

HEALTH AND WELLBEING BOARD



TO:	Health and Wellbeing Board
FROM:	Dominic Harrison, Director of Public Health
DATE:	11 th December 2018

SUBJECT:

Reducing deaths and ill health caused by poor air quality in Blackburn with Darwen and across Lancashire and Cumbria

1. PURPOSE

The purpose of this report is to:

- Provide an update on health related air quality both nationally and locally
- Provide information on recent work in Blackburn with Darwen and sub-regionally to improve air quality
- Outline next steps for action on air quality in both Blackburn with Darwen and sub-regionally

2. RECOMMENDATIONS FOR THE HEALTH & WELLBEING BOARD

- Note the content of the report
- Consider what action the Health and Wellbeing Board and its constituent organisations may take to address and improve air quality.

3. BACKGROUND

As recently as the nineties it was felt that air pollution was no longer a major health issue in the UK. Priority had been given to tackling the biggest individual sources of air pollution and legislation had made the smogs of the fifties a thing of the past. As these major sources of emissions decreased, the relative contribution of smaller and more dispersed sources of air pollution has increased, which requires new types of action.

In more recent years evidence has emerged that small particles emitted to the air from various sources, such as road transport, industry, agriculture and domestic fires, are still having a considerable effect on health. Indeed, diesel engine exhaust, outdoor air pollution and particulate air pollution have been classified by the World Health Organization as carcinogenic. This type of air pollution is so small that it can't be seen by the naked eye, but can get into our respiratory system.

Air pollution reduces life expectancy by increasing deaths from heart disease, lung disease and circulatory problems and can have a short term impact over a single highly polluted day as well as long term impacts from low level exposure over a longer period of time. The majority of health problems result from long-term exposure to air pollution. Air pollution can also reduce lung development in children, which may increase symptoms in those young people who develop conditions like asthma.

The Impact of Air Pollution in Blackburn with Darwen:

Public Health England (PHE) estimate that poor air quality contributes to around 4% of all deaths across Lancashire and Cumbria. The figure for Blackburn with Darwen is 4.7% compared with Lancashire 4.4%; Blackpool 4.3%; and Cumbria 3.4% (PHOF, 2016). For Blackburn with Darwen this is equivalent to 62 deaths per annum however, air pollution is likely to contribute a small amount to the deaths of a larger number of exposed individuals rather than being solely responsible for the calculated figure of attributable deaths.

Air Pollution and Inequalities:

The most significant impacts of air pollution on health often fall on the most deprived communities and the most vulnerable individuals. There is a larger risk to health for young children and older adults, for whom air pollution causes more harm than passive smoking.

Local Action on Air Quality:

District and unitary councils have responsibility for monitoring air quality and reporting on the action being taken to improve areas of poor quality. Action to address the health impacts of air pollution on local populations can play a critical role in supporting other local priorities such as active travel and physical activity, health inequalities, sustainability and growth and regeneration.

Monitoring and modelling of air quality is undertaken in Blackburn with Darwen by Environmental Health staff to fulfil the requirements of the Local Air Quality Management regime, and to report on compliance with EU air quality targets. Air quality is monitored at 47 sites across the Borough and an automatic monitor at Accrington Road Community Centre. The outcome of this work is reported in an [Annual Status Report](#), submitted to the Department for Environment, Food and Rural Affairs (Defra) each year which also outlines local action to improve air quality. For example;

- Initiatives to increase uptake in cycling and walking
- Travel planning information – identifying alternatives to car use
- New roads – bypasses and link roads
- Intelligent traffic light systems
- HGV bans on specific roads
- Camera systems providing information for transport/air quality action plans
- Electric vehicle charging points – on-street, at homes and at new commercial developments
- Cheaper parking for less polluting vehicles
- Bus and rail improvements
- Living green walls
- Planning guidance
- Targeting of vehicle fleets – e.g. increasing the number of low emission vehicles

If a local authority finds any places where the national air quality objectives are not likely to be achieved, it must declare an Air Quality Management Area (AQMA). Where an AQMA is declared the local authority will put together a plan to improve the air quality. There are currently 7 AQMAs in the Borough, declared because of unacceptably high levels of nitrogen dioxides, mainly from road traffic.

- AQMA 1 - Intack, Blackburn (Junction of Whitebirk Rd and Accrington Rd)
- AQMA 2 - Bastwell, Blackburn (Junction of Whalley New Road and Whalley Range)
- AQMA 3 – Darwen Town Centre (A666 between Robert Street and Wraith Street, Darwen)
- AQMA 4 – Witton, Blackburn (Junction of Preston Old Road and Buncer Lane, Blackburn)
- AQMA 5 – Earcroft, Darwen (Junction of the A666 with M65 Link Road)
- AQMA 6 – Blackamoor (Junction of Stopes Brow, Blackamoor Road, Roman Road Blackburn)
- AQMA 7 – Four Lane Ends (Junction of Pleckgate Road, Revidge Road, Lammack Rd and Shear Brow)


An AQMA at the junction of Accrington Road / Burnley Road (AQMA 8) was revoked in 2017 due to improvements in the air quality as a result of Pennine Reach diverting traffic away from the affected area.

