

Improving Air Quality #BrumBreathes

Public Health Priorities Overview
June 2019



Making a positive difference everyday to people's lives

Birmingham Public Health Priorities

The Public Health Priorities Green Paper set out some of the significant health issues affecting individuals, families and communities in Birmingham. This draws on analysis of the data and sets out some of the evidence based opportunities for action by individuals, organisations and strategic partnerships.

This presentation is part of a suite of resources supporting the Green Paper, providing background information in each of the proposed priority areas.

The Green Paper was consulted on in Spring 2019 and this consultation is informing the development of a new health inequalities framework for the city.

Birmingham Public Health: Priorities on a Page

Addressing health inequalities because every child, citizen and place matters

Priority 1: Child health

- Reducing infant mortality
- Taking a whole systems approach to childhood obesity
- Supporting the mental and physical health of our most vulnerable children

Priority 2: Working age adults

- Supporting workplaces to improve their employee wellbeing offer
- Addressing the cumulative impact of unhealthy behaviours such as tobacco control, substance misuse and physical inactivity
- Supporting the mental and physical health of our most vulnerable adults

Priority 3: Ageing well

- Reducing social isolation
- Providing system wide information, advice and support to enable self-management
- Developing community assets
- Supporting the mental and physical health of our most vulnerable older people

Priority 4: Healthy environment

- Improving air quality
- Increasing the health gains of new developments and transport schemes
- Health protection assurance and response including screening, immunisation and communicable diseases

Maximising the public health gains from hosting the Commonwealth Games

Our vision:

To improve and protect the health and wellbeing of Birmingham's population by reducing inequalities in health and enabling people to help themselves

Our values:

- Equity
- Prevention
- Evidence based practice

Our approach:

- Population based
- Proportionate universalism
- Intelligence led
- Strategic influence
- Communication
- Joint working
- Health in all policies

Birmingham City Council Plan: 2018-2022

Challenges and opportunities

BIRMINGHAM HAS
1,141,000
CITIZENS
46%
UNDER 30



Our population is expected to rise to 1.31million by 2039 (15% rise from now) and 24% predicted rise in adults aged 85+ by 2028.

90
A
DIFFERENT
LANGUAGES
ARE SPOKEN

Birmingham has a young and richly diverse population with 25% of the population under-18 and 42% from Black and Minority Ethnic communities.

OUTSIDE OF LONDON
OUR CITY IS THE
MOST
ETHNICALLY &



CULTURALLY
DIVERSE



1,789
CHILDREN
IN CARE
(UNDER 18)

1 in 3 children live in poverty and there is a gap in life expectancy between the wealthiest and poorest wards. English is not the first language for 42% of school children.

1,836
FAMILIES
SUPPORTED BY
FAMILY SERVICES*

(*THINK FAMILY)

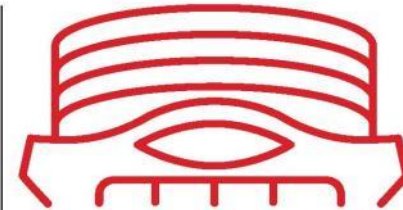


Unemployment is higher than the UK average – 6.4% in Birmingham compared to 2.6% in the UK. Unequal employment rates across Birmingham – e.g. Hodge Hill at 46% compared to 78% in Sutton Coldfield. Air pollution causes up to 900 premature deaths (deaths before the age of 75) per year.



61,818
COUNCIL HOUSES

89,000 new homes are needed by 2023: street homelessness is on the rise and 1 in 88 people (12,785) are homeless.



MOST RAPIDLY
IMPROVING CITY

to live and work in with exciting new developments in Birmingham city centre, delivering almost 13,000 new homes, over 40,000 jobs and adding £2billion to the local economy.

COMMONWEALTH
GAMES

will reposition Birmingham globally,

GENERATING
£526m

for the regional economy and creating 1,000 new homes.



Wide ranging lively cultural offer, including world class theatres, Town Hall and Symphony Hall and a rich tapestry of festivals.

