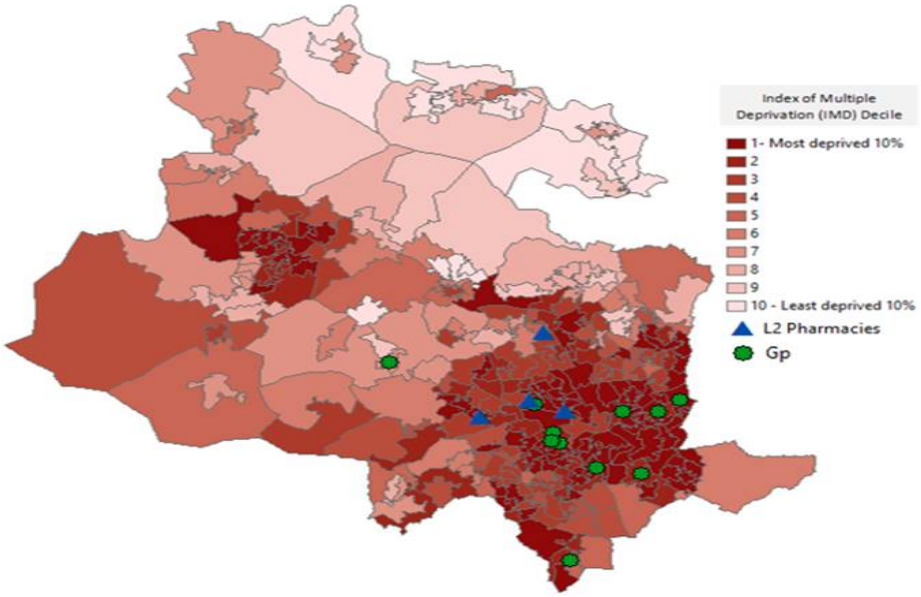
Vaping among young people is an emerging problem that has captured attention of the media and the public. Little is known about the long-term harm to health, but we do know they can cause addiction and short term respiratory and neurological. Therefore, they should not be used by someone who does not smoke, only by adults who want to quit smoking. Public communication needs to balance the message about risks of vaping for those who do not smoke, with the potential benefit of e-cigarettes as part of comprehensive treatments for smoking.

Action: Living Well smoking cessation services

The Living Well Stop Smoking Service provided by Bradford Council offers comprehensive support for smokers aged 12 and above residing in the Bradford District via telephone and face-to-face clinics. The service offers a universal and targeted evidence-based 12-week behavioural programme delivered by Living Well Advisors and Level 2 Stop Smoking Practitioners, along with access to pharmacotherapy through E-vouchers issued by a Stop Smoking Practitioner and processed in participating pharmacies. Dedicated advisors provide personalised guidance, assistance in managing cravings, access to quitting tools and recommendations for utilising nicotine replacement therapy (NRT). Starting from March 2024, the council is extending its support by offering e-cigarettes to adult smokers who wish to quit, with guidance and assistance from Living Well Advisors. E-cigarettes are recognized as substantially less harmful than traditional cigarettes and serve as an effective aid in smoking cessation efforts.

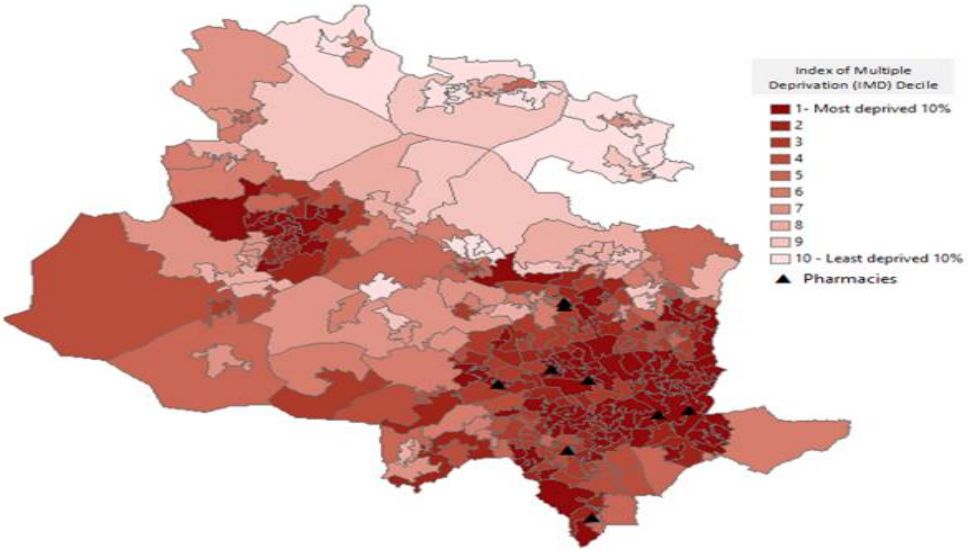
In 2022/23, 1163 service users set a quit date with 517 (44%) reporting a successful quit at week 4. As of June 2023, we had 10 GPs and 4 pharmacies delivering level 2 smoking cessation advice (behavioural intervention) (Figure 12) and 4 pharmacies delivering level 1 advice only (support to use NRT) (Figure 13). This is in addition to our in-house LW advisors, that provide advice to all residents regardless of place of residence. The maps below show the distribution of GPs and pharmacies providing the service as of Summer 2023. The LW advisors cover the whole district.

