

**Agenda Item No:**



**Report To:** Ashford Health & Wellbeing Board

**Date:** 18<sup>th</sup> January 2017

**Report Title:** Kent Environment Strategy and Ashford's Air Quality

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**Summary:**

Kent faces unprecedented growth and change over the coming decades. Kent Environment Strategy 2015: A strategy for environment, health and economy recognises and addresses the challenges and opportunities that this will bring.

It is essential that growth is managed intelligently, providing much needed economic benefits, whilst still protecting and enhancing our natural and historic environment to create and sustain communities that are vibrant, healthy and resilient.

An associated environmental factor to which this strategy impacts is local air quality. Generally Ashford's air quality is considered to be 'good' however given continued and planned growth within the borough it is important at a minimum to retain that standard. Where possible it should be an aim to reduce the effect of harmful pollutants to minimise public health impacts.

**Recommendations: The Board be asked to:-**

1. Discuss the areas of synergy between the public health outcomes, the Ashford Health and Wellbeing Board and the Kent Environment Strategy and agree the priority areas for action.
2. Identify;
  - a. key personnel to work with the KES team to take these initiatives forward
  - b. areas where more support is needed by health partners from the KES team
3. Support the development of an Ashford Air Quality Strategy
4. Facilitate training of staff relevant to the field of air quality so that they are aware of how their work can contribute towards improving air quality and reducing exposure.

## **Purpose of the report**

1. The purpose of this report is threefold:
  - To highlight the links between the Kent Environment Strategy, the Health and Wellbeing Board, and the work of the Clinical Commissioning groups, particularly associated risks and opportunities.
  - To identify areas of activity where working together could lead to shared positive benefits and outcomes
  - To raise awareness of air quality as a public health issue, understand the Ashford context, provide an opportunity to discuss the issue, and to identify useful actions

## **Background**

2. The Kent Environment Strategy: A strategy for environment, health and economy (KES) was agreed by Kent Leaders in November 2015 and adopted by Kent County Council in January 2016.
3. As a result of the development of the sustainability chapter of the JSNA, a significant change in the revised Strategy is the strengthened links between health and environment. There are a number of health risks related to environmental factors for example poor air quality, but also opportunities to deliver positive health benefits, particularly in relation to the natural and historic environment.
4. This report seeks to match the priorities of the KES against that of the AHWB, identifying joint priorities for action, where resources could be maximised and additional benefits achieved.
5. Domains One and Two of the Public Health Framework and Outcome Two of the Kent Health and Wellbeing Strategy make the strongest links between health and the environment.
6. The areas where environmental factors have the most significant impact on health outcomes and indicators, both positive and negative, which could be tackled through joint commissioning are highlighted below.
  - Utilisation of open space and the natural and historic environment to tackle health issues such as obesity, isolation and mental health
  - Support for Active Travel initiatives which will have a positive impact on air quality, as well as obesity, mental health
  - Initiatives to improve the warmth of the homes of those residents with pre-existing health conditions to reduce excess winter deaths and support independent living
  - Identification and mitigation of the health risks of climate change and severe weather events on the health of Kent residents
7. There is now considerable research documenting these links and the mutual benefits that can be achieved through health and environment professionals

co-commissioning outcomes. For example, supporting conservation volunteering can tackle obesity, social isolation and mental health issues and more directly the Kent Warm Homes and Winter Warmth project targets excess winter deaths as well as carbon reduction through installing heating systems in homes of those with pre-existing health conditions.

8. Appendix A maps the links between the Public Health Indicators and the KES Priorities and highlights some existing initiatives that are already delivering positive benefits. However, activity to date has not been consistent across Kent and much more could be achieved through the implementation of the KES.
9. One of the environmental factors considered as part of the KES, is air quality and pollution.
10. Air pollution is associated with a number of adverse health impacts. It is recognised as having a significant impact on human health, including premature mortality, allergic reactions, and cardiovascular diseases. Additionally, air pollution particularly affects the most vulnerable in society: children and older people, and those with heart and lung conditions. There is also often a strong correlation with inequalities, because areas with poor air quality are also often the less affluent areas<sup>1,2</sup>.
11. The annual health cost to society of the impacts of particulate matter alone in the UK is estimated to be around £16 billion<sup>3</sup>.
12. The National Institute for Health and Care Excellence (NICE) have produced a draft document which is current out for consultation, titled Air pollution: outdoor air quality and health. This document goes on to provide recommendations to control air pollution including;
  - Planning new developments –
    - Limiting need for vehicles,
    - Siting buildings away from high pollution areas,
    - Locating vulnerable groups in less sensitive sites (schools/nursing homes),
    - Building configurations to aid pollution dispersion,
    - Including air quality in the local plan and developing local planning guidance
    - Provide infrastructure for low emission travel – cycle and walking routes, electric car charging points etc,
    - Travel plans for new developments to reduce motorised trips
    - Trees/vegetation in open spaces - where it does not restrict ventilation and dispersion of pollutants.
  - Clean air zones/congestion charge zones.
  - Driver training for public sector transport services and vehicle fleets to encourage fuel efficient and low emission driving techniques.
  - Ensuring vehicle procurement includes a low/zero emission target.