CITIZENS'
TOP PRIORITIES

- #1** Clean Streets (57%) 
- #2** Refuse Collection (55%) 
- #3** Child Protection and Safeguarding (37%) 
- #4** Road and Pavement Repairs (37%) 
- #5** Care and Support for Older and Disabled People (36%) 

IN 2017, MORE THAN

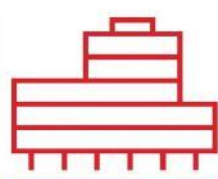
12,000
NEW COMPANIES
OPENED THEIR DOORS
FOR NEW BUSINESS
IN BIRMINGHAM



HOME TO OVER
20
MUSEUMS

571
PARKS

More than any other European city.

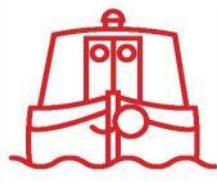


4 MILLION VISITORS TO
CITY'S 37
LIBRARIES
ANNUALLY



12,373
ADULTS (18+)
RECEIVING
LONG-TERM SUPPORT

35 MILES
OF WATERWAYS
MORE CANALS
THAN VENICE



HOME TO
5
UNIVERSITIES
with 87,400 students (aged 16-64).

Making a positive difference everyday to people's lives

BIRMINGHAM

WORKING TOWARDS A HEALTHY CITY: HEALTH INEQUALITIES

BIRMINGHAM POPULATION

1,137,123

Birmingham
Population

Est. Population 2017

1,073,045

Census 2011

56.3%

of Birmingham
residents live in the
20% most deprived
areas in England

LIFE AT THE BOTTOM

People who live in the
most deprived 10% are:

3x

MORE LIKELY TO



be ADMITTED
for PREVENTABLE
CONDITIONS



DIE
PREMATURELY
from PREVENTABLE
CONDITIONS

AT RISK & VULNERABLE

8%

OF ALL IN-PATIENTS
are of
BLACK ETHNICITY

more than expected

BLACK ETHNICITY

12% IN-PATIENTS
with MENTAL
ILLNESS

9% A&E
PSYCHIATRIC
ATTENDANCES

2x more than expected

LIFE EXPECTANCY

84.6 MOST AFFLUENT 86.4



9.9

years less lived in
the most deprived
areas

6.2



74.7 MOST DEPRIVED 80.2

People who live in the
most deprived 10% are:

3x

MORE LIKELY TO



be IN CONTACT
WITH MENTAL
HEALTH
SERVICES



have a
LONG TERM
CONDITION

SEVERE
MULTIPLE
DISADVANTAGE
measured as

Substance Misuse
Homelessness
Offenders

6,700

affected by 2 SMD

B'ham & S'hull

2,000

affected by 3 SMD

HEALTHY LIFE EXPECTANCY

59.9 BIRMINGHAM 58.9



3.5

years less lived in
good health

4.9



63.4 ENGLAND 63.8

128,655

CHILDREN LIVE
IN THE MOST
DEPRIVED 10%

aged 0-15 years

1 IN 4

CHILDREN LIVE
IN POVERTY



Supported Adults with learning disabilities

1%

are in
paid employment

64.1%

live in stable
accommodation

Improving Air Quality

WHAT IS AIR POLLUTION?