Figure 12. Level 2 stop smoking providers



Source: Public health intelligence team

Figure 13. Level 1 stop smoking providers



Source: Public health intelligence team

The Living Well Service can be directly contacted by calling 01274 437700 or emailing stopsmokingservice@bradford.gov.uk. Support is also available through the NHS Better Health website.

Emerging issues: vaping

The decrease in the proportion of current smokers may be partly attributed to the increase

in vaping users. The recent Action on Smoking and Health (ASH) adults and youth survey showed that the use of vapes had increased among adult smokers between 2021 and 2023 from 17% to 27%. The survey also found that the proportion of vapers who were smokers had increased between 2021 and 2023.

The annual YouGov survey for Action on Smoking and Health (ASH), showed that current vaping among young people aged 11-17 has risen from 4% in 2020 to 7% in 2022. The National Smoking, Drinking and Drugs Use survey found the use of e-cigs to be as high as 9% in young people aged 11-15.

The Public Health Team have gathered insight into vaping habits from over young people in Bradford through focus group interviews. Nicotine containing disposable e-cigs were popular among secondary school pupils. These devices were readily available through peers, corners shops, social media and family. The colour and the shape of the devices as well as flavours were stated as the main reasons to why young people were attracted to vapes. Furthermore, the current regulation limits the number of puffs to around 600 per device, however, the findings from the focus groups indicated that young people were using illegal devices which promoted up to 9,000 puffs.

Health facts

A vaping device (also known as vapes or e-cigarettes – ECs) allows you to inhale nicotine in a vapour rather than smoke. They do not contain tobacco and do not produce tar or carbon monoxide, two of the most damaging constituents in cigarette smoke. ECs work by heating a solution (e-liquid) that typically contains nicotine, glycerine, flavourings and propylene glycol which is a solvent to hold the nicotine in and is odourless and considered by Medicine and Healthcare products Regulatory Agency (MHRA) to be non-toxic when ingested orally.

While the tobacco smoke of cigarettes contains thousands of harmful chemicals, many of which are known carcinogens, nicotine itself, though highly addictive, is not a carcinogen. So, alternative nicotine delivery devices such as vapes that are less harmful could play a crucial role in tobacco harm reduction.

Even though vapes are less harmful than tobacco it does not mean they are completely safe. There are fewer knowingly harmful chemicals, but he long-term impact on the heart, circulation, or other aspects of health are unknown. The longer-term risks of vaping are likely to be substantially lower than smoking due to the levels of exposure to toxic chemicals from vaping being a tiny proportion of those from smoking. E-cigarettes and vaping should never be taken up by people who do not already smoke, but they could be a useful tool to help people to stop smoking completely.

Vapes as tools for quit smoking

OHID's Vaping in England Evidence Review (2021) found no evidence to support the concern that e-cigarettes are a route into smoking among young people. The same review found that there is strong evidence that nicotine vaping products are effective for smoking

cessation and reduction. A major UK clinical trial found that e-cigarettes, when combined with face-to-face behavioural support, are twice as effective for quitting smoking, and at one fifth of the cost, as other nicotine replacement products such as patches or gum.

Combining vaping products with stop smoking service support should be an option available to all smokers who want to quit smoking. The use of nicotine containing vaping devices to help adult smokers quit is one of the recommendations from the independent Khan review and from the NICE (NG209) guidance on tobacco.

Vaping education in schools

The long-term consequences of vaping in young people are unknown, however, evidence suggests that it may affect brain development and cause anxiety and nicotine addiction.

The Public Health team have commissioned a local provider (Step 2) to raise awareness of dangers associated with vaping in schools. The purpose of this is to combat the rise of vaping in children and young people. The provider will deliver awareness sessions in both primary (year 6 only) and secondary schools as well as in the community across Bradford and District with greater focus on the most deprived areas where the smoking prevalence is high.

To combat the rise in vaping use in young people, the provider will:

- Develop an age-appropriate awareness package approved by Bradford Public Health for 11–17-year-olds
- Target year 6 onwards- priority will be given to the most deprived areas where smoking prevalence rate is high
- Deliver sessions in the community targeting adults and young people

Illegal cigarettes and vapes

Sales of illegal tobacco and vapes continue to raise concerns in Bradford despite West Yorkshire Trading Standards (WYTS) efforts to combat the activity. The rise in cost of living has contributed towards the increase in sales of cheaper tobacco products through the illegal market. Illegal cigarettes and vapes may contain non-regulated additives and higher concentrations of nicotine and other toxic substances.