The table below shows how nitrogen dioxide levels have changed in the AQMAs over time. It can be seen that nitrogen dioxide in 2017 was below the level of concern in all AQMAs. Compared with previous years, there has been an improvement at almost all of the 46 monitoring locations. These improvements occurred across the Borough, so they can't be attributed to changes at individual junctions. The 2017 results are welcomed but should be treated with caution because some factors, like the weather, can cause short term changes in the build-up of pollution. The results of monitoring in the next few years will determine if 2017 was an anomaly or part of a lasting improvement.

Table 1: AQMA Trends Over Time

Year	AQMA 1 Intack	AQMA 2 Bastwell	AQMA 3 A666 Darwen	AQMA 4 Witton	AQMA 5 Earcroft	AQMA 6 Blackamoor	AQMA 7 Four Lane Ends	AQMA 8 Acc. Rd/ Burnley Rd
2005	Red	Red	Red	Red	Red	n/a	n/a	n/a
2006	Green	Green	Red	Red	Red	n/a	n/a	n/a
2007	Red	Green	Red	Green	Green	n/a	n/a	Green
2008	Red	Red	Red	Red	Red	n/a	n/a	Green
2009	Red	Green	Green	Red	Green	Red	Green	Red
2010	Red	Red	Red	Red	Green	Red	Red	Red
2011	Green	Green	Green	Green	Green	Green	Red	Red
2012	Green	Green	Green	Green	Green	Red	Red	Green
2013	Green	Green	Green	Green	Green	Red	Red	Red
2014	Red	Red	Green	Green	Green	Red	Red	Red
2015	Green	Green	Green	Green	Green	Red	Red	Green
2016	Red	Red	Green with vertical lines	Green	Green	Red	Red	Green
2017	Green	Green	Green	Green	Green	Green	Green	Green

 - Exceedance of annual mean NO₂ objective  - Complies with annual mean NO₂ objective

 - Further monitoring ongoing to determine the existence or extent of any remaining pollution hotspot and whether it affects any residents in town centre flats.

AQMAs No.6 and No.7 present the most significant challenge. The action plan will be updated to include new measures to tackle problems at Four Lane Ends.

In order to achieve these improvements within Blackburn with Darwen a range of actions have been taken which can be split into 3 broad categories:

1. Physical changes – at junctions to address congestion and reduce emissions. The Pennine Reach rapid bus transport scheme was completed in April 2017 and has already brought about improvements in air quality at the Accrington Rd / Burnley Rd AQMA. Growth Deal 3 funding has been secured for local road projects including the Blackamoor Link Road. New intelligent traffic signals have been installed at Blackamoor.
2. Choices - giving people more choices about how they travel and making less polluting options more appealing. The Authority is backing cycling and walking, improving public transport, providing travel planning advice and raising awareness of the benefits that more sustainable and healthy options can provide. Major improvements in the quality of bus services have been delivered by Pennine Reach. In terms of cycling, there has been a 670% increase in leisure rides, the introduction of a new cycle pump track and the 26km Witton Wheel Cycling route. Walking and other active transport choices are being promoted by Public Health initiatives, such as the Eat Well, Move More, Shape Up Strategy 2017-2020, and the commitment to support physical activity, active travel, cycling and walking through the Pennine Lancashire Health and Social Care transformation plans.

It is recognised that there is a significant overlap between the need to address poor air quality and ill-health resulting from inactivity.

3. Managing Development - A new [Air Quality Planning Advisory Note](#) has been adopted for Blackburn with Darwen, which sets out how we intend to deal with site specific issues that need to be addressed and provides guidance which identifies how developers can take action that will reduce the health impact associated with development and transport emissions. For example, most new residential developments are required to include low emission gas boilers and electric vehicle charging points, and charging points are also being required at some commercial developments.

4. RATIONALE

Action on air quality across Lancashire and Cumbria:

Much of the action required to improve air quality will need to be taken by people without any specific statutory role to improve health and wellbeing. The impact of the individual household or business may be small, but the combined impact of actions taken by national and local government, large and small businesses and individuals can make a significant difference. As such, the Lancashire and Cumbria Directors of Public Health identified action on air quality as a sub-regional priority requiring a whole system approach and hosted a **Lancashire and Cumbria Air Quality Summit** on 28th February 2018 to explore ways to accelerate action.

The purpose of the summit was to;

- Improve understanding of air pollution, the health risks of air pollution and scale of the problem
- Improve understanding of what actions could be taken to reduce population exposure to air pollution with additional co-benefits to health, economy, sustainability
- Share good practice including national and local examples of air quality improvement work
- Strengthen participants understanding of their own and each other's' roles in tackling air pollution
- Consider ways of improving public awareness and engagement for action on air quality
- Define the agenda for collective action across Lancashire and Cumbria

The event was attended by Elected Members, Public Health, Planning and Transport and Environmental Health, special interest groups, citizen representatives and academics. The Programme was opened by Cllr Brian Taylor (Blackburn with Darwen Council) and included contributions from Public Health England, Prof Barbara Maher (Lancaster University) talking about emerging evidence of particulate matter in the brains of people with Alzheimer's disease, local authority representatives sharing local approaches and the importance of coordinated action and Prof John Whitelegg (Liverpool John Moores University) who challenged participants regarding further action to improve air quality in the region.