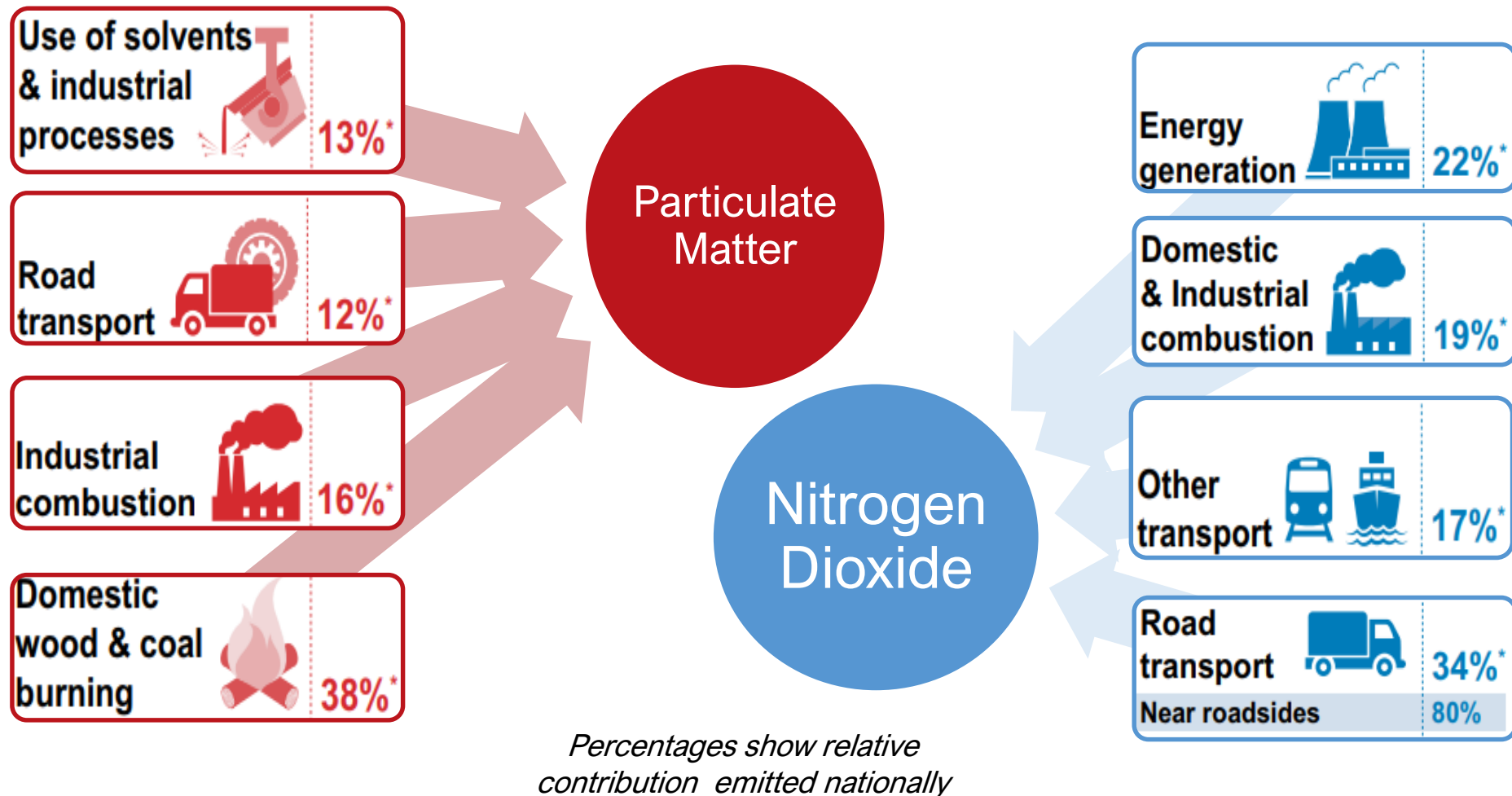
What pollutes the air in Birmingham

- There are several types of pollutant in the air.
- The two most important in terms of health impact are:
 - **Nitrogen Dioxide**
 - **Fine particulate matter**