Data from WYTS suggest that more complaints are received from Bradford than other West Yorkshire Local Authorities on sales of illegal cigarettes and vapes:

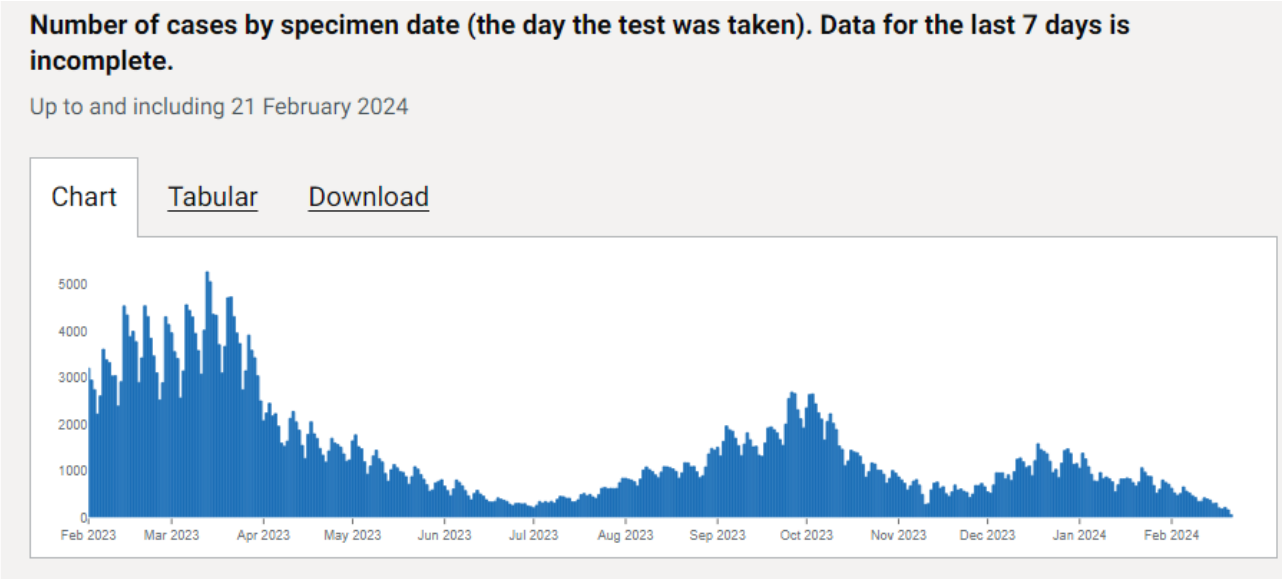
- 30-40 complaints each quarter on supply of cheap and illicit tobacco in Bradford - most complaints received were in regard to underage sales of vapes
- More inspections and test purchasing lead by WYTS than any other WY local authority
- 7,462 illegal vapes seized in 22-23

Respiratory infections

The problem: COVID-19 and other respiratory infections

The UK Coronavirus (COVID-19) dashboard was decommissioned in December 2023 and replaced by UKHSA data dashboard, which presents data on respiratory viruses. The latest update of the COVID-19 dashboard showed that up to December 2023 there had been 21 million cases and 197,000 deaths related to COVID-19 in the UK. In Bradford, almost 190,000 cases and 1,955 deaths were reported until December 2023. Figure 14 shows the cases in Bradford in the last 12 months.

Figure 14. COVID-19 cases in Bradford, Feb 2023-Feb 2024



Source: COVID-19 dashboard

Immunity from vaccines and previous infections significantly reduced the impact of COVID-19, and the last social restrictions were lifted in all settings (including care homes) in September 2022. At that same time, the UK COVID-19 public inquiry began to examine the Government response to the pandemic. This inquiry will inform the UK response to future pandemics.

In May 2023 the WHO declared that COVID-19 was no longer a public health emergency of international concern (PHEIC). This statement marked the official end of the pandemic, although the WHO warned all countries to be vigilant against the rise of new variants. Vaccines should continue to evolve to match evolving variants. At that point in time, 765 million cases and 6.9 million deaths caused by COVID-19 had been reported worldwide, and 13 million doses of a COVID-19 vaccine had been administered.

Following the official end of the COVID-19 pandemic, the WHO set up a Preparedness and Resilience for Emerging Threats (PRET) initiative to improve pandemic preparedness. Similarly, national government in the UK established initiatives like the national Centre for

Pandemic Preparedness and the Pandemic Preparedness toolkit project.

Bradford has had higher levels of COVID-19 infection and deaths than the national average, particularly among deprived groups, older people, and people with chronic conditions. The impact of COVID-19 on the local economy, public trust in government, mental health of young people and those who lost loved ones, and the thousands now living long COVID-19 will still be felt for many years. It will be essential to find ways of re-building the confidence of communities in public health advice, vaccines, and treatments.

