



HEALTH AND WELLBEING BOARD
18th January 2024

ITEM 07a

Report sponsor: Dr Robyn Dewis, Director of Public Health

Report author: Dr Robyn Dewis, Director of Public Health

Health Protection- Derby and Derbyshire Air Quality Strategy

Purpose

- 1.1 To provide the Board with an update on the Derby and Derbyshire Air Quality Strategy.
- 1.2 To provide the Board with assurance on progress made and the structures in place to deliver the strategy.

Recommendations

- 2.1 To note the updated Air Quality Strategy.
- 2.2 To note the structures in place to deliver the strategy.
- 2.3 For partners to support the delivery of the strategy, including consideration of these priorities within their own organisational strategies.

Reasons

- 3.1 Poor air quality has a significant impact on health, contributing to heart and lung disease, stroke, cancer, and dementia. Although air quality is impacted by national and international factors, there are changes we can make to improve the air in Derby through partnership and individual action, from all who live and work in our city.
- 3.2 The strategy is developed and owned by the Derby and Derbyshire Air Quality working group, a subgroup of the Derby and Derbyshire Health Protection Board.

Supporting information

- 4.1 We can be exposed to poor air quality outdoors, but also inside buildings including our homes. Air pollution can be from natural causes, but those from human activity include transport sources, combustion from heating, industrial activities, and certain farming activities. The 2022 Chief Medical Officer report <https://www.gov.uk/government/publications/chief-medical-officers-annual-report-2022-air-pollution> highlighted the impact of solid fuel burning on indoor air quality.

- 4.2 The key airborne pollutants which have an adverse impact on health are particles (respirable particulate (PM10) and fine particulate (PM2.5)) plus nitrogen dioxide (NO2). Other pollutants include sulphur dioxide, ammonia, and non-methane volatile organic compounds. The greatest exposure to these tends to be more concentrated in areas of deprivation, contributing to poorer health, excess mortality and exacerbating health inequality.
- 4.3 The Derby and Derbyshire Air Quality Strategy was originally published in 2020. It has been refreshed including a review of measures used to monitor progress. The three themes of the strategy are:
1. Facilitate travel behaviour change.
Shifting everyday travel away from private car usage, towards walking and cycling and public transport and providing sustainable solutions can reduce air pollution locally. Promotion of walking and cycling can also provide additional health benefits.
 2. Reduce sources of air pollution.
The most effective interventions will involve reducing sources of air pollution. Across Derbyshire the main sources of air pollution include transport and heat sources.
 3. Measure, produce plans and mitigate against the health impacts of air pollution.
Air pollution has health impacts and there is a need to mitigate against this across the population. Furthermore, air pollution does not affect all individuals equally. Exposure to air pollution depends upon where people live, and work and individual susceptibility can also differ. Therefore, inequalities also need to be considered.
- 4.4 Over recent years there has been a trend to improving air quality across Derby and Derbyshire. There have been challenges for the working group in finding local, meaningful measures, some proxy measures have been used when key measures are not available, and these will be reviewed during the period of the strategy.

The performance indicator outcomes for the calendar year 2022 (latest available) and relevant to this report are summarised below. These have been compared to a baseline year of 2019. The latest data available (2022) is shown in Table 1 overleaf:

Table 1 Derbyshire County and Derby City Air Quality Strategy Performance Indicator Outcomes 2021

KPI	2019 (Baseline Comparison)	2022
Annual average concentration of nitrogen dioxide in the air (Derby and Derbyshire)	27.2µg/m ³	23.7µg/m ³
Highest recorded annual concentration of nitrogen dioxide in the air (reported separately for Derby and Derbyshire) expressed as µg/m ³	Derby – 44.6 ¹	Derby – 41.1 ²
	Derbyshire – 52.8 ³	Derbyshire – 53.1 ⁴
Percentage of monitoring sites with a concentration of nitrogen dioxide in the air above 40µg/m ³ (Derby and Derbyshire)	4.2%	2.6%
Annual average concentration of fine particulate matter (PM _{2.5}) in the air at monitoring sites (Derbyshire)	9.7µg/m ³	7.6µg/m ³

Note 1 Measured at Stafford Street, Derby

Note 2 Measured at 201/203 Nottingham Road, Derby

Note 3 measured at 25 Buxton Road, Ashbourne

Note 4 measured at Site ref 37, Buxton Road, Ashbourne, this site was not in use in 2019.

There is no current evidence that air quality objectives for fine particulates (PM10 and PM2.5) are being exceeded anywhere in the county or city. However, there is a lack of local data for these pollutants.

4.5 The government published a revised Air Quality Strategy for England in April 2023 https://assets.publishing.service.gov.uk/media/64e8963d635870000d1dbf9d/Air_Quality_Strategy_Web.pdf, including guidance for local authorities to make best use of their existing powers. Its key objectives align well with our local strategy:

1. Planning reforms helping to deliver better air quality.
2. Building capacity in local councils through training, guidance and knowledge sharing
3. Reducing emissions from industrial sources through improved enforcement of environmental permits
4. Reducing pollution from domestic burning through smoke control areas and cleaner fuels
5. Boosting active travel and public transport to improve air quality.
6. Raising awareness within local communities of air quality impacts and how to reduce them.

Further national strategy developments will continue to have a local response and the strategy will be regularly reviewed.

Public/stakeholder engagement

- 5.1 The Derby and Derbyshire Air Quality Strategy is developed through a partnership group.
- 5.2 Public and stakeholder engagement is fundamental to the implementation of the strategy.

Other options

- 6.1 None considered.

Financial and value for money issues

- 7.1 Capacity to implement the strategy is found from within existing resources. There may be future financial implications in developing monitoring of fine particulates.

Legal implications

- 8.1 Local Authorities have duties and powers in relation to managing air quality.

Climate implications

- 9.1 Key actions in reducing air pollution, e.g., increasing active travel, positively contribute to actions to reduce carbon emissions.

Socio-Economic implications

- 10.1 Poor air quality has the greatest impact on those in our most socio-economically deprived populations. Tackling and improving air quality is a matter of social justice.

Other significant implications

- 11.1 NA

This report has been approved by the following people:

Role	Name	Date of sign-off
Legal		
Finance		
Service Director(s)	Dr Robyn Dewis, Director of Public Health	22/12/2023
Report sponsor		
Other(s)	Karl Suschitzky, Senior Environmental Health Officer	02/01/2024

Background papers:	
List of appendices:	Derby and Derbyshire Air Quality Strategy