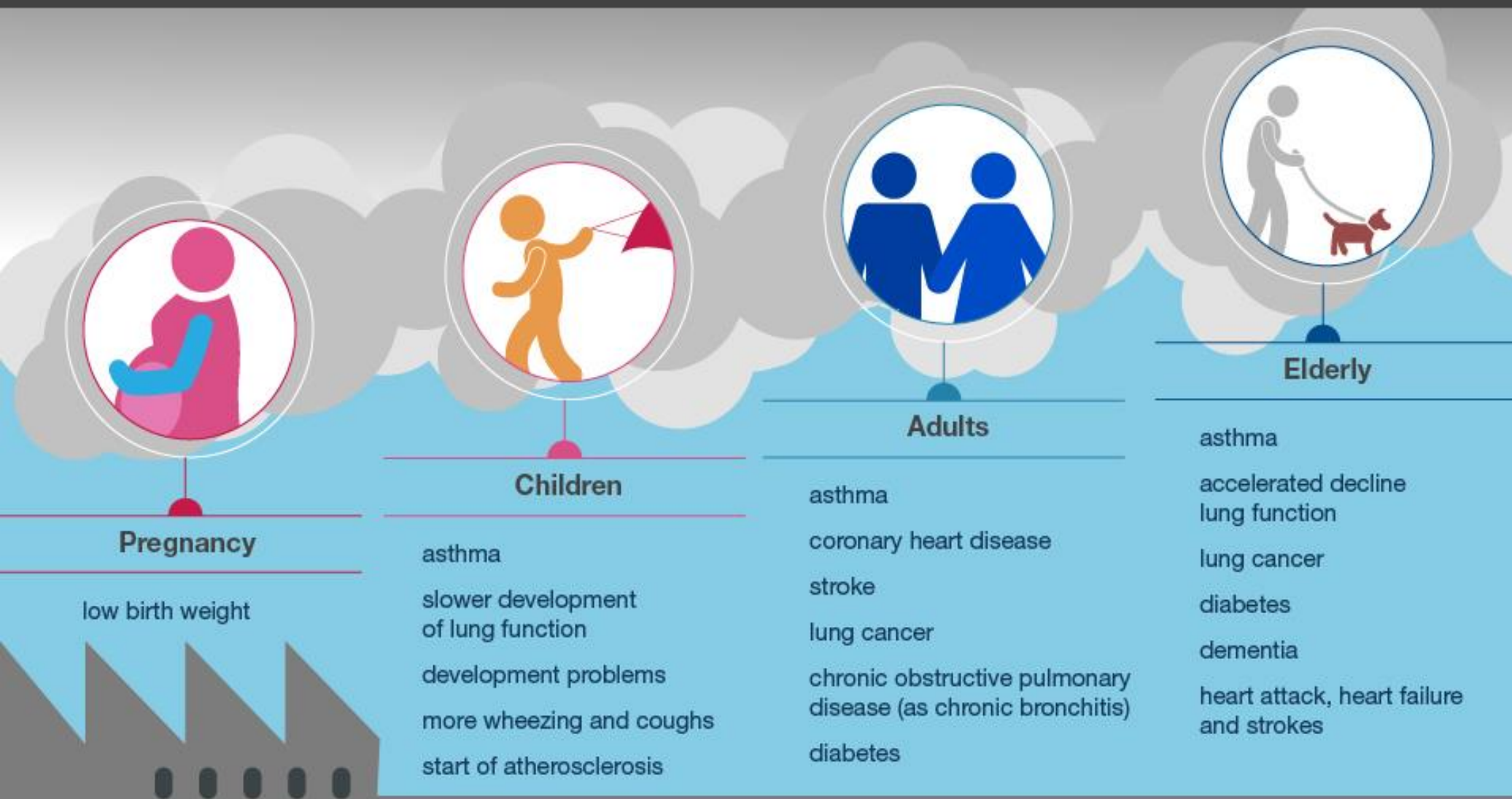
Particulate matter (PM) is made of tiny particles in the air that can be breathed in. Smaller particles go through the lungs and into the blood stream.

Nitrogen dioxide (NO₂) is a gas that is created during combustion. In higher concentrations it can enflame the lungs.

How does pollution get into the air?



Air pollution affects people throughout their lifetime



Improving Air Quality

WHAT IS THE PICTURE IN BIRMINGHAM?



Air pollution in Birmingham

- Levels of particulate matter and Nitrogen Dioxide are highest around the city centre
- Some parts of Birmingham are in the most polluted 10% of areas in England
- On some roads in the city centre, levels of Nitrogen Dioxide are above the legal limit



Air pollution harms Birmingham's residents

UP TO

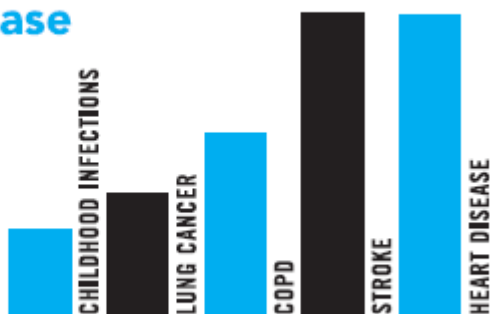
900
DEATHS
IN BIRMINGHAM

per year linked to man-made air pollution.



LINKED TO

Heart disease
Diabetes
Asthma
Obesity
Cancer
Dementia



Deaths due to air pollution worldwide per year.