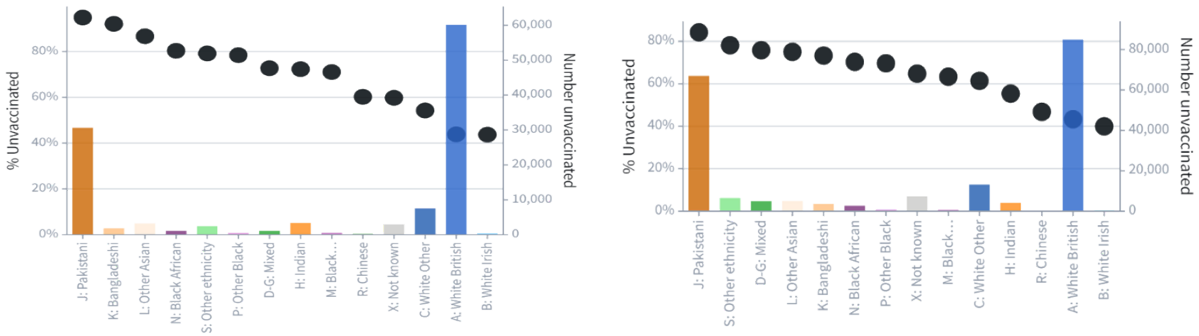
Vaccination and outbreak control

The COVID-19 national vaccination programme moved away from mass vaccination to focus on those at highest risk of severe disease, based on age and underlying conditions. The NHS is promoting joint offer of COVID-19, flu, and other vaccines for which the patient may be eligible and from 2024 COVID-19 and flu vaccination campaigns should be operationally aligned as much as possible. Both the COVID-19 and flu vaccination programmes are led locally by the NHS/ICB, with partnership review meetings which council officers attend.

Bradford has lower uptake of COVID-19 vaccine than the national average. Uptake is good among older people and care home residents, but it is still below NHS targets among children, pregnant women, health and social care workers. Some groups that are at a higher risk of infection and death such as those with long term conditions have very low vaccine uptake. Uptake is particularly low among Pakistani and Bangladeshi individuals and those living in the more deprived areas of the district.

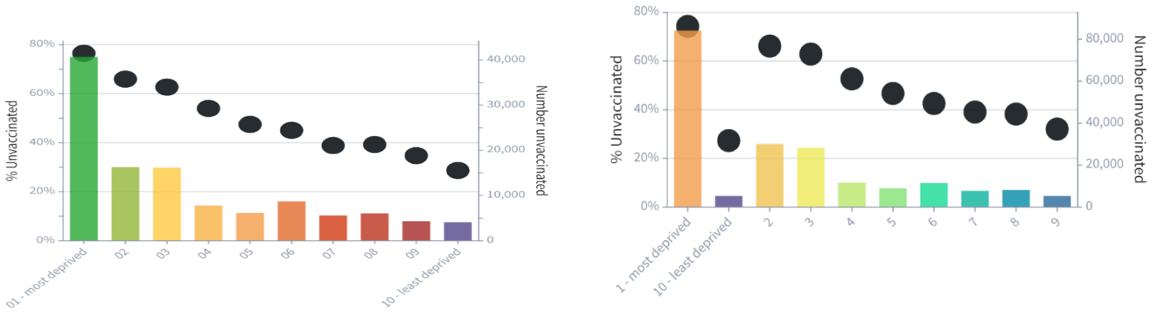
The uptake of COVID-19 and flu vaccine is similar across a range of parameters suggesting that the issues that impact on the uptake of both vaccines are similar. Deprivation, ethnicity, and age are the main determinants of whether a patient receives a vaccination or not and this is most stark in the inner-City areas of Bradford and Keighley. Figure 15 illustrate these similarities.

Figure 15. Uptake of COVID-19 and flu vaccines (unvaccinated) by ethnicity



Source: Foundry

Figure 16. Uptake of COVID-19 and flu vaccines (unvaccinated) by deprivation



Source: Foundry

A COVID-19 and flu vaccination inequalities plan was developed to drive a community-based approach to address those inequalities. The four main strategies are:

- Community pharmacies working alongside PCNs/secondary care services to deliver Covid19 vaccinations where the PCN has opted out of Covid19 delivery.
- Providing vaccination clinics in the community delivered in community centres, faith centres or similar (these may be PCN, Community Pharmacy or jointly delivered)
- Mobile outreach vaccination opportunities in targeted communities or geographical locations to maximise opportunistic uptake.
- Working through existing networks such as the Living Well Community Development work, REN Community Champions & helpline, Community partnership interventions.

In terms of target populations, this plan focus on the groups that consistently demonstrate the lowest take up of flu and COVID-19 vaccines (not including HSC staff).

- PCN 4, 5 & 6 areas
- Pakistani/Bangladeshi communities
- Gypsies, Travellers, and Roma
- Asylum Seekers and refugees
- Pregnant women

The council has also worked to tackle misinformation and increase the public's confidence in the vaccines. A joint communications workgroup with NHS officers is in place and has produced messages reinforcing the safety of the vaccines for all groups. Community champions, LW advisors and social care staff have been offered training on communication skills to overcome vaccine hesitancy.

Vaccine hesitancy is a growing challenge nationally and despite these efforts, Bradford still has the lowest levels of vaccine uptake in West Yorkshire. In the autumn/winter campaign that finished in January 2024, we vaccinated 44% of the eligible population for COVID-19 and 42% for flu, against WY averages of 49% and 48% respectively.