Attendees put forward ideas and suggested ways in which we can encourage and mobilise action on air quality, which were incorporated into a collective report of the Lancashire and Cumbria Directors of Public Health entitled [Reducing deaths and ill-health caused by poor air quality in Lancashire and Cumbria](#). (attached as Appendix 1). The purpose of the report is to:

- Improve awareness and engagement for action on air quality and understanding of everyone's role in tackling air pollution, building on existing plans and strategies
- Start a conversation about the ways in which we can all work together and hold each other to account for action to improve air quality
- Outline areas for further action to reduce population exposure to air pollution, as identified at the Summit.

The report was launched on 21st June 2018 to coincide with Clean Air Day, which is a national drive to help people find out more about the issues surrounding air pollution and how they can make a difference.

5. KEY ISSUES

Air pollution doesn't just affect people living in AQMAs. It is evident that the Local Air Quality Management Regime and UK ambient air quality standards haven't adequately protected public health. For example no AQMAs have been declared in Lancashire and Cumbria because of particulate levels. Particulates are the tiny particles of soot produced when fuels are burnt. They are invisible to the naked eye but are able to pass deep into a person's lungs. Yet the fraction of mortality attributable to man-made particulates is significant. Action taken to reduce the impact of air pollution should not, therefore, be limited to measures designed to address problem in AQMAs only.

Bringing about change on a significant scale is not easy and requires a whole system and whole of society approach. Investment and growth has the potential to impact negatively on air pollution but is essential for the delivery of key objectives, such as employment and housing. As a consequence, there are conflicting priorities and this presents a challenge to us all.

Next Steps:

Blackburn with Darwen AQMA action priorities:

- Develop an action plan for Four Lane Ends junction AQMA.
- Assess the impact of the new road at Blackamoor AQMA once more information is known about the layout and anticipated traffic flows.
- Further monitoring to determine if some AQMAs can be revoked
- Close monitoring of the Moorgate Street/Livesey Branch Road and the Accrington Road Toll Bar Junctions because they hover below level at which new AQMAs may need to be declared.
- Delivering the DfT's Access Fund project "CONNECTING East Lancashire" working with businesses, educational establishments, residents and commuters to raise awareness of travel options and the choices available, in addition to delivering interventions that address specific barriers to active travel.
- Emissions from factories, domestic and commercial bonfires, and also from stoves and fireplaces in smoke control areas are regulated to minimise emissions.

Lancashire and Cumbria Air Quality Priorities:

The suggestions put forward at the Lancashire and Cumbria Air Quality Summit are captured in Appendix 2. This list is not intended to be exhaustive but will act as a guide for further discussion and local action. The Directors of Public Health are working with all stakeholders to turn these suggestions into appropriate action and understand how we might better mobilise the support of wider society in this challenge.

A sub-regional network of individuals from all sectors, including members of the community is being established in support of this and in Blackburn with Darwen we are establishing a local **community of interest** to support and sustain the agenda and our many and varied roles, responsibilities and interests in it. This will be both a real and virtual place for us to share information and good practice, bring local challenges and grow local solutions and a platform from which we can effectively engage in the wider sub-regional/regional/national activity.

6. POLICY IMPLICATIONS

There are no direct policy implications of this report..

7. FINANCIAL IMPLICATIONS

There are no direct financial implications of this report.

8. LEGAL IMPLICATIONS

The Environment Act 1995 requires local authorities to regularly assess the air quality in their area for the key pollutants designated in the National Air Quality Strategy.

The Council has a duty to review and assess local air quality, and to implement actions for improving local air quality. All district and unitary councils are required to submit an Air Quality Annual Status Report (ASR) to the Department for Environment, Food and Rural Affairs (Defra) each year giving an overview of air quality in their area and actions planned, in progress or completed to improve air quality. Where National Standards are not met Air Quality Management Areas must be declared and an Action Plan produced.

The proposals outlined in this report and appendices will assist the Local Authority in executing its responsibility to monitor emissions and reduce emissions in areas where minimum acceptable levels are exceeded.

The Council has a legal duty to write an annual progress report every 3 years, to update and screen assessments and, if required, produce detailed and further assessments.

9. RESOURCE IMPLICATIONS

There are no direct resource implications of this report.

10. EQUALITY AND HEALTH IMPLICATIONS

The priorities set out in this paper are intended to improve health and wellbeing and reduce inequalities and all subsequent activity will be assessed in this regard.

11. CONSULTATIONS

The Lancashire and South Cumbria Air Quality Summit incorporated representatives of key stakeholder organisations and community representative groups. The points set out in this paper and the Lancashire and Cumbria report were presented to the Council's Executive Board for consideration on 11th October 2018.

VERSION:	1
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BACKGROUND PAPER:	Paper to Executive Board 11 th October 2018

