



Kent & Medway

Air Quality Partnership



National Picture:

“The Government must take full advantage of public health reforms to improve local authorities’ abilities to improve air quality. In particular the Government should introduce indicators to measure public health improvements from better air quality in its public health reforms.” (EAC, Feb 2012)



Local Response by K&MAQP:

Raise the awareness of the impacts of Air Quality on Health to both the general public and health professionals. This will be delivered by developing supporting material and attending networking events in order to communicate both the health and financial benefits that improving air quality can deliver and influence beneficial change.



You May Know that:

Costs of alcohol mis-use to society is estimated at £12-£18 billion per annum

Cost of physical inactivity to society is estimated at £10.7 billion per annum

In 2007/2008 there were 74,000 emergency admission to hospital because of asthma

Asthma is estimated to cost society £2.3billion per annum



But did you know:

- Air quality probably causes more mortality and morbidity than passive smoking, road traffic accidents or obesity
- Cost of poor air quality to the UK is almost twice that of physical inactivity
- Cost of poor air quality are comparable with the cost of alcohol misuse
- Poor air quality exacerbates asthma in those already having the condition and has been shown to induce new cases of asthma amongst those living close to busy roads with a lot of lorry traffic.



Particulates:

Elimination of man-made particulates has been estimated to show a gain in life expectancy of 7-8 months compared to only 1-3 months for the elimination of road traffic accidents or 2-3 months for passive smoking (Table 1: EPUK, 2011).

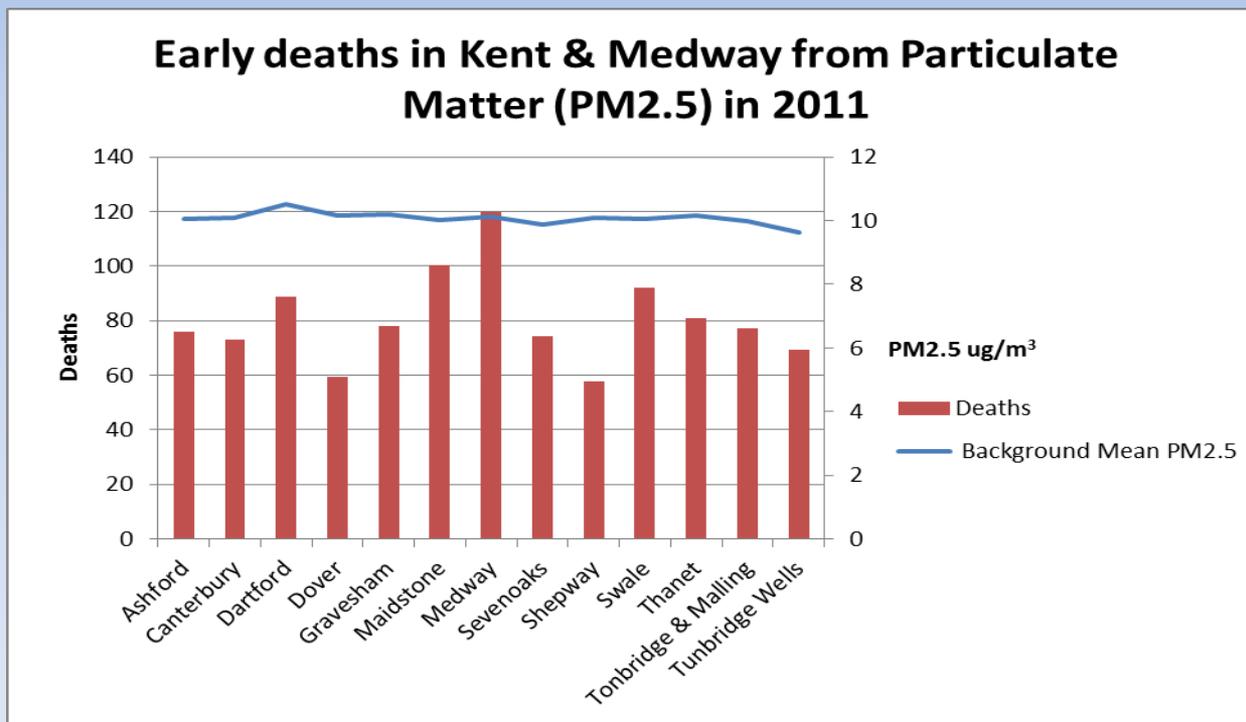
Table 1: Comparison of the benefits of reducing PM_{2.5} by 10 µg/m³ (equivalent to eliminating man-made PM_{2.5} in 2005), the elimination of motor vehicle traffic accidents and the elimination of exposure to passive smoking⁴

	Reduction in PM _{2.5}	Elimination of road traffic accidents	Elimination of passive smoking
Expected gain in life expectancy	7-8 months	1-3 months	2-3 months
Estimated equivalent gain in life years in England and Wales from 2005-2110 for the whole population (including people born during that time)	39,058,000	8,126,000	13,194,000



Particulates & Kent:

- More than 1000 early deaths as a result of **just** PM_{2.5} air pollution across Kent & Medway in 2011
- Estimate calculated using methodology set out in the Committee on the Medical Effects of Air Pollutants (COMEAP), 'Estimating the mortality burden of particulate air pollution at the local level.'