LINKED TO

Still births
Infant deaths
Low birth weight
Organ damage
Premature deaths

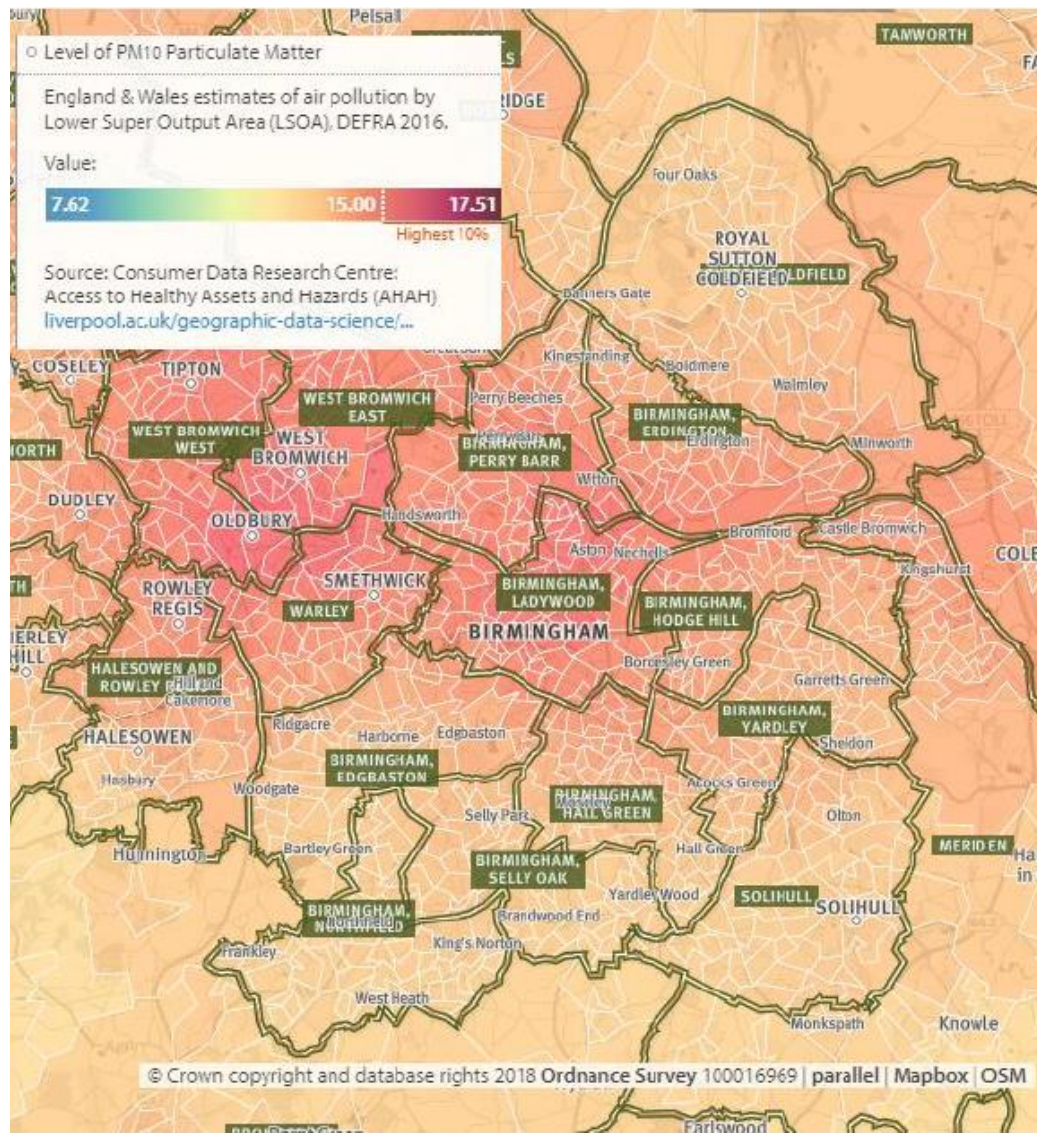


AFFECTS THE

VULNERABLE
& DEPRIVED
AREAS MOST



Air pollution mapped

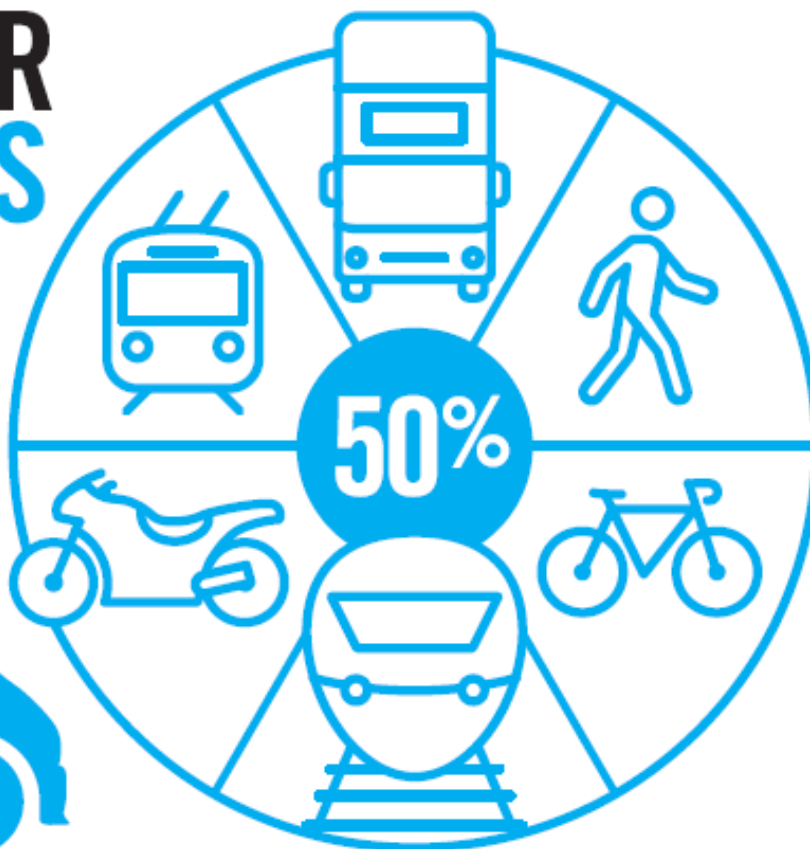


Transport is a major source of Birmingham's pollution

VEHICULAR EMISSIONS

2.8m

The number of journeys made by the residents of Birmingham each day comprises 50% by car and 50% by all other forms of travel combined.*



3.8
0.5m

The average number of journeys per weekday in car-using households.

The number of car journeys made into Birmingham by people from outside of the city.

250k

The number of car journeys made by Birmingham residents that are less than one mile.

Improving Air Quality

WHAT WILL MAKE IT BETTER?



The approach to changing the way we travel

Reduce

- The amount of journeys that need to be made – or at least that travel through locations with the poorest air quality

Shift

- Journeys to public transport, walking and cycling.

Improve

- Clean up the emissions of the trips which are essential – stimulating take up of cleaner vehicles

Create opportunities and promote active travel

Addressing air pollution by providing **good quality infrastructure** and **public transport** and encouraging people **to walk** and **cycle** rather than drive can help people to become fitter and healthier.



