



Traffic, air quality and our health, in Bradford, Manningham, Frizinghall, Shipley and Bolton Woods

This factsheet highlights the cost to our health of air pollution caused by traffic. Harmful emissions of gases and tiny particles – these are invisible killers. Some traffic is necessary but is there too much and is it too dirty?

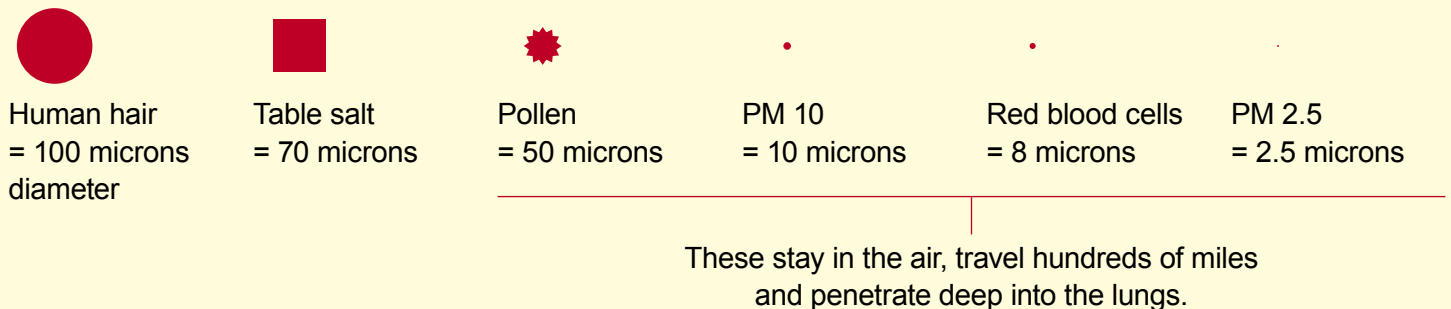
WHAT'S THE PROBLEM?

Bradford Council says that *“Air pollution is recognised as a contributing factor in the onset of heart disease and cancer... Air pollution particularly affects the most vulnerable in society: children and older people, and those with heart and lung conditions... Areas with poor air quality are also often the less affluent areas.”* But Bradford Council are continuing with old plans to widen Canal Road and Valley Road bringing more traffic to the roads between Bradford and Shipley, through Manningham, Frizinghall and Bolton Woods.

WHAT IS AIR POLLUTION?

Air pollution is a mix of particles and gases. Particulates and nitrogen dioxide (NO₂) are the main harmful components of our air pollution. Outside our homes, road traffic is the main source of both.

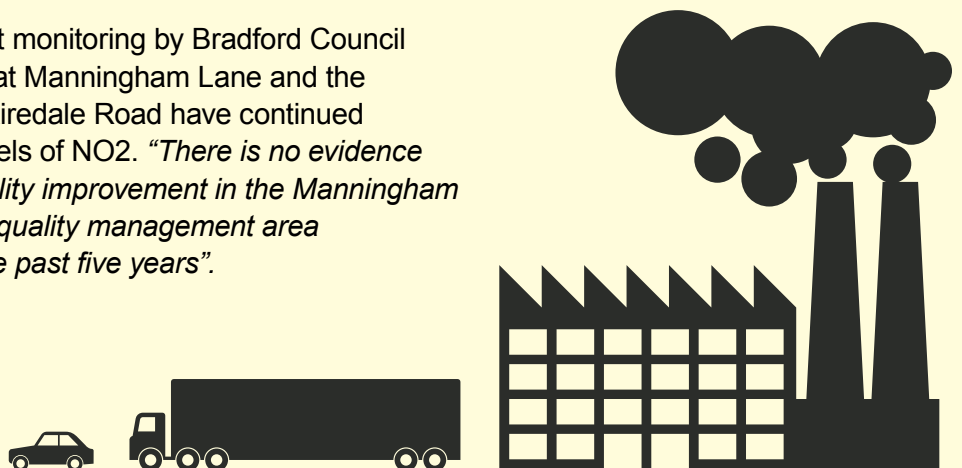
Particulate Matter in the air is known as PM 10 and PM 2.5 which are smaller in diameter than a human hair.



Particulates come from burning fuel and from the friction of brakes and tyres on all vehicles. NO₂ also comes from burning fossil fuels including petrol – DEFRA estimates that 80% of it in our area comes from transport, mostly road vehicles.

Bradford's air quality improved markedly during the lockdown but by 2021 was back up to illegal values (40mg/m³ of NO₂). Bradford has the worst nitrogen dioxide levels of 49 cities studied in the UK, both before and after COVID.

The latest monitoring by Bradford Council shows that Manningham Lane and the Shipley Airedale Road have continued illegal levels of NO₂. *“There is no evidence of air quality improvement in the Manningham Road air quality management area during the past five years”.*



