air quality

2007 rainfall improves county's air quality

The UK's changeable weather causes extremely variable pollution levels. This pollution, further complicated by atmospheric chemistry, reacts with other gases in the atmosphere to worsen air quality. This was evidenced in 2007 when heavy rainfall reduced the number of ozone and particulate exceedances.

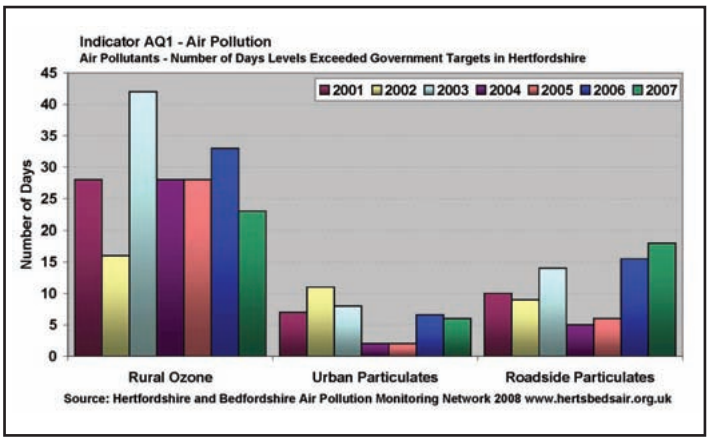
Whilst a healthy person is unlikely to experience any short term health effects on an average day in the UK, daily changes in the level of air pollutants can seriously affect the quality of a person's life if they suffer from a heart or lung illness. With the British Lung Foundation[1] finding that 1 in 5 people are at particular risk from air pollution, 2007 results show how important it is to monitor air quality alongside traffic levels, industrial activity and meteorological conditions. Monitoring will help create modelling scenarios to devise plans for avoiding or improving air quality problems. For example, traffic levels will change when a new supermarket has been built.

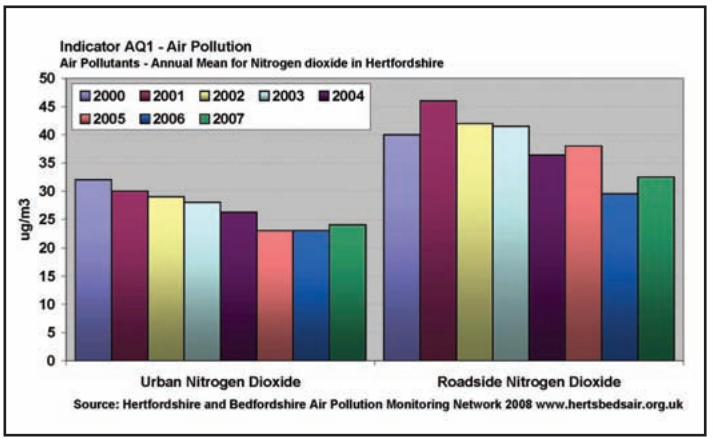
Indicator AQ1 - Air Pollution

This indicator shows the quality of the county's air against the government's air quality criteria in 2007. Moderate ozone was recorded over a number of days, however, due to higher than average rainfall there were fewer incidences than that in 2006. For two days Stevenage showed very high particulate levels at its roadside monitoring station. This was later attributed to nearby roadworks. There were no exceedances of particulates at any of the county's monitoring stations between the beginning of April and November; again a reflection of heavy rainfall. Broxbourne's continuous analyser was again the only one to fail the nitrogen dioxide objective, but the average level monitored was lower than in 2006.

Criteria for Measuring Air Quality[2]

1. *Number of days when ozone levels in rural areas exceeds the Government's standard*
2. *Number of days when particulate levels in urban areas exceeded the Government's standard*
3. *Number of days where particulate levels close to busy roads exceeded the Government's standard*
4. *Annual mean nitrogen dioxide levels in urban areas*
5. *Annual mean nitrogen dioxide levels is close to busy roads*





airALERT

On 19 November 2008 a free air quality alert service was launched for Hertfordshire and Bedfordshire asthma sufferers and those with respiratory conditions.