ROUTE MAP TO

#brumbreathes

CLEANER AIR IN BIRMINGHAM

Encouraging transport behaviour change

2018

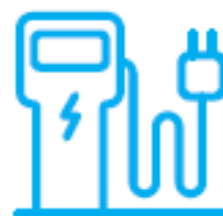


Consultation
into Clean Air Zone
proposals begins

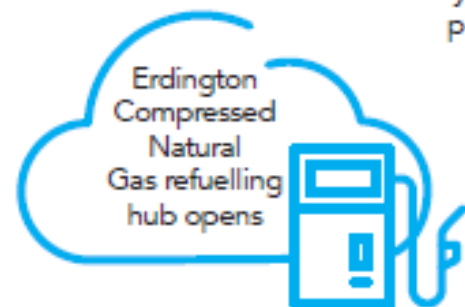
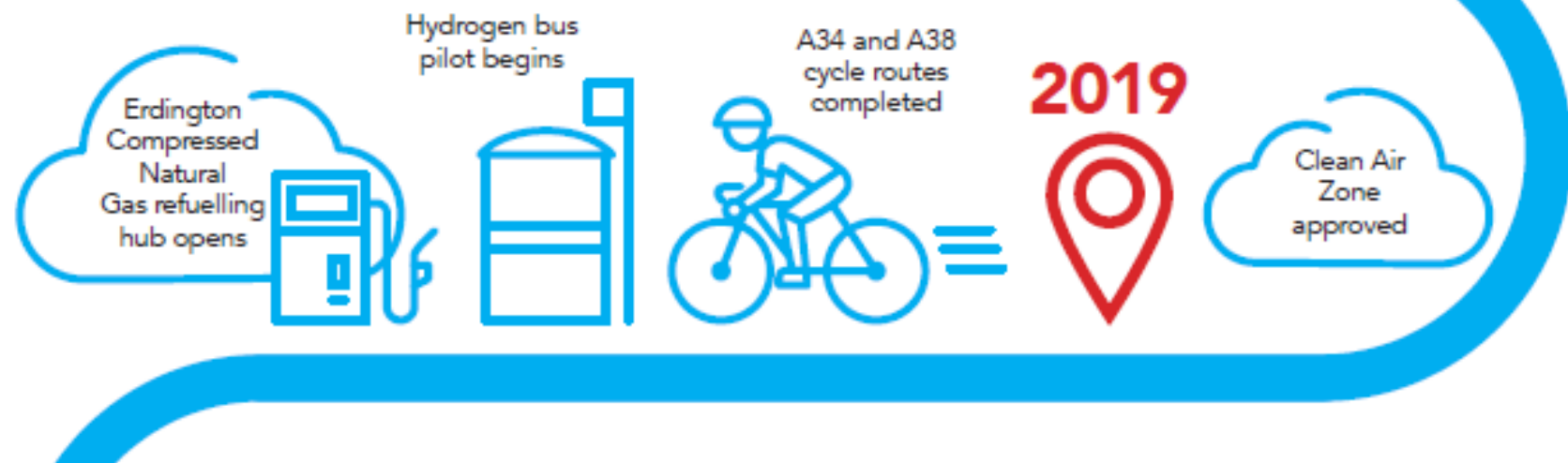


Tyseley
Energy Park
opens

Electric vehicle charge point
network partner appointed



Taxi and public
electric vehicle charge
points installed



Erdington
Compressed
Natural
Gas refuelling
hub opens

Hydrogen bus
pilot begins



A34 and A38
cycle routes
completed

2019



Clean Air
Zone
approved

Council fleet vehicles
continue to switch
to greener alternatives



Metro
Centenary Square
extension opens



Taxi
emissions policy
takes effect



Commercial vehicle
electric vehicle charge
point network completed



Clean Air
Zone
implementation



Perry Barr
CNG refuelling
hub opens



2020



2021



Metro Edgbaston
extension set
to open



2022



New Sprint Rapid
bus routes launch



Metro
Eastside extension
set to open

Improving Air Quality

WHAT ARE WE DOING AT THE MOMENT?