<u>Action: preventing spread of respiratory infections</u>

In April 2023, the Council's Infection Prevention Control team, that has supported outbreak management in care homes since the early days of the COVID-19 pandemic, registered no outbreaks of respiratory infections for the first time since July 2021. This was a few weeks before the WHO declared the official end of the pandemic. Since them there has been between 1-3 ongoing outbreaks per week, with no significant spikes during winter. Testing is not routinely made anymore so not all outbreaks are clearly identified as being caused by COVID-19, flu or other respiratory viruses.

In February 2024, in line with the national guidance that integrated management of COVID-19 and other acute respiratory infections (ARI), the definition of an outbreak of ARI has been changed from 2 or more linked cases within a 14-day period, to 2 or more linked symptomatic cases within a **5-day period**. The rationale for this change was an observed reduction of the duration of symptoms and contagious period following roll out of the COVID-19 vaccination programme.

New guidance for Infection prevention and control (IPC) in adult social care: acute respiratory infection (ARI) was published on 31 January 2024. Acute respiratory illness (ARI) is defined as the acute onset of one or more specific respiratory symptoms and a clinician's judgement that the illness is due to a viral acute respiratory infection (for example COVID-19, flu, respiratory syncytial virus (RSV)).

The best way to reduce the spread and mitigate the harm of ARIs is to combine standard infection prevention and control precautions with vaccinations, available medical treatments, and proportionate outbreak management.

As routine testing has been removed, an outbreak may be suspected when there is an increase in the number of staff and/or residents displaying symptoms of ARI at the same time. An ARI outbreak consists of 2 or more positive or clinically suspected linked cases of ARI, within the same setting within a 5-day period. This means the cases may be linked to each other and transmission within the care setting may have occurred. Testing might still be used within the context of risk assessing an outbreak, under guidance of the Health Protection Team.

Recommendations for individuals in community settings with symptoms of a respiratory infection, such as COVID-19, have not changed since 2022. If you have symptoms of a respiratory infection and has a high temperature or do not feel well enough to go to work or carry out normal activities, you should avoid contact with vulnerable people and stay at home, if possible, until you no longer have a high temperature (if you had one) or until you no longer feel unwell. For those who absolutely cannot stay at home, guidance to reduce spread of infection is available here. Testing for specific respiratory infections is not routinely advised, but If you have a positive COVID-19 test result, you should try to stay at home and avoid contact with other people for 5 days after the day you took your test.

Chronic respiratory conditions

The problem: chronic respiratory disease

Chronic respiratory diseases are influenced by smoking rates, air quality, and access to healthcare. Individuals in disadvantaged areas may face higher smoking rates and exposure to environmental pollutants. Deprived communities in Bradford may have higher rates of chronic respiratory diseases due to environmental factors and lifestyle choices. These conditions can reduce life expectancy and overall well-being, especially when coupled with other health disparities, and limit individuals' ability to engage in physically demanding work, affecting employment opportunities.

COPD

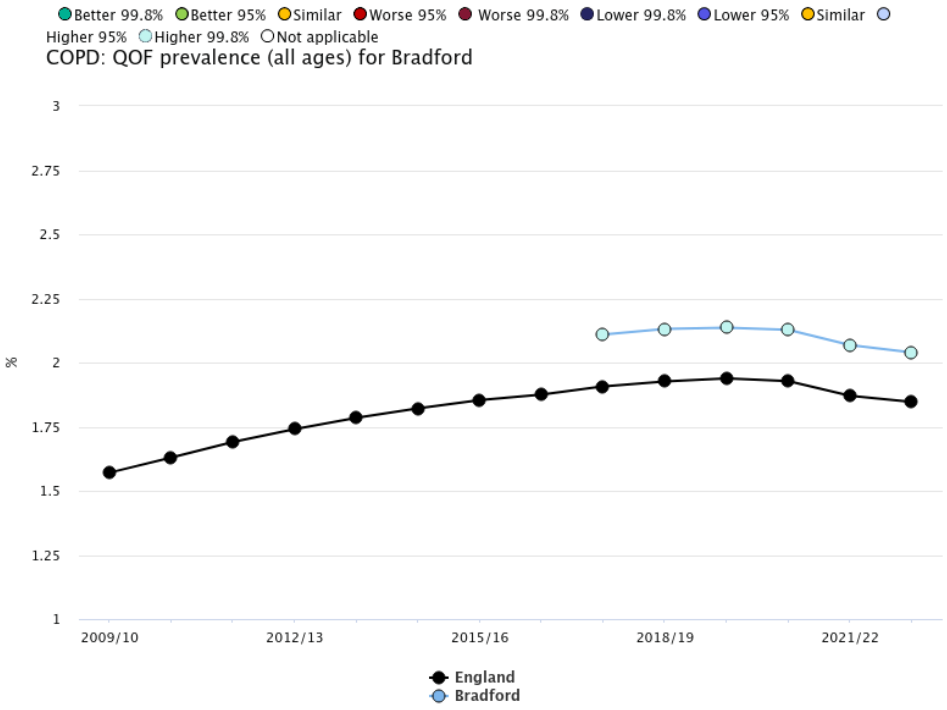
Chronic obstructive pulmonary disease (COPD) is a common name for a group of lung diseases that cause progressive narrowing of the airways and breathing difficulty. It includes emphysema and chronic bronchitis and is more common in middle-aged or older adults who smoke. An estimated 3% of the UK population and 2.1% of people in West Yorkshire has COPD, of which about a third goes undiagnosed. Up to 70% of COPD is caused by smoking.

