

DERBYSHIRE HEALTH AND WELLBEING BOARD

31st January 2019

Report of the Director of Public Health

Proposal to develop a Health and Wellbeing Board Air Quality Strategy

1. Purpose of the report

To seek approval for the development of a Health and Wellbeing Board Air Quality Strategy, and agree the strategies strategic aims and objectives.

2. Information and analysis

Why develop an Air Quality Strategy?

The Health and Wellbeing Board agreed to “work to lower levels of air pollution” as a key priority within the Health and Wellbeing Board Strategy 2018 onwards. The development of an Air Quality Strategy would support action and governance of the Boards priority.

Even modest decreases in air pollution can lead to population impacts including increases in life expectancy and reduce morbidity. Similarly interventions to address air quality will likely deliver wider public health benefits, including increases in physical activity and support reductions in health inequalities.

The cumulative effect of a range of interventions to improve air quality has been shown to have the greatest potential to reduce impacts on health. An effective strategy therefore requires a multi-organisational approach involving a range of partners and disciplines such as spatial and transport planners, environmental and public health, local political and community leaders and the public. The partners of the Health and Wellbeing Board are therefore well positioned under a shared vision to work collaboratively to improve public health through the reduction of local air pollution.

Developing an Air Quality Strategy

A growing evidence base exists which examines the most effective interventions to reduce air pollution at a local level, including NICE guidance and soon to be published evidence review by Public Health England. This provides a strong evidence base to inform the development of local Strategy.

Interventions which seek to reduce sources of pollution and provide additional health benefits should be prioritised over interventions which seek to mitigate risk and reduce exposure.

Five core strategic aims are proposed;

- Working together; Build a stronger working relationship across Derbyshire, and will seek to support and influence national policy and strategy.
- Lead by example; We will ensure our own practice reduces the impacts of local authorities and partners on Derbyshire's air quality
- Support travel behaviour change; Work collaboratively to support modal shift amongst our workforce and wider population, through the promotion of active travel, investment in infrastructure and travel planning.
- Reduce sources of air pollution; Work to implement measures to reduce sources of air pollution through air quality management areas, planning and urban design, and supporting infrastructure for low emission vehicles.

Mitigate against the impact of air pollution; Seek to reduce the impact of air pollution with particular reference to those who are vulnerable to its impacts including children, elderly and those with long term conditions.

Under each strategic aim it is suggested that strategic actions sit with identified lead partner agencies. It is suggested that the Air Quality working group (a sub group of the Health and Wellbeing Board) develop these strategic actions, with relevant key partners and present a draft strategy to the Board by no later than December 2019, for adoption in 2020.

A ten year strategy is recommended in order to support long term change, with annual measurable objectives and actions within a supporting action plan. As evidence on the impact of air pollution on health is constantly advancing, it will be important to ensure the strategy is regularly reviewed in line with changes in evidence base and changing pollution levels locally.

It is recommended that the strategy be monitored through the air quality working group, with annual progress reported to the Health and Wellbeing Board. Existing data from the network of air quality monitoring sites and modelled data, will be utilised to support performance monitoring against measurable targets. The Strategy will seek to reflect National policy and integrate within local relevant policies and strategies. Further supporting information is provided at Appendix 1.

3. Recommendations

That the Health and Wellbeing Board;

1. Approve the development of an Air Quality Strategy through the Air Quality Working Group.
2. Approve the development of Strategic objectives and action under the five outline core themes.
3. Agree that progress subsequently be monitored and reported through the Health Protection Board
4. Agree to receive the final draft Strategy for comment and sign off by December 2019.