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<sup>1</sup> Environmental equity, air quality, socioeconomic status and respiratory health, 2010

<sup>2</sup> Air quality and social deprivation in the UK: an environmental inequalities analysis, 2006

<sup>3</sup> Defra. Abatement cost guidance for valuing changes in air quality, May 2013

- Schemes to ensure smooth driving and speed reduction.
- Planning cycle routes – where possible locating them off main roads, minimising exposure.
- Awareness programmes.

### **Ashford's Air Quality**

13. Ashford is the largest borough in Kent, with a fast-growing population. There are 14,680 new dwellings proposed between 2011 and 2030. In addition redevelopment in the town promises to bring more visitors, employment and in turn journeys into the town centre.

Although the urban area of Ashford is expanding, much of the borough is rural in character, including protected areas such as the North Downs and the High Weald.

14. The Environmental Protection Team at Ashford Borough Council monitor nitrogen dioxide (NO<sub>2</sub>) concentrations through the use of passive diffusion tubes at 27 sites within the borough.

This data forms part of the Kent Air Quality Monitoring Network and is fed into the [www.kentair.org.uk](http://www.kentair.org.uk) website as well as to DEFRA as part of national requirements.

In line with local authority practice Ashford Borough Council do not have any automatic monitoring stations.

15. Current projects and involvement with air quality, excluding ongoing monitoring, include;
- Reviewing and responding to planning applications considered likely to have an air quality impact.
  - Air quality messages through Kent Highways Virtual Message Signs (VMS) on main arterial routes, such as; **Save fuel, cut pollution, switch off when stopped**
  - Provision of electric vehicle charging points - Five double points have been installed around the borough for use by the public and ABC staff, and usage records highlight a trend towards increasing use of plug-in vehicles.
  - Contribution to the KM Charity Group 'Walk to School' scheme, which is associated with 13 school participants and three walking buses.
  - A28 improvements, associated with the Chilmington development.
  - M20 Junction 10/10A improvements
16. Particulate monitoring (PM<sub>10</sub> and PM<sub>2.5</sub>) is not commonly undertaken by individual boroughs, but funded by Defra through the Automatic Urban and

Rural Network, and some other limited sites operated by agencies such as the Highways Agency.

The closest monitoring is carried out at Medway, Thanet which both demonstrate a downward trend to levels of particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>).

The Public Health England (PHE) report Estimating Local Mortality Burdens Associated with Particulate Air Pollution provide some useful statistics on the contribution of particulate matter to public health broken down by borough.

Within the Ashford borough is calculated that particulate matter contributes towards the death of 50 persons (age 25+) mostly through associated respiratory and cardiovascular disease. An alternate metric which is perhaps more useful for decision making is the associated 539 of life-years lost, which takes into account life expectancies at age of death.

The report demonstrates that Ashford is the 2<sup>nd</sup> lowest borough in Kent in relation to attributable deaths and 3<sup>rd</sup> lowest for associated life-years lost. The report does however state that uncertainty in the increased mortality burden could range from approximately one-sixth to double the modelled figures. An extract of the report for the County of Kent is shown at *Appendix A*

17. With reference to Nitrogen Dioxide (NO<sup>2</sup>) levels, Ashford has not declared a air quality management area (AQMA). Such AQMAs are only declared where there is existing exceedance of national standards, or where standards are considered likely to be exceeded.

Annual mean concentrations of NO<sup>2</sup> for the past five years show a slight downward trend, indicating that air quality conditions within the borough are improving.

Details of the data sets, monitoring, and current air quality status within the borough are contained within the Ashford Borough Council 2016 Annual Status Report.

## **Conclusion**

18. There are strong links between health and the environment, both risks and also opportunities. Many positive benefits and outcomes could be achieved by those in the health and environment sectors co-developing and co-commissioning environment and health initiatives.
19. As part of the development and delivery of the KES, it is recommended that the Ashford Health and Wellbeing Board agree a number of priority areas as outlined in this report where health and environment professionals should be encouraged and supported by the HWB to work together and jointly commission mutually beneficial outcomes.
20. With specific regard to the environmental factor of air quality, despite the existing trend towards improving air quality, we are conscious of the growth of the town and the potential for both negative and positive impacts on air quality.