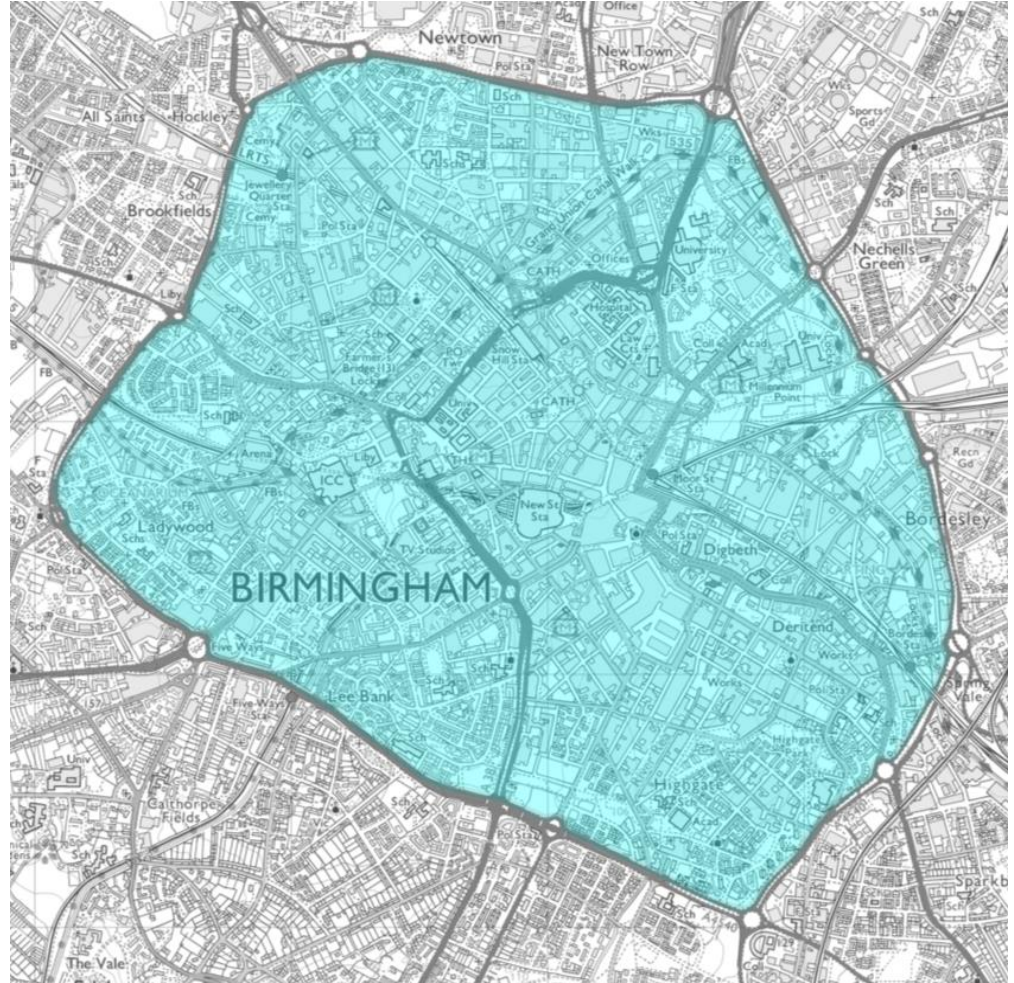


Introducing a Clean Air Zone (CAZ)

Cause/Risk Factor	Targeted Interventions	Universal Actions
High concentrations of NO ₂ and particulate matter PM ₁₀ & PM _{2.5}	Introduction of a geographically targeting zone	Work across local authority boundaries to address regional air pollution and cleaner ways to travel into Birmingham from outside the area
	Target high traffic congestion areas by supporting more frequent and reliable public transport	Support zero- and low emission travel – e.g. walking/cycling, zero- low emission vehicles, integrated transport system

Introducing a Clean Air Zone (CAZ)

- The aim to is to reduce the levels of Nitrogen Dioxide in the city center
- To include all the roads within the Middleway Ring Road (A4540), **but not the Middleway itself**
- To be introduced in January 2020



Involving others in the challenge

Cause/Risk Factor	Targeted Interventions	Universal Interventions
New developments and housing increases car travel	Show how planning decisions can have a better impact on air quality	Include air pollution in 'plan making' by all tiers of local government
Low awareness of road traffic related air pollution	Ensure healthcare professionals are aware of what it means for patients	Base actions to raise awareness through behaviour change and community engagement
High concentrations of NO ₂ and particulate matter PM ₁₀ & PM _{2.5}	Work with schools and areas with vulnerable individuals to measure pollution and take action	Provide support for all citizens to walk and cycle more

How individuals can make a difference

REDUCE AIR POLLUTION

5 SIMPLE THINGS

1 CHANGE THE WAY YOU TRAVEL

By leaving your car at home and choosing to cycle, walk or use public transport, you can help reduce air pollution by 20%.



2 CHANGE THE TIME YOU TRAVEL

If you must use your car, avoid morning and evening rush hours – this will reduce congestion and produce less pollution as a result of not idling in traffic jams.



3

CHANGE THE ROUTES YOU TRAVEL

If you are cycling or walking, avoid main roads and choose routes using quieter back streets, parks or canals. Even walking on the side of the pavement furthest from the road can help reduce your exposure to air pollution.

**4**

CHANGE THE WAY YOU DRIVE

Driving economically – such as accelerating gently and sticking to speed limits – uses less fuel, saves money, reduces the risk of having an accident and reduces air pollution.

**5**

THE SCHOOL RUN

Cycling or walking to school with your children will help reduce the impact of air pollution. If you do have to drive then turn your engine off when waiting by the school gates.



Tell Us What You Think

- This presentation is one of a group of slides that sets out the priorities for the public's health in the city of Birmingham.
- The Public Health team are keen to hear what you think about the slides and whether they have helped understand the challenges facing the city.
- If you would like to give us feedback please email:



@BhamCityCouncil



@birminghamcitycouncil



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