Dean Wallace
Director of Public Health
Derbyshire County Council

Supporting information

The impact of air quality on health

Air pollution is a mixture of particles and gases that can have an adverse effect on health. Air pollution has a significant effect on public health, and poor air quality is the largest environmental risk to public health in the UK. Costs to society are estimated at more than 20 billion pounds every yearⁱ. Epidemiological studies have shown that long-term exposure to air pollution (over several years) reduces life expectancy, mainly due to cardiovascular and respiratory causes and from lung cancer. The annual mortality burden of human-made air pollution in the Derbyshire is roughly equivalent to 402 deathsⁱⁱ. Health can be affected both by short-term, high-pollution episodes and by long term exposure to lower levels of pollution. Air pollution plays a role in a range of major health issues including cancer, asthma, stroke and heart disease, diabetes, and obesity. The impact of air pollution affects the whole population, however disproportionately affects the young, older people, those with underlying health conditions and the most disadvantaged within our communities.

Man-made sources of outdoor air pollutants include transport, household burning of solid fuels, and industrial activities. Highest levels are seen near the sources of pollution. Small particulate matter (PM) and nitrogen dioxides (No₂) have the greatest epidemiological link to health outcomes, with traffic related and combustion heating sources being the most significant contributors. Evidence highlights adverse health effects from air pollutants are observed at lower exposure levels than those outlined within National air quality objectives and European Directive limit and target. Further action is needed to achieve air pollution levels below current objectives and in line with World Health Organisation recommendations.

National Strategy

The profile of air quality has increased nationally in recent years with a number of policy and strategies supporting change to improve air quality including most recently the National Air Quality Plan 2017, Clean Air Strategy 2018 and Road to Zero 2018.

Air quality in Derbyshire

Under the Environment Act 1995, local authorities in the UK are required to assess air quality within their administrative areas and report annually. When potential breaches of the Air Quality Standards (AQS) occur, an Air Quality Management Area (AQMA) is declared and an Air Quality Action Plan (AQAP) developed.

There are currently 6 Air Quality Management Areas (AQMA) in Derbyshire which are geographical located next to busy roads, these include;

- Chesterfield, one AQMA on Church Street, Brimington;
- Erewash, two AQMA East of the M1 Motorway in Sandiacre and Long Eaton
- Bolsover, one AQMA in South Normanton (near A38), two in Barlborough close to the M1

High Peak Borough Council are currently proposing an AQMA along the A628 Woodhead Road, Tintwistle. Bolsover District Council are looking to revoke two of the AQMA in Barlborough, with the possibility of Erewash also revoking its AQMA on the M1.

NO₂ is the most widely measured air pollutant across Derbyshire. In recent years this monitoring data has been collated by the Chief Regulators Group and presented to the Health Protection Board (a sub group of the Health and Wellbeing Board) on an annual basis. Medium term analysis (7 year range) shows improvements in air quality at all monitoring sites within AQMA and 90% of sites outside of AQMA.

Local Strategy

Following a paper to the Health and Wellbeing Board in 2016, the Derbyshire Air Quality Working Group was established across Derbyshire County and City. The group aims to agree drive progress on air quality, receive assurance on progress, facilitate strategic relationships between stakeholders, and support action based on best available evidence. The group chaired by the Director of Public Health for Derby City, is formed of a range of stakeholders including Borough and District Environmental Health, Public Health, Highways, Planning, Sustainable Travel, voluntary sector, and health representatives, and acts as a sub group of the Health Protection Board.

Specific actions from partners have included;

- The production of air quality heat maps
- Initiatives to raise the profile of air quality including participation in Clean Air Day, Low Emission events, attendance at Sustainable Travel and Planning Groups
- Annual report to Health Protection Board of trends and issues related to Air quality locally
- Evidence review
- Development of supplementary planning guidance for local planners
- Links to wider strategic plans including Cycle Plan and supporting the development of a Derbyshire County Low Emission Strategy
- Links with Healthy Homes teams to examine evidence on reducing solid fuel usage across the County

ⁱ Royal College of Physicians (RCP). Every breath we take: the lifelong impact of air pollution. Report of a working party 2016 19/07/18. Available from: <https://www.rcplondon.ac.uk/file/2914/download?token=qjVXtDGo>.

ⁱⁱ Committee on the Medical Effects of Air Pollutants (COMEAP). Long-term exposure to air pollution: effect on mortality (final report - June 2009) 2009 14/10/15. Available from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/304667/COMEAP_long_term_exposure_to_air_pollution.pdf.