

Oxfordshire Air Quality Group Annual Report 2016/17

Health Improvement Board

National Context

1. Poor air quality is the largest environmental risk to public health in the UK. It is known to have more severe effects on vulnerable groups, for example the elderly, children and people already suffering from pre-existing health conditions such as respiratory and cardiovascular conditions. Two studies have suggested that the most deprived areas of Britain bear a disproportionate share of poor air quality.
2. In February 2016 the Royal College of Paediatrics and Child Health published a study, estimating the amount of premature deaths in the UK attributable to exposure to outdoor air pollution to be 40,000/year. In the same study, air pollution was linked to diseases such as cancer, asthma, stroke, heart disease, diabetes, obesity and dementia.
3. In April 2016, the Committee on the Medical Effects of Air Pollutants, responsible for carrying out research into the link between air quality and human health stated that considered epidemiological evidence was suggestive of an association between long term exposure to particulate pollution and chronic bronchitis. The committee's sensitivity analyses estimated that over 722,000 cases of chronic phlegm in 2010 could be attributable to exposure to particulate pollution (anthropogenic PM10) in the UK, and that a reduction of 1 µgm-3 of this pollutant in 2010 could have led to over 65,000 fewer cases in 2010.
4. A new national Air Quality Action Plan was published by the English Government in July of this year, as a response to court orders imposed by the Supreme Court as a result of actions led by Client Earth. The plan presents some important new measures such as clean air zones (CAZ's). This plan is however still seen by the majority of the scientific community as not strong enough to tackle air pollution in the fastest time possible
5. EU courts have threatened infraction action over non-compliance with EU regulations. Under Part 2 of the Localism Act the Government could require local authorities to pay all or part of an infraction fine.

The role of District Councils

6. The Environment Act 1995 requires district councils to carry out periodic review and assessment of air quality within their area. The air quality objectives applicable to Local Air Quality Management (LAQM) in England are set out in the Air Quality (England) Regulations (2000). Short and long term objectives are set for a number of pollutants including nitrogen dioxide and particulate matter.
7. District councils are required to designate an Air Quality Management Area (AQMA), if any of the air quality objectives are not being achieved.
8. Once an AQMA has been designated the district council should prepare an Action Plan that sets out how it will achieve the air quality standards or objectives for the area that it covers.
9. District councils report annually to the Department for Environment, Food and Rural Affairs (Defra) on the results of monitoring in their area and progress with the implementation of their Action Plans.

The role of County Councils

10. Where a district council is preparing an Action Plan, the county council is obliged to submit measures related to their functions (i.e. local transport, highways and public health) to help meet air quality objectives in their local area.
11. Oxfordshire County Council developed Local Transport Plan 4 (LTP4) which contains a commitment to improve public health and wellbeing by increasing levels of walking and cycling, reducing transport emissions, reducing casualties, and enabling inclusive access to jobs, education, training and services.

Air Quality in Oxfordshire

12. Air quality across Oxfordshire is considered to be generally good as the county is largely rural in nature. In the more densely populated areas of the county, and those which experience high traffic flows such as Oxford, Banbury and Bicester, levels of air pollution are of concern. In these areas, road traffic is the most significant source of pollutant emissions.
13. Air quality is regularly monitored at many locations across Oxfordshire. At some locations air quality is at levels where legal intervention is required by Local Authorities. There are currently 13 AQMAs in Oxfordshire, where the annual mean objective for nitrogen dioxide is being exceeded (four in Cherwell, one covering the whole of Oxford city, three in South Oxfordshire, three in Vale of White Horse and two in West Oxfordshire). The table below summarises monitoring results from 2014, 2015 and 2016.
14. The figures in the table below are the average annual concentrations of Nitrogen Dioxide measured by diffusion tube in each of the AQMAs in 2014, 2015 and 2016. The Government objective level is an annual mean concentration of nitrogen dioxide of 40 $\mu\text{g}/\text{m}^3$. **PLEASE NOTE In those AQMAs with more than one diffusion tube the worst i.e. highest result has been used.**

Air Quality Management Areas in Oxfordshire

District	AQMA	NO ₂ µg/m ³ 2014	NO ₂ µg/m ³ 2015	NO ₂ µg/m ³ 2016
Oxford	Whole of city	65	67	61
West	Witney town centre	47	53	71*
	Chipping Norton town centre	58	55	63*
South	Watlington village centre	49	41	50
	Wallingford town centre	41	34	41
	Henley-on-Thames town centre	59	47	47
Vale	Abingdon-on-Thames town centre	45	45	40
	Marcham village centre	50	48	53
	Botley A34	53	48	57
Cherwell	Banbury Hennef Way	79	78	
	Banbury town centre	42	41	
	Bicester town centre	47	46	
	Kidlington Bicester Road	44	41	

*Not a full years data set only 6 month average – so figures cannot be compared

15. The data highlights exceedances of the objective levels in all of the AQMA's.

16. The figures highlight a mixed year for air pollution across the District in comparison to the 2015 data with increases being seen in Marcham, Botley, Watlington and Wallingford and drops in Oxford City and Abingdon with Henley remaining unchanged.