It is our intention to ensure that Ashford retain a 'good' level of air quality, and the burden associated with poor air quality both in terms of damage to public health and burden on public sector resource is avoided. The support of the Ashford Health and Wellbeing Board would go a great way to assist this aim.

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## **Background Documents –**

Kent Environment Strategy  
<http://www.kent.gov.uk/environmentstrategy>

PHE Estimating local mortality burdens associated with particulate air pollution  
[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/332854/PHE\\_CRCE\\_010.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/332854/PHE_CRCE_010.pdf)

Particulate matter summary  
<http://lagm.defra.gov.uk/public-health/pm25.html>

Ashford Air Quality Annual Status Report  
[http://www.kentair.org.uk/documents/ABC\\_ASR\\_2016.pdf](http://www.kentair.org.uk/documents/ABC_ASR_2016.pdf)

## **Appendix A – Health and Environment Synergies**

**Appendix B – Public Health England: Estimating Local Mortality Burdens associated with Particulate Air Pollution**

## Appendix A - Health and Environment Synergies

Public Health Outcome	Kent Environment Strategy Priority	Existing/potential initiatives
<p>Natural Environment – Access to/use of Green Spaces</p> <p>1.16 Utilisation of outdoor space for exercise/health reasons</p> <p>1.18 Social Isolation</p>	<p>1.1 Strengthen our understanding of the health, social and economic value of our natural and historical assets.</p> <p>7.1 Improved access for all</p>	<p>Volunteering – Country Parks and Countryside Management Partnerships</p> <p>Green Gyms</p> <p>Forest Schools</p> <p>Explore Kent - promoting access to the countryside</p>
<p>Air Quality</p> <p>3.01 Fraction of mortality attributable to particulate air pollution (England 5.3, South East 5.2, Kent 5.4)</p>	<p>1.5 Build our understanding of local air and noise pollution and associated health outcomes to determine targeted actions</p> <p>7.2 Support residents, businesses and communities in being well connected to services, with sustainable and active travel options</p>	<p>Low Emissions Strategy (Development)</p> <p>Active Travel Strategy</p> <p>JAMBUSTERS - Support take up of Active Travel options – schools travel planning to reduce car use and support active travel</p>
<p>Fuel Poverty</p> <p>1.17 Fuel Poverty</p> <p>Excess Winter Deaths</p>	<p>6.2 Improve the resource efficiency of our homes, reducing costs, tackling fuel poverty and improving health outcomes</p>	<p>Kent Warm Homes – <a href="http://www.kent.gov.uk/warmhomes">www.kent.gov.uk/warmhomes</a> and Winter Warmth</p> <p>Kent Fuel Poverty Action Plan</p>
<p>Severe Weather/climate change</p> <p>3.07 Comprehensive, agreed inter-agency plans for responding to health protection incidents and emergencies</p>	<p>1.2 Continue to assess the economic, health and social impacts of climate change on our businesses, services and residents and take action where appropriate.</p>	<p>Joint Strategic Needs Assessment Review, to incorporate new risks identified by the Committee on Climate Change Risk Assessment (12 July 06)</p> <p>Public Health Champions Training</p>

## Appendix B – Public Health England – Estimating Local Mortality Burdens associated with Particulate Air Pollution

Area	Population age 25+ (x 10 <sup>3</sup> )	Deaths age 25+	Mean anthropogenic PM <sub>2.5</sub> (µg m <sup>-3</sup> )*	Attributable fraction <sup>†</sup> (%)	Attributable deaths <sup>‡</sup> age 25+	Associated life-years lost <sup>§</sup>
<b>Kent CC</b>	984.5	13466	9.8	5.6	745	7436
Ashford	78.8	928	9.4	5.4	50	539
Canterbury	98.6	1516	9.4	5.3	81	748
Dartford	64.3	811	11.8	6.7	54	518
Dover	75.9	1184	9.1	5.2	61	602
Gravesham	67.9	846	10.9	6.2	52	563
Maidstone	105.0	1332	10.0	5.6	75	769
Sevenoaks	81.2	988	10.1	5.7	57	572
Shepway	72.5	1119	9.2	5.2	58	565
Swale	91.0	1194	10.0	5.7	68	700
Thanet	92.0	1697	9.4	5.3	90	830
Tonbridge and Malling	81.6	930	10.0	5.7	53	569
Tunbridge Wells	75.6	920	8.9	5	46	462

Source: Public Health England