Designed to send messages to mobile or home phones via email when poor air quality is predicted, airALERT informs vulnerable people of a pollution episode the day before it is expected. This will help the vulnerable make informed choices about managing their respiratory health.

The service is provided by the Herts and Beds Air Quality Network that consists of members from each of the 14 district authorities in Hertfordshire and Bedfordshire. The Network has close ties with King's College London (Environment Research Group) and received funding from Luton PCT to assist with the project.

Anyone with asthma or other respiratory complaint can register free online or by post by returning the FREEPOST response form on the airALERT leaflets that can obtained from Hertfordshire's council offices.

More details and registration at www.airlert.info

1 *British Lung Foundation website: www.lunguk.org*

2 *See our website for more on health and the government bandings.*

Air Quality Management Areas

An area is declared an Air Quality Management Area (AQMA) where it is estimated that air quality standards set by the government cannot be met by specified dates and an action plan must be created to improve it. Jointly published by the County Council and local authorities with transport-related AQMAs, this plan can be viewed online at www.hertsdirect.org. Containing a broad range of options, including traffic management, engineering and lifestyle enhancements, the plans are divided into 12 generic county-wide themes with specific plans for each AQMA. The table below lists just a few of the possible actions that could be taken at each AQMA. Some of these have already been implemented and a number are currently being considered - subject to funding being identified. The action plan is reviewed regularly to take into account the latest research in measures that may reduce pollutants. AQMA action plans affected by non-traffic sources on roads managed by the Highways Agency are devised by each Local Authority.

Status of Air Quality Management Areas (AQMAs) in Hertfordshire

Council	AQMA	Why Air Standards Not Met	Progress on development of indicator to measure change
BBC	Waltham Cross	Residential area close to M25.	• Liaise with the Highways Agency to ensure that the air quality in the borough is a consideration in the Environmental Impact Assessment (EIA) for all relevant M25 projects. • Provide information to local businesses to encourage the 'greening' of their vehicle fleet. • The Highways Agency's 'Target Programme of Improvement' includes the widening of the M25 at Junctions 23 to 27. It is also expected that the refurbishment of the Holmesdale tunnel will result in improved traffic flow and ventilation.
EHDC	Junction at Hockerhill Lights	Traffic volume & traffic signal queues. HGVs not using bypass. Park and ride underused.	• Support the goods yard link. • Reduce emissions from idling cars. • Investigate road signage in the vicinity of the junction and bypass to encourage its use.
HBC	A5183 High Street Elstree	Queue length at traffic signals. Number of HGVs.	• Consider Air Quality in all planning applications. • Investigate a programme for exhaust emission testing. • Support and work with the Highways Agency and other agencies to consider any traffic schemes that may affect air quality at AQMAs especially in relation to widening the M25 and proposed Integrated Demand Management and widening the M1 at Junctions 6a-10.
	High Street, Potters Bar	Bus garage with high number of bus movements. Traffic volume & traffic signal queues.	
	4 either side of M25 & M1	Proximity to M25 & M1.	
SACD	Peahen Junction	Queuing traffic at Peahen junction. Inappropriate routing of HGVs. Unnecessary through traffic.	• Investigate signage provision for cyclists, pedestrians and for M1/M10 traffic travelling through St Albans. • Make bus travel a more attractive option in St Albans. • Investigate cheaper car parking for lower polluting vehicles.
TRDC	5 related to M25	M25.	• The Highways Agency's 'Target Programme of Improvements' includes the widening of the M25 at Junctions 16 to 23.
WBC	Pinner Road/ Chalk Hill	Bottlenecks at Bushey Arches. Volume of traffic. Junction issues.	• Introduce measures that control the access of freight. (St Albans Road AQMA) • Consider the rephasing of traffic lights. • Consider the introduction of measures that control the access of cars.
	Chalk Hill	Queue length at traffic signals. High traffic volumes.	
	Farraline Road	High volumes of traffic and queue lengths at traffic signals.	
	Horseshoe Lane/ A405 junction	Queue length due to stationary traffic at the junction.	

Source: HCC (2008) LTP Progress Report Appendix 5 *Note: There were no AQMAs in Dacorum, North Herts, Stevenage or Welwyn Hatfield.*