What is being done?

17. The District Councils have either developed, or are in the process of developing Air Quality Action Plans for the AQMAs in their areas.

18. As the cause of all the AQMAs is road traffic, the actions focus on reducing emissions from vehicles and can be grouped into the following themes:

- a. Influencing the development of the Local Transport Plan and area specific strategies to ensure that impacts on air quality are considered at an early stage;
- b. Reducing emissions from transport, for example through the introduction of Low Emission Zones;
- c. Promoting more sustainable forms of transport, particularly electric vehicles;
- d. Encouraging modal shift to more active forms of transport such as walking and cycling;
- e. Education and awareness raising around air quality to promote behavioural change; and
- f. Ensuring that air quality is given due consideration as part of the planning process.

19. Opportunities to draw down funding from a variety of sources to implement measure to improve air quality in Oxfordshire have been taken where possible.

20. Further details of specific action by district can be found in appendix 1.

What could the Health Improvement Board do?

21. Defra's Local Air Quality Management Policy Guidance (PG16) recommends that local Directors of Public Health and 'Health and Wellbeing' boards should work closely with local authorities. Working in partnership will increase support for measures to improve air quality, with co-benefits for all. Defra recommends that the following local action is taken:
- a. Ensuring the Joint Strategic Needs Assessment has up to date information on air quality impacts on the population; and
 - b. Working closely with local authority health and air quality officers – e.g. have regular update meetings on key, emerging issues.
 - c. That Directors of Public Health/ H&W Boards sign off on air quality Annual Status Reports and Action Plans prior to submission to Defra.
22. Introduce policies that encourage a shift from motorised transport to walking and cycling as this is expected to reduce total vehicle emissions, including particulate pollution. If this could be achieved in towns and cities, then we could expect local improvements in air quality leading to health improvements, as well as additional health benefits through increased physical activity through walking and cycling.
23. To date, aside from Public Health England attendance at our recent air quality meetings there has been no joint working between Oxfordshire Air Quality Partnership and health boards or organisations. We welcome your ideas in finding co-beneficial ways of working and for assisting us in identifying relevant contacts.

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Appendix 1. Recent Actions

The launch of the Oxfordshire air quality website (<https://oxfordshire.air-quality.info/>) in 2015 was a great success and allows users to see real-time air quality data in a visual map based format whilst providing a raft of air quality data and information for Oxfordshire all in one place. The webpage comes complete with a children's section and quiz.

In addition to this the Districts have been working closely with the County Council and as a result the County have approved an air quality appendix to their Local Transport Plan 4, the key themes are;

- Encouraging walking and cycling
- Restricting diesel vehicles in town centres through the introduction of clean air zones
- Working more proactively with the district councils on action planning
- Introducing low or zero emission mass transit vehicles

South specific actions:

- Our low emission strategy underwent 2 rounds of public consultation and is now awaiting licensing committee for a decision on adoption later this year
- Work on actions within our action plan continues, this year we focussed on the provision of electric charging points and on a community cycling project

Vale specific actions:

- Draft developer guidance to be integrated in to the local planning process.

Cherwell specific actions:

- Development of a comprehensive and workable air quality action plan to improve air quality in partnership with other organisations that will assist in the implementation of the measures.

Oxford City Council specific actions

- Requiring AQAs for all planning applications for major developments

- Submitted a successful bid for the provision of electric vehicle charging infrastructure for the use of hackney carriages and private hire taxis in the city.
- Commissioning of a feasibility study investigating the introduction of a zero emission zone in Oxford city centre from 2020 which would be expanded so that the entire city is covered by around 2030/2035. This study was supported by both Oxfordshire county council and Oxford City Council.
- Recruited over 20 participants for the Go Ultra Low Oxford electric charging infrastructure trials –The first phase of the project will see 30 charging stations installed. Ten of these will be available for the general public, 10 for Co-wheels Car Club vehicles, and the remaining for individual households. Installation of the charging stations started in August 2017 and they will be ready for residents and the general public to use in October 2017. The trial will last for 12 months. The best solutions from the trial will then be rolled out in approximately 100 sites across Oxford’s residential streets. This is expected to happen in 2018.
- Ran successful “Test Drive the Future” annual event which saw over 600 people attend.
- Working with some of Oxford city’s primary and secondary schools. The project aims to install real time, indicative air quality sensors in 6 schools across the city and provides educational material to integrate into the national curriculum
- Increased resourcing of the City Councils Air Quality Officer role, increasing the post from 0.8 to 1 FTE reflecting the importance the City Council places on this matter