Helping keep nearly 200 extra patients out of hospital each year:

In 2011 there were 48 days when air pollution was 'moderate' or worse across the county, not just in 'bad' areas.

Extra emergency respiratory admissions **per day**

Ozone – 4

Particulate (PM10) – up to 6

Up to 192 extra emergency respiratory admissions

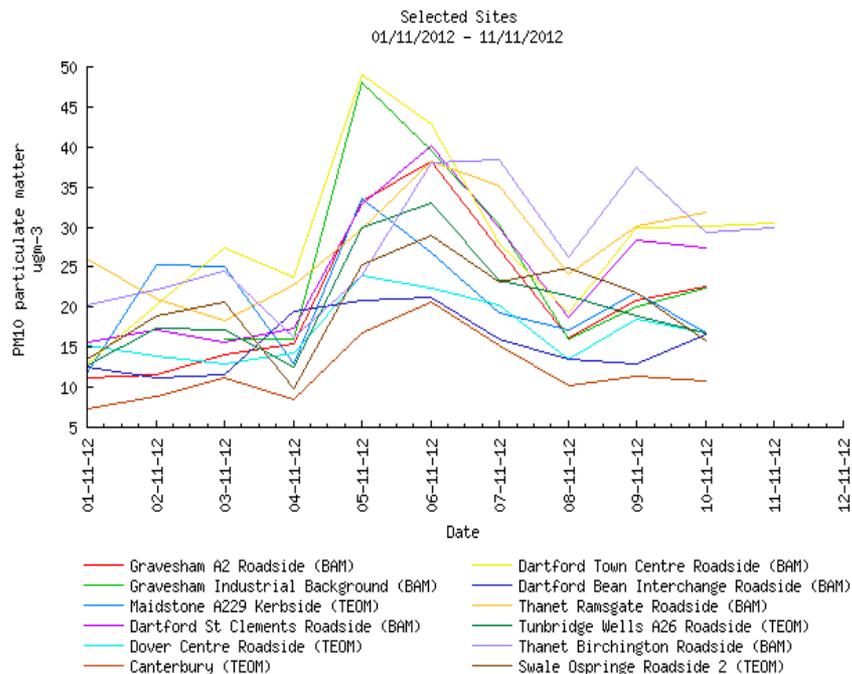
Warning those at risk with advise on some simple actions could help reduce these



Example of K&MAQP data collection (Provisional Data)

Continuous Data

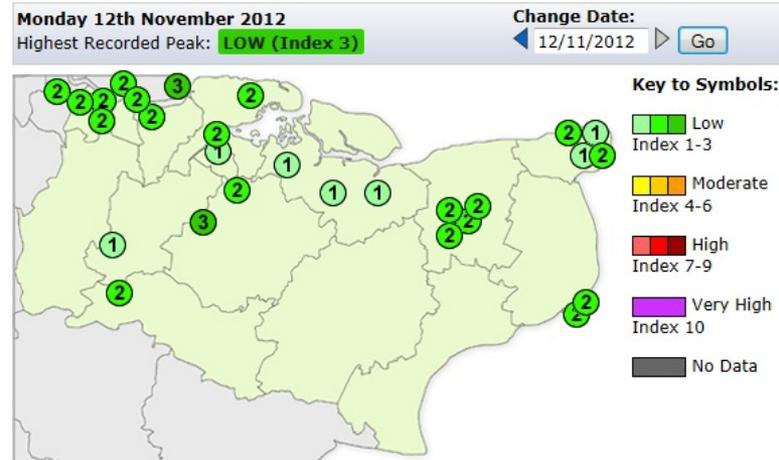
Measurements taken from air pollution monitors and weathersensors are made available for educational and research use by the network members. For commercial use of the data, please request permission from the originating authority or by emailing us at info@kentair.org.uk



[Download Data as CSV File](#)

[Make Another Plot](#)

Latest Pollution Levels



Forecast from 11/11/2012

Air pollution is expected to remain low at all location across Kent for the next 24 hours as current weather conditions continue affecting the area.

The situation is expected to remain unchanged for the following 2 days.



Communication

- K&MAQP hold a lot of information on key air pollutants
- K&MAQP have the technology to pass that information on
- HOW can YOU deliver that information to where it is required (face to face or through other media)
- Together WE can deliver information that could improve the health of our public and may make some financial savings as well

CONTACT US:

<http://www.kentair.org.uk/>
Stuart.Steed@canterbury.gov.uk



airAlert – the business case

airAlert intervention cost (approx):

• Service cost (1000):	£10k
• AQ network support costs:	£10k
	<u>Total £20k</u>

Cost of admissions:

• Asthma (admission + 1 day)	£1.5- £2k
• COPD (admission + 3-5 days)	£3k/day

Prevent 3 people with COPD (admitted 3 days) = £27k plus

*personal health and well-being benefits

* lengthen life.