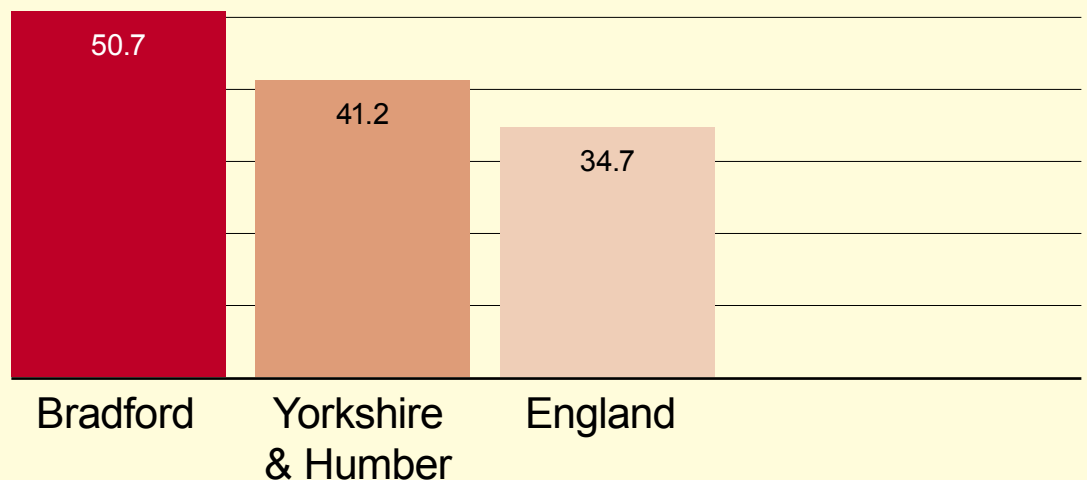
How does air pollution affect our health?

Air pollution causes inflammation of the airways leading to cough, mucus and shortness of breath. In children it reduces lung development, and increases respiratory infections.

- Each year around 125 people die in Bradford District from preventable disease caused by air pollution.
- Health studies show that early death (before the age of 75) from respiratory disease in the Bradford area is amongst the highest in England.
- More than a third of childhood asthma cases in Bradford are a result of air pollution.
- In Bradford, fine particles PM2.5 cause 4.6% of total mortality, representing 2,300 years of life lost.
- Emergency hospital admissions for asthma of 0-18 year olds are at a greater rate in Bradford District than both Yorkshire & Humber and England.

Early mortality from respiratory diseases

Under 75 mortality rate from respiratory disease, 2016-18 (most recent), per 100k population.
Source: ASR2020.



According to Bradford's annual Air Quality report, "*The annual health cost to society of the impacts of particulate matter alone in the UK is estimated to be around £16 billion*". In Bradford, these health costs are equivalent to more than half of all the Council Tax collected here.

The impact of difficult breathing on every individual affected is personal and devastating.

Asthma

Hayfever has dramatically increased in recent years and now affects one fifth of the UK population. Air pollution from traffic increases our sensitivity to pollen. Exhaust fumes cause pollen grains to split open more easily and trigger allergic reactions in hayfever sufferers.



Pollutants from cars react with sunlight to create ground level ozone, which can trigger asthma attacks, and the nitrogen dioxide in diesel fumes can boost asthma, especially in children.

Air pollution affects people throughout their lifetime



Pregnancy

- Low birth weight



Children

- Asthma
- Slower development of lung function
- More wheezing and coughs



Adults

- Heart disease
- Lung cancer
- COPD
- Diabetes



Elderly

- Lung cancer
- Diabetes
- Dementia
- Heart attack
- Heart failure
- Strokes

Adapted from Public Health England.

Legal limits or safe limits?

The Clean Air Zone aims to bring Nitrogen Dioxide within legal guidelines. An international team of researchers with Born in Bradford found that 253 early deaths in Bradford could be prevented by reducing air pollution well below the guidelines. Reducing air pollution to legal levels would prevent just 17 early deaths. To take Bradford people's lives seriously we must aim to reduce air pollution to healthy levels, not just stay within the current legal limits.

What's the challenge in Bradford?

Planned dual carriageway along Canal Road/Valley Road will bring more through traffic avoiding the M62 to get to the North West, and more local car journeys. The bottleneck of Shipley will cause vehicles to use alternative routes through Manningham, Heaton and Cottingley. Extra traffic will mean poorer air quality, with all the effects described above, over the entire area between Bradford and Shipley

Can anything be done about this?

The Council itself aims to

- Reduce the number of car trips, by encouraging walking cycling and public transport, sharing cars, and working at home, including through its Active Travel Neighbourhoods.
- Reduce emissions from vehicles, by fitting cleaner engines and replacing old vehicles with cleaner ones, including through the Clean Air Zone.
- Encourage new housing, offices and industry that create a minimum of extra trips.
- Educate about air quality, and monitor its changing levels.

The Council's own assessment reports that a 10% reduction of car journeys would save £2.9m in Bradford on health problems, with similar savings from improvement to engines. Think of the benefit to the people whose health would be improved.

We agree with these aims. Yet the Council has not listened to its own advice and wants to increase the road capacity in this area.

What can you do?

- Tell your local councillor your views.
- Make a louder organised voice – join us at BSTA by adding your email address to our mailing list.

The Bradford-Shipley Travel Alliance works with our 20 affiliates to encourage alternatives to road-widening, alternatives that achieve a shift from car traffic to other transport, to reduce emissions that are harmful to health and climate. We are not a political party but a group of concerned citizens and community organisations who wish a better future for all of us.

We also think that low-income drivers need support to improve their cars or change to public transport. Our website gives alternative plans that would reduce congestion with less traffic.

Please visit our website at www.bsta.org.uk and sign up there for our monthly newsletter



Also see FACT SHEET 1 – Traffic. We intend to produce further factsheets including the impact of traffic on climate.

Sources: 'Bradford Council says...': Annual Status Report on Air Quality 2020 (ASR). Study of 49 cities: Centre for Cities report using DEFRA figures. 'Continued illegal levels of NO2': ASR. 'How does air pollution affect our health': JSNA (Bradford Joint Strategic Needs Assessment), respiratory disease). Health costs vs Council Tax: BSTA calculation using Bradford 1/150th of UK population. '253 early deaths': Born in Bradford research in Environment International 2018. Council aims: ASR. 'Save £2.9m': JSNA, air quality.

This factsheet is published by Bradford-Shipley Travel Alliance, 2022.