The disease is usually progressive, but symptoms can be reduced with proper treatment. One of the main challenges in managing COPD is that many people are unaware that they have the condition. Late diagnosis has a substantial impact on symptom control, quality of life, outcomes, and cost. Often people are not diagnosed until the disease is at an advanced stage, with non-reversible changes to the lungs and airways. This is because people may not recognise symptoms that develop gradually or may think that the symptoms are normal or associated with age.

Data for Bradford District and Craven show that 13,407 individuals had a COPD diagnosis in 2021/22 which corresponds to 2.1% of the population. This is slightly higher than the national average of 1.9%. In the same period, 44,770 people aged 6 years or older were living with asthma, or 7.4% of the population, what is also higher than the national average of 6.5%.

Diagnosis rates for COPD have decreased since 2019/20 after 10 years of increase, which may be related to the impact of COVID-19 on NHS capacity and mortality patterns. Figure 17 compares prevalence of COPD for England (black) and Bradford District (light blue) based on NHS data from the Quality Outcomes Framework, showing that rates of COPD in Bradford district continue to be consistently higher than the national average.

Figure 17. Prevalence of COPD for Bradford and England



Source: https://fingertips.phe.org.uk/

Hospital admissions for COPD for Bradford district were decreasing before the COVID-19 pandemic. Latest data publicly available (2019/20) showed that the gap between national and local rates was narrowing. In absolute numbers, there has been over 1,200 hospital admissions a year for COPD exacerbations in Bradford District.

Asthma

Asthma differs from COPD as it usually starts in childhood – it is the most common chronic condition among children. About 6.5% of the population have a diagnosis of asthma, and as with COPD a great number of individuals are not diagnosed. In asthma, the obstruction of the airways is due to inflammation, and it can usually be controlled or reversed with use of drugs. Long term, untreated asthma may cause structural changes in the lungs and airways similarly to COPD. In both conditions, symptoms can get temporarily worse (COPD exacerbations and asthma attacks).

While the main determinant of COPD is smoking (or passive exposure to tobacco smoke), asthma is multifactorial, and it is often difficult to find a single, direct cause.

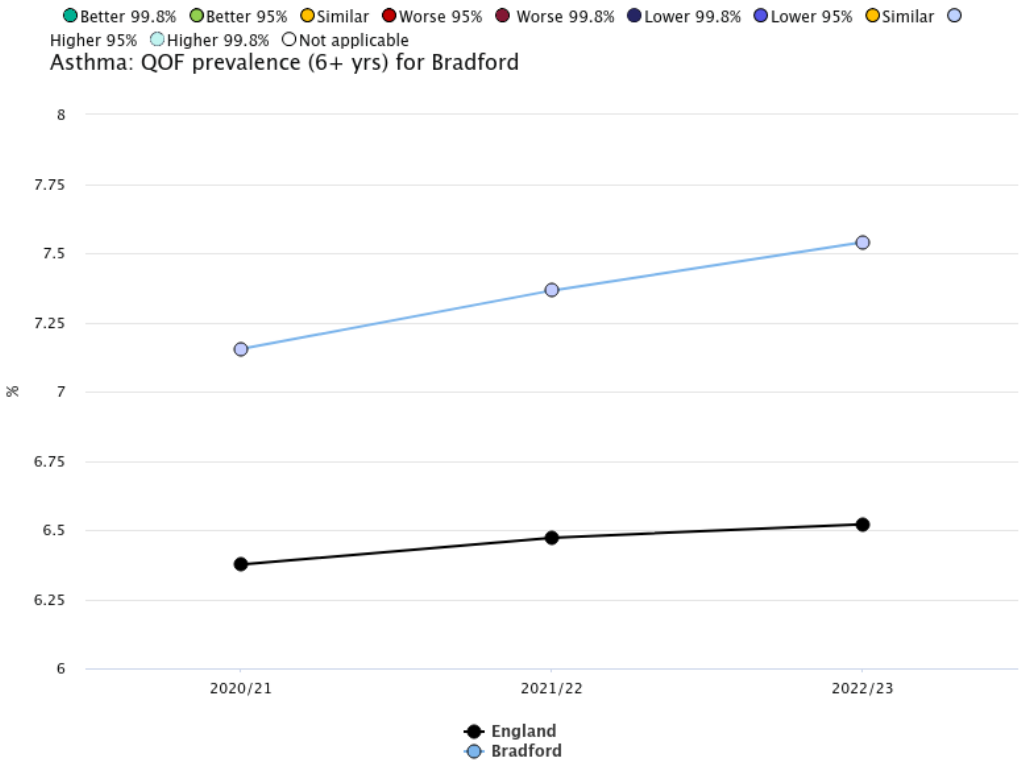
Risk factors for developing asthma include:

- A close relative with asthma
- Existence of other allergic conditions such as eczema and hay fever
- Exposure to air pollution
- Events in early life that affect the developing lungs like prematurity, exposure to

tobacco smoke (including during pregnancy) and air pollution, viral respiratory infections
- Overweight or obesity

The same environmental factors that are involved in the primary development of asthma may increase the frequency and severity of attacks. Up to one third of the asthma cases in Bradford can be attributable to air pollution. Prevalence of asthma for Bradford is shown in Figure 18

Figure 18. Prevalence of asthma for Bradford and England



Source: https://fingertips.phe.org.uk/

Data on admissions for asthma are calculated differently from those for COPD. In the 3-year period between 2019-2020 and 2021-22, there were on average 890 admissions per year for asthma in Bradford District. This corresponds to 172 admissions per 100,000, which is higher than the average for England (120/100,000)

Action: NHS respiratory programme

Most of the care for people with COPD and asthma is provided in primary care. Early identification and effective management can lead to improvements in symptom control and quality of life and reduce exacerbations and hospital admissions.

The national approach for respiratory health, in line with the NHS Long Term Plan, aims to improve early diagnosis, access to the right medications, and access to respiratory

rehabilitation services, ensuring that people have the support they need to best self-manage their condition.

Regionally, the WY Integrated Care Partnership is committed to implementing the NHS CORE20PLUS5 approach to reduce health inequalities. This approach defines a target population (the 20% most deprived as defined by the national Index of Multiple Deprivation) and five clinical areas that require accelerated improvement. Chronic respiratory diseases are one of the key clinical areas. The main objective in this area is to increase uptake of COVID-19, flu, and pneumonia vaccines to reduce COPD exacerbations and hospital admissions in adults.

There are signs of improvement for access and quality of care for people with COPD and asthma. In Bradford district, the proportion of patients with COPD who had a review in the last 12 months increased from 50% in 2020/21 to 69% in 2021/22, what is better than the national numbers of 45% and 60% respectively. Likewise, the proportion of patients with asthma that had a review in the last 12 months increased from 38% in 2020/21 to 62% in 2021/22 for Bradford, compared to 31% and 52% respectively for England.

We recognise there is a long way to go, and we work closely with our partners to ensure we develop pathways of care which meet the needs of our local population.

Action: lung cancer screening programme

Both lung cancer and chronic respiratory diseases can share common risk factors, mainly smoking but also environmental factors, such as exposure to air pollution and carcinogens. Smoking causes 72% of lung cancers, and around 35,000 people die and 48,000 people are diagnosed with lung cancer each year. The low survival rate of this cancer is largely attributed to late diagnosis, at a stage when treatment is less effective.

In 2023, a national targeted lung cancer screening programme was launched to help detect cancer sooner and speed up diagnosis. People aged 55 to 74 with a GP record of smoking will be invited for screenings and offered smoking cessation services. The aim of the programme is to cover 100% of eligible population by 2030, what will support the government target for England to be smokefree by 2030.

The rollout follows early pilots and phase 1 projects conducted on more deprived areas of the country, where smoking prevalence is higher and lung cancer survival rates are lower. In the first phase of the targeted lung health check scheme by NHSE, 3 out of 4 lung cancers were caught at an earlier stage, compared with just a third caught at early stages in 2018.

In West Yorkshire, two ‘targeted lung health check’ (TLHC) projects were delivered in 2023 by BTHFT respiratory service in North Kirklees and Bradford. Most assessments were conducted in mobile CT scanning units located in leisure centres, supermarkets, and GPs. Over 36,000 participants were invited, circa 20,000 undertook a lung check, and over 8500 scans were completed. Discussions for the Bradford District and Craven Phase 2 are underway.

4. FINANCIAL & RESOURCE APPRAISAL

Tackling public health issues requires long term commitment and investment. Much of this already exists and is directed towards activity which will positively influence indicators in the Public Health Outcomes Framework. The Public Health service is grant funded by the Department of Health. There are no immediate financial issues arising from this report. Future investments in public health and urban planning may be needed to enable the Council to make a substantive contribution towards reducing the impact of the environmental determinants of respiratory health outlined in this report.

5. RISK MANAGEMENT AND GOVERNANCE ISSUES

Two areas covered in this report are included in Bradford Council Strategic Risk Register (SRR). SR 18 is managed by public health, so the assurance mechanisms are also listed.

SR 06 ENV Environment and Sustainability

Responding to Climate Emergency by management of CO2e (Carbon Dioxide equivalent) emissions, helping to manage rising costs, resource pressures and increasing exposure to penalties as a result of demographic changes and other volume & capacity pressures, changing targets, legislation, economic and political pressures. The Clean Air Programme to achieve legal limits for air quality in the District has synergistic effects and benefits as for the CO2e Emission Reduction Programme due to the same emission sources.

SR 18 COV Multiple Outbreaks of Infectious Diseases

COVID-19 and other respiratory infections could rise locally causing multiple outbreaks across the district that could leave to further waves of infection. This could lead to reintroduction of control measures like community testing, contact tracing, and social restrictions. Low uptake of COVID/flu vaccines increases the risk of simultaneous outbreaks of COVID-19, flu and other respiratory infections, potentially overwhelming capacity of the healthcare, social care and public health systems.

Assurance mechanisms - On-going monitoring of COVID-19 cases, admissions and deaths in the District; On-going support to NHS immunisation programmes; Contingency plans and escalation routes for PH input to outbreak management.

6. LEGAL APPRAISAL

The provision of public health services to protect the population from respiratory disease and its determinants falls within the Council’s responsibilities for public health under the

provisions of the Health and Social Care Act 2012 and Health and Care Act 2022. Outbreak control and protection against environmental health threats are part of the statutory health protection function of local authorities. The Council collaborates with the NHS and UKHSA through partnerships and joint work agreements in areas like vaccination, control of communicable diseases, and public health advice for individuals and organisations. The provision of healthcare for patients with respiratory disease remains under the responsibility of NHS England.

This report does not raise other specific legal issues.

7. OTHER IMPLICATIONS

7.1 SUSTAINABILITY IMPLICATIONS

See 7.2.

7.2 TACKLING THE CLIMATE EMERGENCY IMPLICATIONS

Actions outlined in this report that contribute to reduce air pollution, increase active travel and increase green areas can contribute towards reducing the speed and impact of climate change. This synergism reinforces the need for integrated approaches to tackle the wider environmental determinants of poor respiratory health, like air pollution, scarcity of green spaces in many urban areas, availability of good public transport links, and climate change leading to extreme weather such as excess cold and heat events.

7.3 COMMUNITY SAFETY IMPLICATIONS

Urban redevelopment initiatives mentioned in this report to improve air quality can also improve community safety. The current transformation programme for parts of the City Centre increases safe walking, cycling and wheeling routes for city centre residents, workers, commuters and visitors, including the large number of young people accessing the sixth form colleges, Bradford College and the University.

7.4 HUMAN RIGHTS ACT

None.

7.5 TRADE UNION

None.

7.6 WARD IMPLICATIONS

Although we have limited access to ward level data on most topics covered in this report, we know that the impact of respiratory disease varies across the district. Part of this can be attributed to variations in access and quality of healthcare including early detection and prevention what highlights the need for targeted work with the NHS. Respiratory health is also strongly influenced by exposure to environmental risk factors and the quality of the built and natural environment, what stresses the need for more cross-sector work and engagement with the different Bradford communities to address wider determinants of respiratory disease.

Living Well stop smoking services and the community engagement actions to improve uptake of COVID and flu vaccines both concentrate resources on the most deprived areas of the district (City and Keighley) which are also where we have highest smoking prevalence and lowest vaccine uptake. Reports on vaccine coverage per GP catchment area are available under request from the NHS immunisation programme.

7.7 AREA COMMITTEE LOCALITY PLAN IMPLICATIONS (for reports to Area Committees only)

7.8 IMPLICATIONS FOR CHILDREN AND YOUNG PEOPLE

Children and young people are more vulnerable to the harm caused by air pollution, adverse weather and climate change, and less able to protect themselves from exposure to tobacco smoke. Asthma is a chronic condition that usually starts in childhood and is influenced by environmental factors and also by second-hand exposure to tobacco smoke including during pregnancy. Although children and young people are less likely to develop severe diseases following respiratory infections like COVID-19 and flu, they are an important target for vaccination programmes because of their role in spread of infectious diseases in the household, school and community.

7.9 ISSUES ARISING FROM PRIVACY IMPACT ASSESMENT

None

8. NOT FOR PUBLICATION DOCUMENTS

None

9. OPTIONS

This report is for information and awareness mainly. The options are to continue or not to support the programmes of work outlined.

10. RECOMMENDATIONS

We invite this committee to note and comment on the information provided in the report and to support ongoing work seeking to address the main challenges outlined.

Elected members can provide unvaluable support through public statements and other awareness raising actions to:

- Initiatives that aim to reduce the health impacts of air pollution, urban development and climate change, like the inclusion of a health in all policies approach in local development policies, instruments and plans.
- Implementation of the Bradford Tobacco Control Strategy, particularly actions to prevent uptake of smoking and vaping in young people and to reduce availability of illegal tobacco in our most deprived communities.
- Initiatives to increase uptake of COVID-19 and flu vaccines and to restore public trust in health advice issued by the local authority, NHS and other local partners.

11. APPENDICES

No confidential information that falls under Schedule 12A of the Local Government Act 1972 were included in this report.

12. BACKGROUND DOCUMENTS